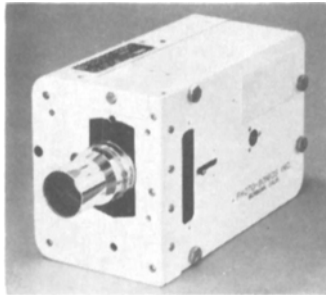


## new products (and developments)

.....  
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 new Photo-Sonics 16mm-IP instrumentation/documentation camera featur-

ing 200-, 400- and 1200-ft daylight loading magazines that can be interchanged in seconds with one hand has been announced by Instrumentation Marketing Corp., 820 South Mariposa St., Burbank, CA 91506. The quick-change magazine feature was designed to minimize the loss of event documentation at the time of film runout and magazines can be loaded without disturbing the optical system. Camera speeds range from 16 to 400 frames/s by means of a selector switch. The camera has a film runout switch, is dual intermittent pulldown and dual pin-registered. The electronics are modular solid state and the camera accepts any C-mount lens. It is priced at \$2,925.

The Shading Generator, Model 608, an instrument designed to correct for brightness errors in video signals, has been announced by Colorado Video, Inc., P.O. Box 928, Boulder, CO 80302. The instrument also allows for the correction deficiencies produced by improper lighting or shading in camera tubes. It is designed especially for use in data processing work involving computer analysis of television images. It is priced at \$950.

A new surveillance video recorder has been developed by Odetics, Inc., 1845 South Manchester Ave., Anaheim, CA 92802, to make it possible to view an entire recorded surveillance day in 48 min. Under the system, a standard 1-h roll of video tape can record pictures for 30 h.

The unit utilizes a modified Sony Videocorder and a camera which takes one picture every second. When the tape plays back at regular speeds, 30 frames or 60 fields appear each second, thereby capsuling time, yet missing no activity. The system is priced at under \$2,000.



A new line of light-emitting diode drivers for high-speed photoinstrumentation cameras has been announced by L. M. Dearing Associates, Inc., 12345 Ventura Blvd., Suite R, Studio City, CA 91604. The diode drivers, designated the SST-III series, utilize modular construction and plug-in PC cards. From 2 to 12 camera outputs are available in field case portable units. As many as 36 individual channels are available in the rack-mounted models. Available as ac or 28-V dc powered versions for field and airborne use, diode drivers in the series will accept existing time code signals and amplify them to meet requirements of presently available electroluminescent light-emitting diodes. Prices for the SST-III series range from \$350 to \$2,825.



A large-screen (960 in<sup>2</sup>) motion-picture film viewer which gives 20× enlargements of 70mm frames has been announced by the Photographic Instrumentation Division of Traid Corp., 777 Flower St., Glendale, CA 91201. The viewer, called Traid VF-550M Film Viewer, displays 35mm and 70mm films through an optical system that permits the image to be rotated 360° on the screen. A variable speed motor drive provides slow-speed scanning and high-speed search or rewind up to 350 ft/min. A solenoid-operated glass platen holds the film flat for optimum focus when the motor drive is stopped. It is priced at about \$12,500.

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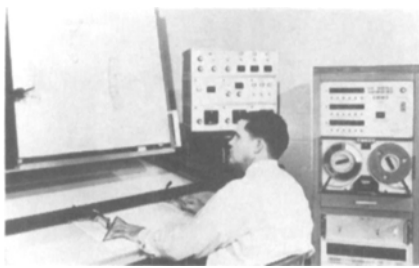
They must, somehow, meet the bill. And keep higher education moving ahead. Both are urgent, if our young people, and our society, are to move ahead.

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The Recordamat 1250, an electronic system for digitizing, storing and reproducing two- and three-dimensional graphics data, has been announced by Perspective System, Inc., 4400 Seventh Ave. South, Seattle, WA 98108. The Recordamat is designed as a companion system for the company's Illustromat 1200 which converts two-dimensional orthographic drawings into 3-D (axonometric or perspective) illustrations. Together they form an automated plotting system.

The Recordamat consists of a small keyboard, a data coupler, a tape unit and a graphics processor. Coupled with the Illustromat 1200, the unit operates as follows:

As the Illustromat operator locates points on an orthographic drawing, each movement of the Illustromat's input styluses passes two- and three-axis (xyz) information to the Recordamat's Data Coupler. It is then transmitted to the Tape Unit and recorded on 7-, 8- or 9-track tape. Simultaneously, data from the Tape Unit are received by the Recordamat's Graphics Processor, which interpolates be-

tween digitized points in the drawing, and a 3-D illustration is drawn by the Illustromat. The Recordamat stores all information needed to reproduce a three-dimensional illustration. As a recorded tape is played back, the desired drawing is automatically plotted by the Illustromat.

The Recordamat records data at 600 characters/s on 7- or 9-track IBM compatible tape or 8-track paper punch tape (EIA compatible). Data is played back at 4 in/s during high-speed search. The unit's graphic processor has a 16-bit word length, a 2  $\mu$ s add time and a 10  $\mu$ s multiply and divide time. The Recordamat has a 4,096 word memory. It can be expanded to 64,000 words. The basic Recordamat 1250 is priced at \$55,000.

A 12-ft optical bench featuring remote lens focusing has been announced by Data Optics, Inc., 115 Holmes Rd., Ypsilanti, MI 48197. Any lens mount on the optical bench can be used to move remotely any other mount or set of mounts. Shown above, two mounts are being moved at the same time with a stationary mount between them. A rack-and-pinion system provides flexibility. The rack runs the length of the bench and it can be fixed in position or be free to move. If the rack is fixed, turning a pinion knob on any lens mount will move the mount for focusing. If the rack is free to move, turning a pinion knob on any mount will move the rack. Any other mount or set of mounts clamped to the rack will be moved with it.

The optical bench weighs 260 lb. It has been specifically designed with a flat mounting surface so that the optical mounts can be utilized on the bench or placed on any flat surface used in optical experimentation. Price of the new bench is \$1,580.

An update kit designed for owners of Marconi Mark VIIA color television cameras to permit upgrading the cameras to performance standards of the Marconi VIIB has been announced by Ampex Corp., 401 Broadway, Redwood City, CA 94063. The update kit contains field-effect transistors, preamplifiers and deflection yokes to achieve a 6-dB improvement in SNR performance and increased image registration stability when installed in a Mark VIIA. The Marconi Mark VII is a 4-Plumbicon transistorized camera series designed for use in the studio and remote color TV applications. It is manufactured by Marconi Company, of England, and is marketed in the United States by Ampex Corp. The kit is priced at \$5,000 installed in the field, or \$4,400 without installation.

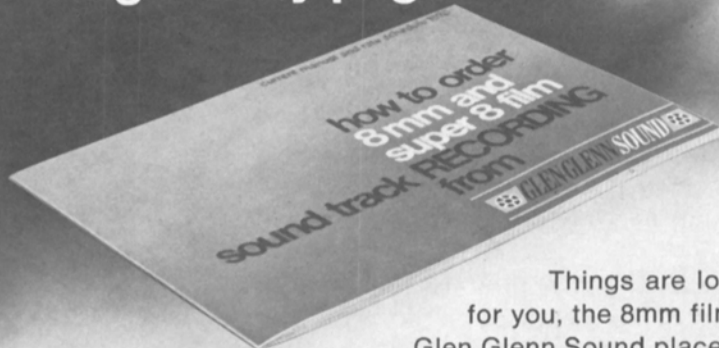
Two new vidicons, Types P844 and 7262A, have been announced by Visual Electronics Corp., 356 W. 40 St., New York, NY 10018. The P844 is intended as a replacement for the 8604 and has a low-current (95-mA) heater allowing the tube to be used in the newer transistorized vidicon cameras. It is a 1-in diameter vidicon of separate mesh construction with magnetic deflection and focusing, employing the same photoconductive layer as that used in Type 7038. This photosurface differs in sensitivity from those used in the 8541 and 8625 and can be exposed to bright stationary scenes for long periods without risk of burning or a long-term after-image. At high light levels the image retention time is very short. The spectral response is substantially panchromatic when used in tungsten illumination.

The 7262A is an integral mesh, magnetic focus and deflection tube type. It has a short envelope (5.18-in) and low current heater (95-mA). Its sensitivity and lag characteristics are similar to the English Electric Valve Type 7735B.

A special 40.5mm Gordon Star Filter designed for use on the Norelco Color Television camera has been announced by Alan Gordon Enterprises, Inc., 5362 North Cahuenga Blvd., North Hollywood, CA 91601. The new filter is designed to screw into the filter wheel at the rear of the lens, thus eliminating the need for mounting the filter on the front part of the lens. Gordon Star filter provides a special-effect starlike pattern in highlights. The new filter is priced at \$47.50.

A new special-effects generator/switcher designated the SE-6X3-RS has been announced by Dynair Electronics, Inc., 6360 Federal Blvd., San Diego, CA 92114. It is a solid-state unit designed to complement the Dynair VS-121B-RS Switcher-Fader or similar units. The new special-effects unit produces a single electronically combined signal from any two of six input sources with capabilities for inserts from each of

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If you are still making hundreds of loops for a single feature, then consider a fast, precise and economical method of altering sound tracks that makes "looping" obsolete.

The new Magna-Tech system electronically synchronizes a reel of picture with a reel of full-coat magnetic sound-recording film. Footage and frame "PRESETS" permit the recordist to select the scene to be "dubbed" and to fully control the advance and return of the film as the actor voices the line to be "dubbed."

The system is so accurate it will even permit the change of a single word without danger of erasing an adjacent word.

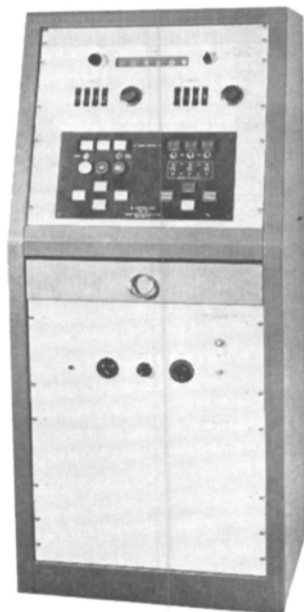
High speed return of the film to "start" saves time and permits new starts without waiting for a "loop" to complete its trip.

Actors, who so often succumb to the rhythm of a loop, are spared this hypnotic interference. Acceptable "takes" can be stored on the 3-track film and replayed for final selection.

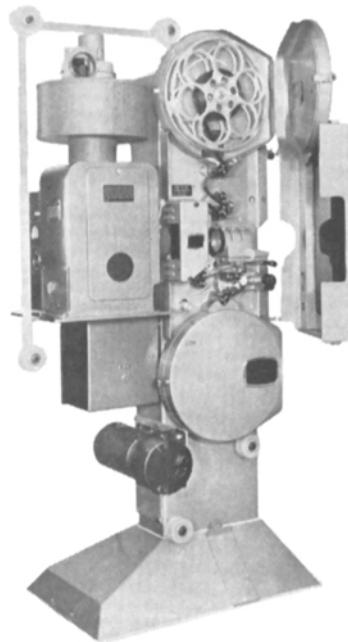
A complete remote control system is provided the director so that, once the recording engineer has preset footages, the director can take over if he wishes and directly control every facet of the recording.

The Electronic Looping System precludes the need for cutting loops and eliminates the need for editing of the track. Complete reels of the motion picture are run in synchronization with the full-coat magnetic film on which the sound track is recorded. Transfer of the best takes is then made to the third track of the same recorder.

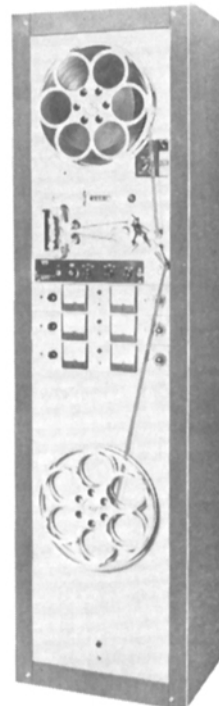
This track now has all of the final takes in sequential position and ultimately permits the screening of the picture and the final edited track in perfect synchronization. From this point the track is ready to go to a mix and no further editing is required.



Electronic Looping Console



35mm Projector



Master Magnetic Pick Up Recorder with Selective Erase



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four corners, internal and external key, full horizontal and vertical wipes, and matting. Signal selection is accomplished by mechanical pushbuttons which activate solid-state crosspoints which perform the video switching. The control panel is connected to a remote electronics unit with a 50-conductor dc control cable. The distance between the two can be as great as 150 ft. The SE-6X3-RS is priced at \$2,450.

A silver recovery estimating kit for on-the-spot use in determining the value of silver content in spent processing solutions and scrap sensitized materials has been developed at Eastman Kodak Co. The kit contains charts and simple calculators for determining the value of silver recoverable from the spent fixer and from scrap films and papers as well as chemically-treated paper for on-the-spot testing of liquid fixer. To estimate recovery from fixer solutions, a slip of the chemically treated paper is dipped into the spent fixer solution and the change in the color of the paper is compared with a color chart in the kit. This reading supplies data for the final calculation. Silver recovery from scrap sensitized materials is estimated on the basis of square inches and percentage exposed, using a calculator in the kit.

A gallon of spent fixer can be worth as much as \$2.00 net return. A machine for recovering silver from spent fixer consists basically of a cartridge filled with spun steel and a small liquid circulating unit. When the spent fixer flows through the

cartridge, the spun steel dissolves and a silver-rich sludge is deposited. When all the steel has been dissolved, the cartridge is shipped to Kodak where the silver is assayed and the customer's account credited. Silver is recovered from scrap sensitized material by more complex procedures which are operated by professional refiners and salvagers.

A gas-discharge tube announced as having certain advantages over a conventional super-high-pressure xenon tube is described and illustrated in the *Licensintorg* Newsletter describing recent Soviet inventions. Inventions described in the *Newsletter* are available under license from *Licensintorg*. Full details are available from Amtorg Trading Corp., 355 Lexington Ave., New York, NY 10017, *Licensintorg* representative in the United States, or from *Licensintorg*, Kakhovka Str., 31, Moscow M-461, USSR. Features of the gas-discharge tube include an absence of soldered leads, thus eliminating forced cooling of the inside electrodes. A lead-packed gasket ensures hermetical sealing. As the electrodes are cooled by water, the tube power can be increased 2½ times without changing the bulb size.

A monaural, full-track tape recorder, Pilonetone Model 11-1-P, has been announced by Alan Gordon Enterprises, 5362 North Cañuenga Blvd., North Hollywood, CA 91601. The new recorder is fully transis-

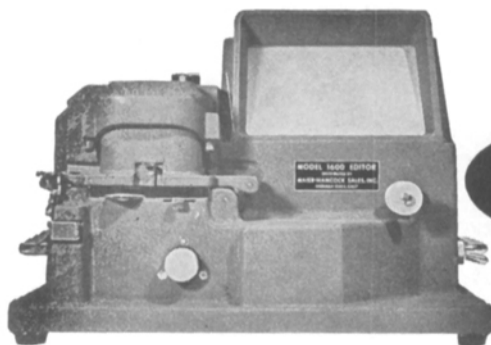
torized with five heads, three speeds and 7-in reel capacity. Included in the recorder are an electronic tape speed governor, servo tape tension mechanism, automatic overload limiter and separate level controls for mixing microphone and line inputs. Recorded and source signals can be monitored simultaneously with built-in speaker or headphone. The machine weighs 9½ lb and it has been built to operate at temperatures from +15° to +115°F. It is priced at \$699.



System 700, a large-area strobe lighting unit for synchronous use with motion-picture cameras and video systems, has been announced by Unilux, Inc., 48-20 70th St., Woodside, NY 11377. The System 700 strobe stops action and produces sharp images on film and video tape, regardless of the speed of motion of the subject. The System 700 flashes up to 250 flashes/s (15,000 flashes/min) with each flash lasting for about 50 μs. The system has a continuous duty flashing capability. It produces a light output of 250 fc over an area of 300 ft². It is priced at \$6,900.



The Cross-Modulation Oscillator/Analyzer for recording cross-modulation tests and analyzing the results has been announced by Sound Engineering, 71 Crescent West, Hadley Wood, Barnet, Herts, England. The results can be analyzed on 35mm or 16mm optical film using a choice of carriers ranging from 4 to 10 kHz. The oscillator section of the test set also supplies a stepped output from 40 Hz to 10 kHz for galvanometer and channel sine-wave response tests. Oscillator distortions are better than 0.25% at all frequencies. Output level of the oscillators is up to -10 dBm



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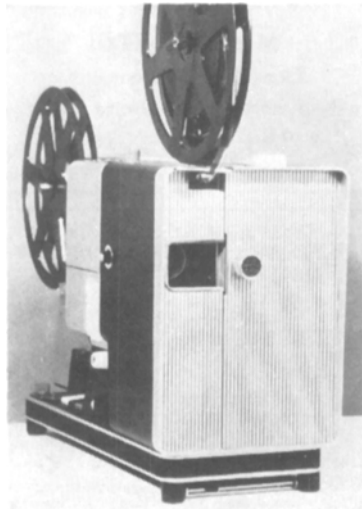
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The Carena 858 Model T convertible sound projector for 8mm and super 8 has been announced by Karl Heitz Inc., 979 Third Ave., New York, NY 10022. Both 8mm and super 8 can be projected with

the one sound projector and the same projector can be used to add music, speech and sound effects to silent film. The price of \$499 includes a Zeiss 20mm  $f/1.2$  lens, a 7-W amplifier/speaker, dynamic mixer/microphone and carrying case.

The Classette Model 130, a cassette tape recorder designed especially for schools has been announced by Audiotronics Corp., 7428 Bellaire Ave., North Hollywood, CA 91605. Features include an Automatic Level Control which adjusts the recording volume level electronically regardless of room or group size. A special locking Pause Control permits instant tape interruption for student response or class discussion. The recorder is equipped with a dynamic microphone with which the instructor can talk over the tape or operate the unit as a 20-W public address system. Model 130 is priced at \$149.50.

A miniature integrated light switch, Type IPL 11, which combines a sensor, amplifier and trigger unit in one component, has been announced by Teknis Ltd., Teknis House, Stoke Rd., Guildford, Surrey, England (U.S. agent, Teknis Inc., Plainville, MA 02672). The unit combines a silicon planar photodiode with integrated circuitry on a single substrate, encapsulated in a TO 18 can with a glass window. The device is activated when light of a preselected intensity falls on the photodiode. Switching speed is about 1 ms in normal

operation while the sensitivity range covers five orders of magnitude.

A variable frequency marker, Model 3323, designed for swept frequency applications, has been announced by Telonoc Instruments, 60 N. First Ave., Beech Grove, IN 46107. The instrument, which operates from 1 to 2000 MHz is basically a plug-in module for the 20003 Sweep/Signal Generator System. The unit incorporates an oscillator and provides a single birdy-type mark on the oscilloscope trace at the frequency set by a calibrated tape on the front panel. Model 3323 is priced at \$325.

The EOM-3064 Low Voltage Light Modulator, a low-voltage device designed for high-efficiency modulation of laser radiation, has been introduced by Crystalab Products Corp., 19 Legion Pl., Rochelle Park, NJ 07662. The low-voltage requirement provides a device capable of being driven by transistor circuits over its 100 MHz bandwidth. Simplified driving circuits are applicable because birefringent offset and piezoelectric resonance are held to a negligible level, negating the need for optical or electrical compensation. Dimensions are 2.5-in diameter and 9.6-in length. The weight is 3 lb. The device is priced at \$3,400.

An oscilloscope camera that can be focused with an external indicator that eliminates the need for through-the-lens sighting has been announced by Hewlett-Packard, 1501 Page Mill Rd., Palo Alto, CA 94304. Designated Model 198A, the camera uses a Polaroid back and standard flat-pack self-processing film. Shutter speeds range from 1/60 s to 1 s. Shutter operation closes a contract to ground so that the camera can trigger the oscilloscope or other equipment the instant the shutter opens. A battery-powered lamp illuminates the cathode-ray tube face to delineate the black graticule of no-parallax internal graticule tubes. The camera is priced at \$350.

The Temp-Aging Indicator, a device that directly displays the remaining useful life or excessive aging of limited life materials whose aging rate depends on temperature, such as photographic film, foodstuffs and chemicals, is a product of DynaMetric, Inc., 330 W. Holly St., Pasadena, CA 91103. The indicator is designed to match the aging characteristics of the materials with which it is to be stored. During the storage period it integrates time and temperature to provide a continuous direct display of the material's useful remaining life or its excessive aging.

A new line of photomultipliers, incorporating venetian blind electron multipliers with reduced feedback features has been announced by Space Research Corp., 1525 Kings Highway, Fairfield, CT 06430. The new models include 2-, 3- and 5-in diameter tubes with 10, 11 and 12 multiplier stages which are available with S-11, bi-alkali and tri-alkali photocathodes.

Mounting for the Eclair Camera. Also available for flat base cameras.

The pod withstands all types of weather.

Even distribution of weight makes shooting easier.

Strong lightweight construction (less than 5 lbs.) for easier handling.

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