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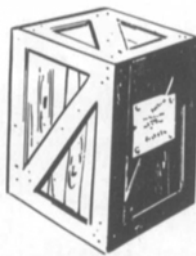
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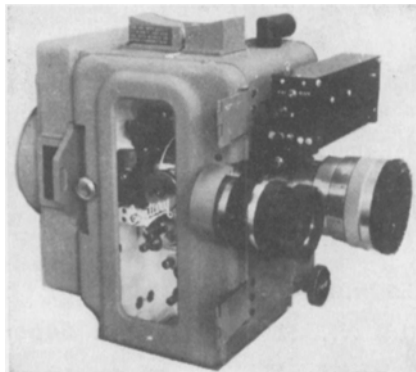
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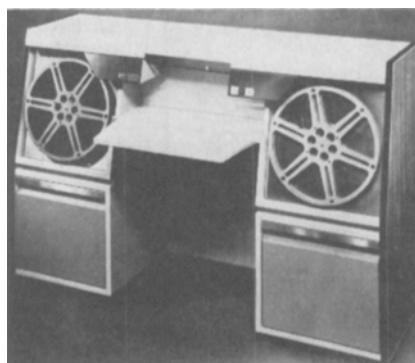
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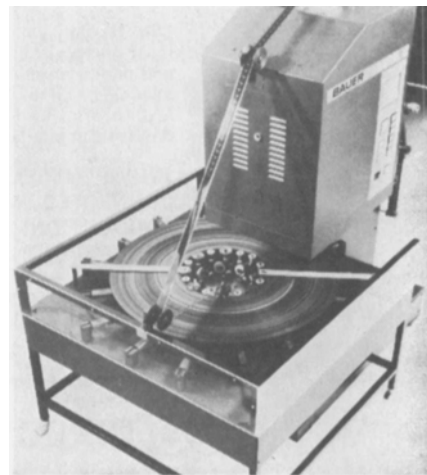


A 35mm projector based on the single-lens concept, using one prime lens, an anamorphic lens and a Magna-Com lens, has been announced by Century Projector Corp., 165 W. 46 St., New York, NY 10036. The anamorphic and Magna-Com lenses are mounted in a lens carriage that can be motor driven, or the lenses can be changed manually. The projectionist can change from CinemaScope to regular 35mm by touching a button without moving the basic prime lens or handling any lenses. The prime lens never moves and as the change from CinemaScope to "flat" picture is made, the focus of the lenses does not change. The modifying lenses (anamorphic and Magna-Com) are mounted in a movable lens holder on ball bearings. The holder slides sideways so that either lens may be selected.



A new film inspection machine called the Retectron has been announced by Research Technology Inc., 3525 West Peterson Ave., Chicago, IL 60645. The machine has a solid-state integrated circuit logic control defect detecting system. A three-

pushbutton (Inspect, Stop and Rewind) control system simplifies operation. The Regenerative Rewind System automatically provides optimum tension and speed regulation for any size reel. When the machine is in use the operator places the reel to be inspected on the machine, pulls the film to the other reel and depresses the Inspect button. The film is measured for length and number of splices, examined for defects and cleaned. When the machine detects film damage it stops automatically and an indicator light identifies the defect so that the damage can be quickly and easily repaired. The Retectron detects torn or enlarged sprocket holes, cuts and tears in the soundtrack or picture area, sprocket punches, broken film and edge cuts. It also detects improperly made splices, weak splices and tape splices. It is available in various models with prices ranging from \$3,400 to \$6,000.



The Bauer U 4 projection system for endless showing of 35mm film up to 14,000 ft in length, has been announced by Canadian Magnetic Inc., 1027 Bleury St., Montreal, Que., Canada, distributors of the system manufactured by Robert Bosch Photokino GmbH of Stuttgart, Germany. The endless film arrangement, which is on wheels and can be separated from the projector, is loaded with a pack of film which lies horizontally on two power-driven and electronically-controlled systems of rollers. The film comes out of the 30-mm inner wind. It runs over a film-pull control to the supply sprocket of the projector mechanism. The film-pull governor controls the inner set of the rollers, so the film is pushed out rather than pulled out to reduce film pull.

The film is wrapped in a film-protecting foil to prevent emulsion damage. Film and foil are wound onto the endless film arrangement on a specially designed film editing table. During the showing, film and foil are separated while the film comes out of the inner wind. When the film has passed through the projector and returns to the outer wind it is received by the protective foil. The foil and film are wound together.

The Bauer U 4 system will be shown at the Equipment Exhibit of the Society's 109th Conference in Los Angeles.

Price of the U 4 35mm unit is about \$24,000. A 16mm automated unit is available at about \$12,000.



The Automatic Color Corrector Model 6000, an advanced solid-state system that automatically senses and balances color variations in TV programs while they are going on the air, has been introduced by CBS Laboratories, High Ridge Rd., Stamford, CT 06905. The system operates in real time unattended to maintain consistent color balance for live or recorded material.

The Automatic Color Corrector was invented by Renville H. McMann, Jr. and Clyde W. Smith (shown here with Model 6000). The device balances the color tones by generating a correction signal. The signal is added to the incoming signal only when required. The system closely simulates operating controls used to balance one camera or videotape against another.

In operation, the color corrector eliminates the problem of color matching when a studio program, for example, is succeeded by tape or film or by a segment made outdoors under varying light conditions. It can also be used to match colors by TV cameras of different manufacture. It will be distributed anywhere in the world where the NTSC encoded signal is the standard for broadcasting, the announcement stated. Its ability to operate automatically on-line to make instant color judgments adds the factor of real-time operation in maintaining consistent color tones.

An earlier color corrector, manually operated, has been used by CBS Television Network for various programming operations including the gubernatorial and congressional elections last November.

The Model 6000, to be shown at the NAB meeting in Chicago will be priced at about \$5,000.

The Autopak-8 D4, a new super-8 camera featuring a Rokkor 4:1 power zoom lens, has been announced by Minolta Corp., 200 Park Ave. South, New York, NY 10003. The camera has a removable magnetic shutter release which permits the use of various special accessories, including intervalometers for time-lapse and wire and wireless remote control equipment. Fea-



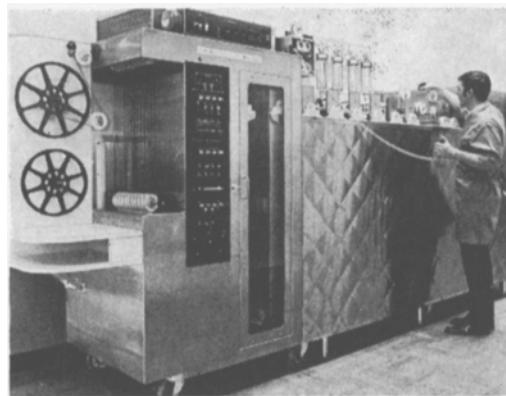
tures include power zooming from 9.5mm wide angle to 38mm telephoto via rocker control positioned on one side of the camera for finger-tip operation. Aperture range of the lens is $f/1.8$ to $f/45$. A built-in cadmium sulfide cell measures light after it passes through the lens and diaphragm opening. Compensation for filters, lens attachments, motor speed or changes in lens focal length due to zooming is automatic. For special effects in unusual lighting situations, the aperture can be set manually. A micromotor drives the film at 18

frames/s or 32 frames/s. Power for the micromotor and CdS cell is provided by four penlight batteries. The Autopak-8 D4 is priced at about \$160.



The Picker/Vertex 35mm analytical projector for cine film, a product of Vertex Development Corp., 10 Stepar Pl., Huntington Sta., NY 11756, is distributed by Photo-Electric Instrumentation Co., 125-10 Queens Blvd., Kew Gardens, NY 11415. The projector, for use with 35mm film in color or black-and-white, accepts up to 1200 ft of film on reels and 500 ft of film on cores. It has a Geneva-type film transport mechanism, three-element lens, interchangeable projection lamps up to 1200 W and solid-state circuitry. It is designed to

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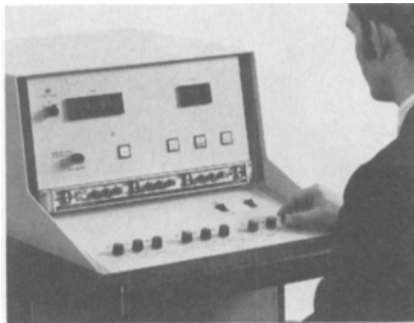
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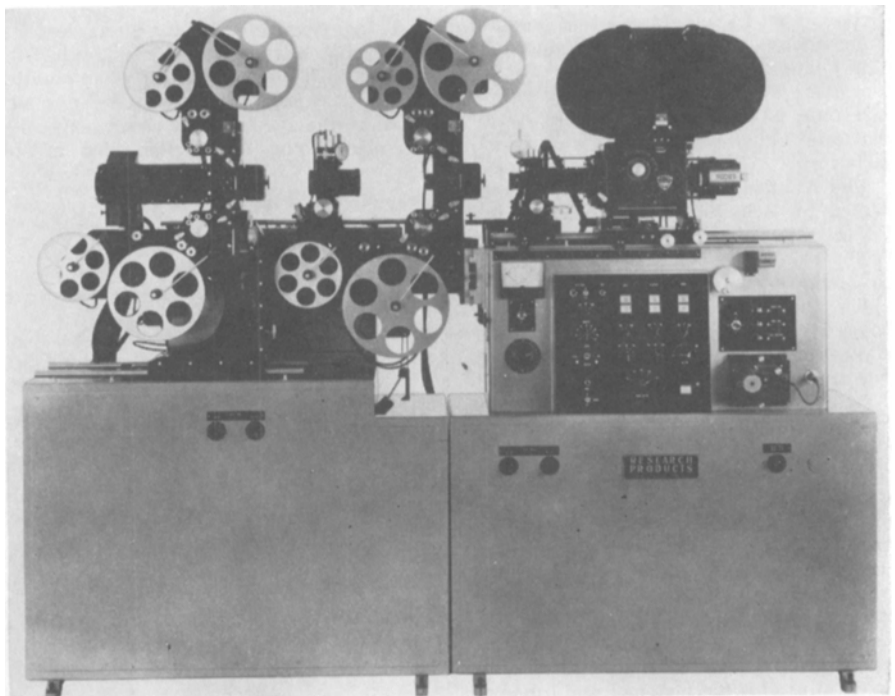
provide flickerless projection at any film speed. Slow motion, reverse and stop motion can be selected by remote control. The film is held in the film gate by an airstream process which allows indefinite exposure of a single frame of film without damage. A screen image of 5.5 by 6.5 ft at 16.5 ft gives 10 fL at the screen. The projector is priced at \$7,550.



The Ampex ACC-1, a color corrector/programmer designed to produce perfectly balanced color master tapes from film or

tape program sources, has been announced by Ampex Corp., 401 Broadway, Redwood City, CA 94068. The ACC-1, which programs a color corrector developed by CBS Laboratories (*Journal*, p. 390, Apr. 1970), is used to eliminate color variations that can result when TV programs or commercials are assembled from tapes and film of varying quality. Program material from either a film chain or videotape recorder is viewed by the operator who enters color corrections into the memory system. When the material is replayed, the electronic corrections are made automatically as the program is being recorded on the master videotape recorder.

Heart of the ACC-1 is a small random-access memory system that converts the analog correction information into a digital format, stores the information and reconverts the digitized color corrections into analog format for insertion into the picture at the proper frame. The console, which contains the manual controls is 35 in long, 25.5 in wide and 42.75 in high. The ACC-1 is priced at about \$25,000.



The new RP Model 2100 Aerial Image Printer has been announced by Research Products, Inc., 6860 Lexington Ave., Hollywood, CA 90038. The system employs electrically programmed stepping motors to operate the camera and projector heads in interlock or independently. Synchronization between heads is maintained within 0.01% maximum tolerance regardless of speed or direction of individual camera or projector heads. The printer is operated from a lighted control panel. The electronic drive is made up of the power supply and the electronic module which is mounted directly behind and is an integral part of the control panel. All connections into and out of the modules are accomplished through high-density connectors keyed to prevent miswiring or misalignment. Both modules can be speedily removed from the printer for easy maintenance or adjustment. The electronic mod-

ule is made up of seven printed circuit cards which can be easily removed from a card cage. The front panel is internally connected to the electronic module through three separate connectors which provide for straightforward reversal of the panel. A technical description of the printer is being presented at the Society's Conference, April 25-30.

Model 2101 is available with an automatic shutter which can be programmed by means of a switch to provide either a fade or a dissolve over a pre-determined frame count ranging from 8 through 192. The printer's price range is \$64,000 to \$68,000.

A new vertical-interval production switcher has been announced by Dynair Electronics, 6360 Federal Blvd., San Diego, CA 92114. Available in two models, the VS-151A is designed especially for use in CATV, broadcast, educational and remote

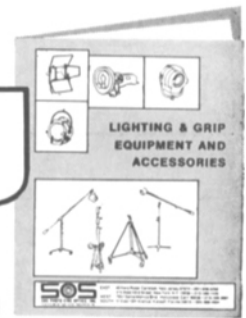
TV studio applications and the VS-153A is designed especially for the more sophisticated small studio. Both units have full color programming capability. The VS-151A is a self-contained unit with 10 video inputs with basic effects and mixing. The switcher is 5.75 in deep. It is priced at \$1,495. The VS-153A is a remote-controlled unit with provision for 11 video inputs with basic single re-entry effects and mixing. The control panel is 3.5 in thick. The electronics unit is remoted by means of a multi-conductor dc control cable and can be located up to 150 ft from the control panel. The VS-153A is priced at \$2,895.

The Model D-1500 Television Character Generator, a self-contained keyboard/memory/display electronic titling character generator, has been announced by Systems Resources Corp., 223 Newtown Rd., Plainview, NY 11803. Data in ASCII coded form is stored in an integrated circuit memory and translated into a television compatible signal suitable for display on any standard video monitor. Characters are directly entered from the keyboard or from external storage devices or data sets. If desired, data from the keyboard can be transmitted to an external storage device or data set. By using the external synchronization input, the output character video can be added to any picture program video. The output signal is broadcast compatible and can be used to add titling on any TV picture in a broadcast, closed-circuit or CATV system. The generator can operate in three modes. In the roll-up mode as new information enters at the bottom of the display, the message automatically rolls up, row by row. The generator is capable of storing internally up to 15 rows of information. In the crawl mode the information is presented as a continuous one-row horizontal crawl. In the title mode, up to 15 one-row titles can be selected in consecutive order or on a random basis. The D-1500 is 18 in long, 8 in deep and 4 in high. It weighs 15 lb. The price is \$4,000.

An electronic videotape editing system utilizing the new 80-bit editing time code has been announced by Electronic Engineering Co. of California, 1441 East Chestnut Ave., Santa Ana, CA 92701. The basic equipment consists of an electronic editor programmer and a time code generator. Accessory equipment includes an auxiliary programmer, an auxiliary time display and a remote transport control panel. The system is designed specifically for the RCA TR60/70 and Ampex VR1200/2000 series. It provides control of search, cue and splicing functions. The electronic splicing function is performed for audio and video or audio/video combined. In addition to normally manual operating controls, an edit sequence control is provided, which permits the operator to perform an entire edit sequence by means of a single button control. The system is packaged in a building block concept so that the system can be adapted to various requirements. Basic price for the equipment is less than \$20,000.

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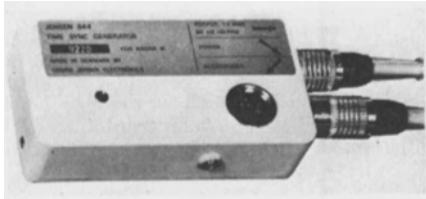
The Proxicon WX-31486, a new secondary electron conduction (SEC) camera tube designed for commercial and closed-circuit color broadcasting applications, has been announced by Westinghouse Electric Corp., Electronic Tube Div., P.O. Box 284, Elmira, NY 14902. The new tube consists of three sections: a proximity-focused image section, a burn-resistant SEC target and a magnetically-focused and deflected reading section. The image section consists of a faceplate flat on both sides. On the inside of the faceplate is a sensitive photoemissive material called the S-20 photocathode which emits electrons in direct proportion to incoming light. The target of the Proxicon is mounted very close to the faceplate (proximity focus). When incoming light strikes the photocathode, the electrons that result are accelerated by a 4-kV potential and travel directly to the target. The SEC target uses a wire mesh support which protects the target from overexposure by absorbing and conducting away the heat. When an electron from the photocathode strikes the SEC target, it gives up its energy, releasing about 100 electrons for each incident photoelectron. The secondary electrons form a charge pattern on the target that exactly corresponds to the scene being photographed. The Proxicon is priced at about \$1,750.

Two new image intensifier cameras have been announced by Riker Video, 142 Central Ave., Clark, NJ 07066. Model TC-177-Li is a single-stage image-intensifier camera that can produce usable TV pictures with scene illumination as low as 0.05 fc. It produces 500-line resolution with the light of the half moon and almost 800 lines with the light of the full moon. Model TC-177-L2 is a two-stage intensifier capable of working with much lower light levels than the TC-177-Li. Applications include security and surveillance systems. The TC-177-Li is priced at \$4,950. Price of the TC-177-L2 depends on the features required.

A monochrome multiplex TV film chain, Model OM-300, has been announced by Kalart Victor Corp., Plainville, CT 06062. 16mm motion pictures, 35mm filmstrips or 2 by 2 slides can be projected for television from its three input stations. The fourth station is for the TC camera. In use, either of its inputs can be put "on line" instantly. Optical transfer time is 175 ms maximum and audio transfer is accomplished simultaneously with the picture. Combinations of input may be used.

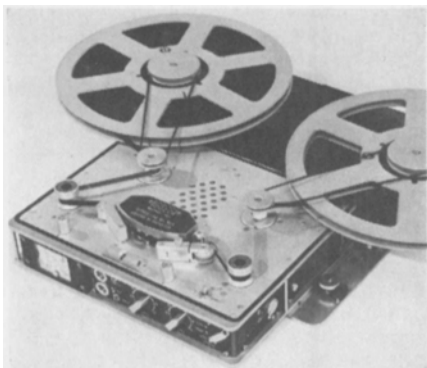
The Auto-Lok Travelite, a tripod designed to set up and fold down in seconds, has been announced by Quick-Set, Inc., 8121 Central Park Ave., Skokie, IL 60076. The tripod is made without bushings, screws or handles and the legs lock automatically at the desired length. The elevator column also locks automatically. Features include a single-control pan and tilt head with 360° pan, 90° forward tilt, 45° back tilt and 100° side tilt for vertical shots. It is priced at about \$18.

Acmechromatek, a new film transfer process reported to improve resolution 15 to 20% as well as causing a reduction in video noise level, has been installed at Acme Film and Videotape Laboratories, 1161 N. Highland Ave., Hollywood, CA 90038. The firm was instrumental in the development of the process. The unit is an electronic innovation for color as well as black-and-white film transfer processing. It attaches to film recording units.



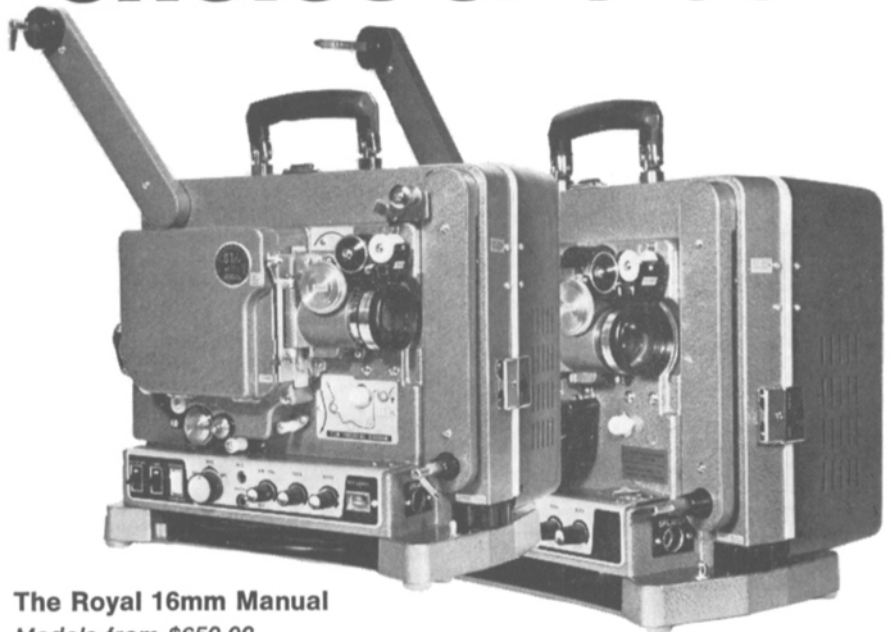
Jensen crystal time-sync generators, Model 544 for Nagra III recorders and Model 542 for Tandberg recorders, are distributed in the United States by Ryder Magnetic Sales Corp., 1147 N. Vine St., Hollywood, CA 90038. The generator is powered by the recorder and produces a 1.0-V 60-Hz synchronizing signal. The signal is recorded on the tape by the Neo-Pilot system along with the audio signal. Model 544 can be used with the Nagra IV recorder as well as with the Nagra III. Price for either Model 544 or Model 542 is \$256, including cables.

The Jensen Type 504 crystal-controlled camera motor is distributed in the United States exclusively by Ryder Magnetic Sales Corp., 1147 N. Vine St., Hollywood, CA 90038. The motor can be used to drive either Arriflex Model "S" or "M" 16mm cameras. It fits the cameras with no electrical or mechanical changes required. When using the Jensen 504, a sync signal is recorded on Nagra IV recorders with a Kudelski QGX internal time sync generator. Nagra III users may operate with either a Kudelski TGX-60 or Jensen Type 544 external time sync generator. The 504 motor is priced at \$960.



The Stellavox SP-7 portable tape recorder has been announced by Gotham Audio Corp., 2 W. 46 St., New York, NY 10036. The machine, manufactured by Stellavox in Hauterlive, Switzerland, weighs 8 lb with batteries. A system called Synchronone gives it sync capability in stereo. Plug-in head assemblies allow for interchange between mono with Neopilot sync and stereo with Synchronone sync. An internal quartz oscillator is available. An ABR adapter makes it possible to use up

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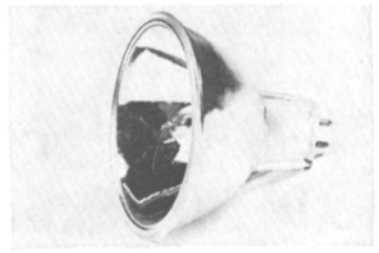
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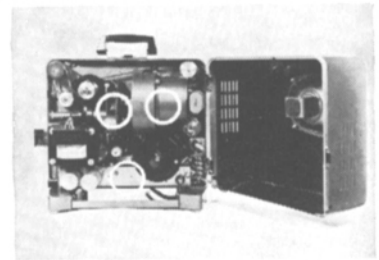
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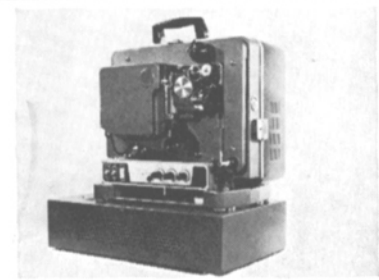
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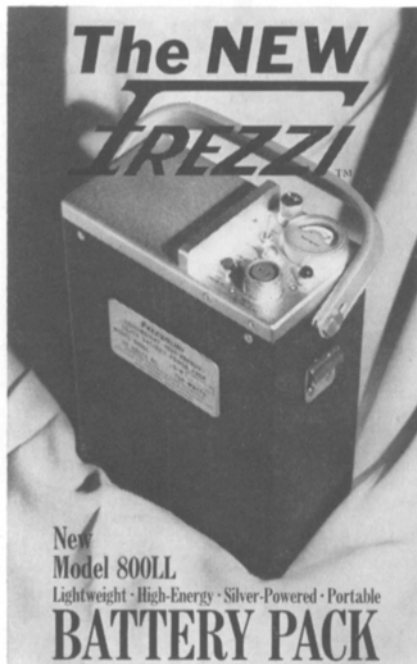
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to 10.5-in reels. A mechanical motion sensor in the motor allows all functions to be electrically switched so that the machine can be remotely controlled. It can operate at any one of four speeds — 3.75, 7.5, 15 or 30 in/s. Speed stability can be maintained over a wide temperature range. The electronics are packaged in epoxy-sealed, mu-metal plug-in modules. The current drain is only 1.4 mA, assuring long battery life. There is a built-in power supply for condenser microphones. There are no flywheels so the machine does not vary in speed during sudden accelerations. The recorder measures 10.625 by 8.375 by 3.125 in.

Low-profile multilayer optical interference filters for silicon photosensor systems have been announced by Fish-Schurman Corp., 70 Portman Rd., New Rochelle, NY 10802. The filters on ultrathin glass may be placed between a fiber optics bundle and the photosensors to provide the light and infrared filtering required for target discrimination without significant loss of resolution or sensitivity. In other applications, the sharp-cut feature of the multilayer filters and the narrow spectral bands of their combinations provide two-color or multicolor differential sensing for identification or sorting logic. Any of the firm's multilayer coatings are available on clear glass substrates 0.75 mm thick. Thinner filters are available on special order.

The Minolta 3-Color Temperature Meter, designed to measure the color temperature of any light source, including fluorescent, and to measure simultaneously the color temperature of different types of light emanating from a single source or combination of sources, has been announced by Minolta Corp., 200 Park Ave. South, New York, NY 10003. The meter uses blue silicon cells. It measures blue, red and green color temperatures via a 180° flat receptor designed to take into account all surrounding conditions that affect or contribute to the color temperature of the light at subject position; for operation from a fixed point, the flat incident receptor rotates 330° on its axis. The meter measures color temperatures from 2,500 K to 12,500 K and gives accurate readings in illumination level from 10 to 128,000 lx. Red, blue and green detectors in the light receptor have a spectral response similar to that of color films. A fourth detector measures incident light for the built-in illumination-intensity meter. It can be used as an ordinary photographic exposure meter. The meter measures 2.125 by 2.875 by 6 in and weighs 17.6 oz. It is designed for handheld operation. The price is \$375.

The Model 160 Ultrasonic Film Splicer for 16mm film has been announced by Metro/Kalvar, Inc., 745 Post Rd., Darien, CT 06820. The splicer pre-cuts and positions the film in alignment and fuses polyester to polyester with a tensile strength reported to approximate that of unspliced film. No consumables are required. Splicing time is about 3 s. Total weight of the splicing block and generator is 28 lb. The splicer operates on 120-V ac, 50 to 60 Hz. It is priced at \$1,700.

The Electro-Voice RE85 dynamic lavalier microphone, designed to eliminate friction noise, has been announced by Electro-Voice, Inc., Buchanan, MI 49107. The microphone has a double-wall construction with two separate cases being used. One case is nested inside the other and insulated from all shock and vibration with highly compliant rubber. The internal case is a capsule containing the generating element. The microphone has the Electro-Voice Acoustalloy nonmetallic diaphragm which is durable under high-humidity conditions, temperature extremes, salt air and severe mechanical shock. An integral windscreen and blast filter provides protection from wind noise, excessive sibilance and pops. The RE85 is an omnidirectional microphone with frequency response 90 to 10,000 Hz and it matches all low-impedance inputs. It weighs 8 oz, is 2.625 in long and has a diameter of less than 1 in. It is priced at \$133. The price includes 30 ft of cable, a neck cord assembly and a tie clip assembly.

Two new attenuators, Models 4436A and 4437A, covering the range from 0 to 119.9 dB and with a flat frequency response from dc to 1.5 MHz, have been announced by Hewlett-Packard Co., 1601 California Ave., Palo Alto, CA 94304. Attenuation is set by front-panel controls in 0.1-dB increments and the setting is read on a front-panel inline readout. Maximum input power is 1 W. Input/output impedance of Model 4436A is 600 Ω balanced and that of Model 4437A is 600 Ω unbalanced. Both units use printed circuit switches and a new drive mechanism designed to make them compact, lightweight and rugged. Both attenuators are 7.75 in wide, 3 in high and 6.625 in deep. Model 4436A weighs 3.8 lb and is priced at \$300. Model 4437A weighs 3.5 lb and is priced at \$255.

Model S-50K, a dual channel 50-W rms/8 Ω load power amplifier kit, has been announced by Opamp Labs, 172 S. Alta Vista Blvd., Los Angeles, CA 90036. The kit is contained in a panel-chassis 7 in high and 19 in wide with a plug-in, repairable power supply and power amplifiers. The kit includes the panel-chassis with hardware, two 440KR power amplifier kits, a wired and tested 536 power supply, a printed circuit board and the necessary components. Model S-50K is priced at \$170. Wired, it is priced at \$250.

A series of all-solid-state ac Uninterruptible Power Sources (UPS) each with a self-contained bank of sealed batteries has been announced by Elgar Corp., 8159 Engineer Rd., San Diego, CA 92111. The UPS units are designed to provide reliable, no-break ac power to users of critical equipment, such as medical patient monitoring, heart-lung machines, automatic analyzers and data processing systems. The units can work by themselves or in conjunction with emergency generator power systems to bridge the transition from ac mains to the emergency back-up power. The Elgard UPS provide full output power at 115-V ac, 60 Hz for 15 min. Prices for metered units start at \$1,500.