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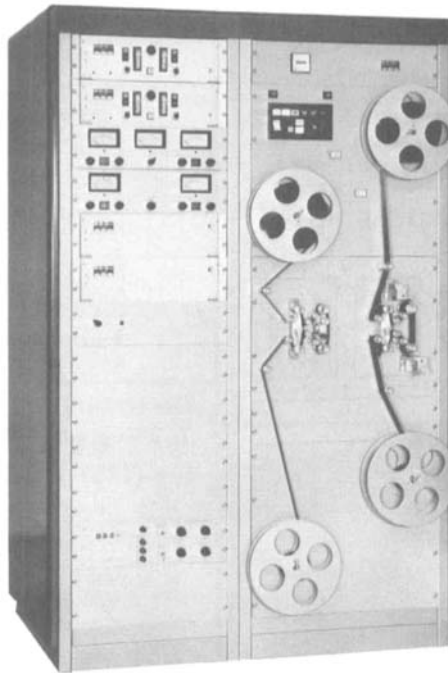
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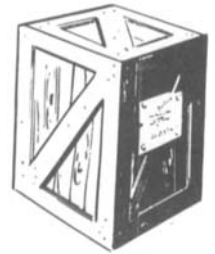


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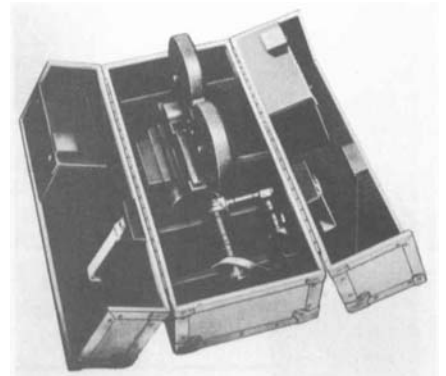
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new products

(and developments)

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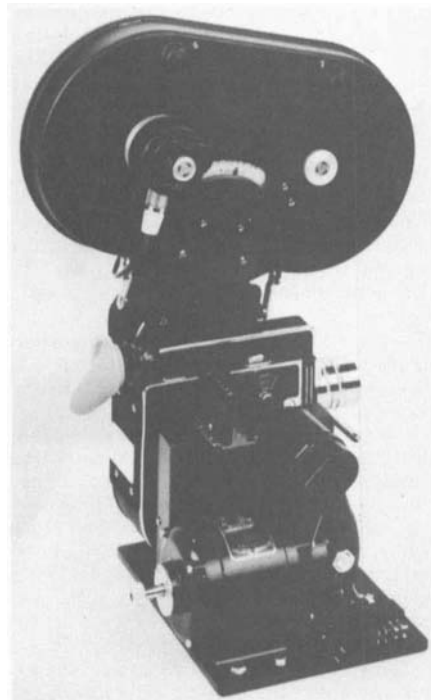
A TV newsfilm package built around the Frezzi-Cordless camera has been announced by Frezzolini Electronics Inc., 7 Valley St., Hawthorne, NJ 07506. The basic package includes the camera, an Angenieux AVB 12-120 zoom lens (choice of finder), a 400-ft magazine, spare battery, data rings, filters, amplifiers and accessories packed in a carrying case. The price is about \$6,000.

The Frezzi-Cordless camera, a 16mm single/double system sound camera, is available separately at a price of \$3,175. The camera is portable and can be operated from an internal power system that can run eight 400-ft rolls of film without use of a power cord. It can also operate on an external 120-V ac line or on an external dc battery.



The new Photo-Sonics 35mm-4M instrumentation/documentation camera has been announced by Instrumentation Marketing Corp., 820 South Mariposa St., Burbank, CA 91506. The camera can accommodate 200-, 400- and 1000-ft daylight

loading magazines that can be interchanged in a few seconds. The quick-change magazine feature minimizes the loss of event documentation at the time of the film runout and magazines can be loaded without disturbing the optical system. The camera with the 1000-ft magazine mounted measures 12 by 14 by 7 in. Camera speeds ranging from 16 to 180 frames/s are available by means of a selector switch. The camera has a film runout switch, intermittent with four pull-down pins and two register pins, 28-V dc. The camera can be tripod-, top- or side-mounted. A 155-V ac version is available. The lens mount is bayonet interrupted thread. The electronics are modular solid state. The shutter is a variable rotary disc with openings of 9° to 144°. Price of the camera (without magazine) is \$3,850.

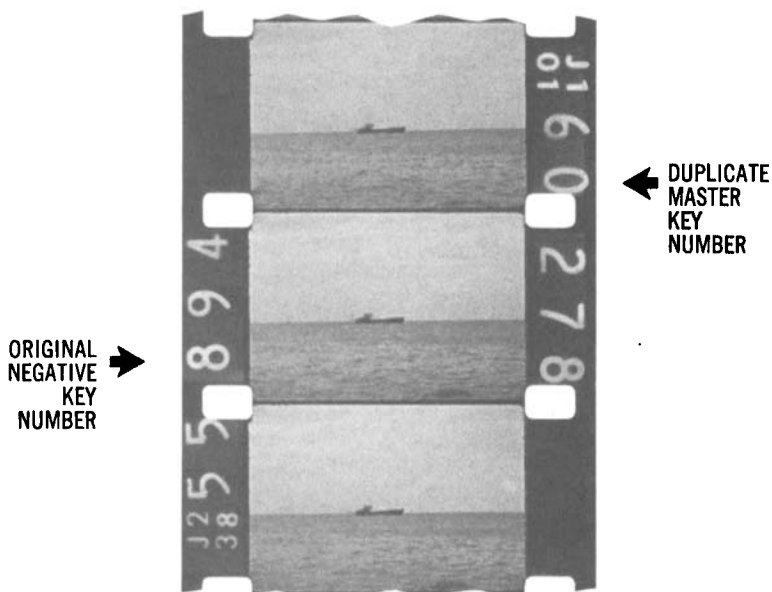


Camera drive systems for 16mm cameras that can be used in studies requiring single-frame exposures have been announced by Lafayette Instrument Co., P.O. Box 1279, Lafayette, IN 47902. The camera drives can be used on such cameras as Bolex, Bell & Howell and Kodak. The drive systems utilize Geneva gear movement and solid-state interval timers. They are manufactured as complete systems so that no adjustments or assemblies are required. The cameras can be removed and utilized independently when not being used for time-lapse or memo-motion film studies. Specialized timers allow photography at 1 frame/s to 1 frame/24 h. The systems can be used for such applications as work sampling, pollution study control, weather tracking, ice flow measurements and others. The system is priced at \$485 without a camera and about \$1,100 to \$1,200 with a camera and lens, depending on the camera selected.

A blimp for small-format cameras enshrouding the camera body and thus preventing the whirring noise that frequently presents a problem in lip-sync close-ups has been designed by Ogden Lowell, a New York cinematographer. Announce-

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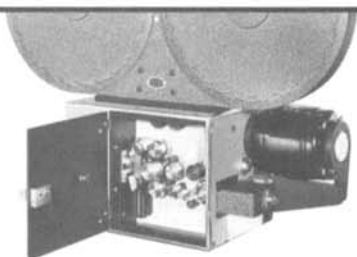
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The 1250mm f/10 Aspheric Telephoto lens, model CL5, has been announced by Celestron Pacific, Box 3578, Torrance, CA 90505. It is a compound catadioptric cassegrain system with a compound aspheric corrector lens, to give a flat field and eliminate spherical aberration while not introducing or worsening lateral chromatic aberration. Resolution in air at the film plane is reported to be over 100 lines/mm, using Dr. K. S. Tydings' resolution chart as a target. Celestron has available on request a group of slides — "CL-5 Resolution Testing Series" — giving an opportunity for performance evaluation under ordinary circumstances without use of preselected optics. Minimum focusing distance is 15 ft. At that distance the image size is about one-third life size; it can be gotten larger by use of a bellows extension tube or by introducing a Kellner eyepiece between the mirror optics and the camera, to produce an enlarged image. A 1:1 image at a distance of 23 to 29 ft is possible. The lens can be used for wildlife photography or for any subjects that must be photographed at a distance. The lens weighs 3½ lb, which is extremely light in relation to the magnification achieved. Price of the lens with finder scope, "T" adaptor and carrying case is \$395.

The U-Matic Color Video Cassette System designed to put prerecorded programs on any TV screen has been announced by Sony Corp. of America, 47-47 Van Dam St., Long Island City, NY 11101. The system uses an erasable ¼-in magnetic tape. A 60-min unrecorded tape is priced at about \$35. The player is connected to a standard TV set, color or black-and-white. A video cassette with a recorded program is inserted in the player, a button is pressed and the program appears on the TV screen. Price of the U-Matic player is about \$995. The player/recorder combination is priced at about \$1,395.

The Panasonic VTP system for duplicating large numbers of ½-in color and black-and-white videotapes has been announced by Matsushita Electric Corp. of America,

Pan Am Bldg., 200 Park Ave., New York, NY 10017. The system, consisting of a VTP printer and VTP recorder that makes the master tape, eliminates head-to-head duplication. The system is based on the principle of contact printing by bifilar tape winding. The process involves the master and slave tapes being wound onto one reel in close contact; a magnetic field is then applied which makes duplication in an instant. With this method, a 60-min tape can be duplicated in six minutes including winding and rewinding time. The master tape is free from demagnetization by the magnetic head. The machine is capable of processing 2400 ft of ½-in color videotape in six minutes.

The Nikon 100mm f/2.8 Repro-Nikkor, a lens designed primarily for use with optical printers, has been introduced by Photo-Technical Products, Inc., a subsidiary of Ehrenreich Photo-Optical Industries, Inc., 623 Stewart Ave., Garden City, NY 11530. An apochromatic lens, it has an aperture range of f/2.8 to f/22 and an optimum magnification of 1.5:1. Its magnification range of 2.5× to 1× provides for printing from 16mm to 16mm, 35mm to 16mm, 35mm to 35mm and 70mm to 35mm with distortion less than 0.1% over 50mm diameter. Overall working distance (object to image) is about 400 mm. The lens is priced at \$1,150.

The third generation of the Reverbertron artificial reverberation system has been announced by Fairchild Sound Equipment Corp., 15-58, 127th St., College Point, NY 11356. The new model, 659A, features instant selection of three decay times. It uses six electromechanical delay lines, each isolated against building rumble and environmental noise and each tuned differently to produce a natural reverberant effect. Smaller PC boards, and a generation unit now only ¾ in high, permit stacking several units in a space formerly required by a single system. It is 7 in long. A knob-controlled system-lock is incorporated to prevent vibration and damage in transit. Other improvements in the new model include a lower input level requirement (down to -30 dBm; improved SNR (65 dB); full-range equalization with bass, midrange and control presence peak selection, high and rolloff; metering of all signals; local and remote selection of three degrees of reverberation (dry, premix 1 and premix 2) and continuous mix control. Model 659A is priced at \$918.

A new unidirectional dynamic microphone, Model SM54, an improved version of the SM53, has been announced by Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. The new microphone has a substantially improved "pop" filter. A series of special acoustic filters is incorporated to virtually eliminate problems of explosive speech and breath sounds. The acoustic filters allow extremely close voice pickup without excessive low-frequency response. Other features include a broad, true cardioid pickup pattern with a wide front working angle at all frequencies, resulting in elimination of tonal coloration. The SM54 has the same rugged design as the SM53. The case is of aluminum with a stainless-steel mesh grill. The price is \$162.



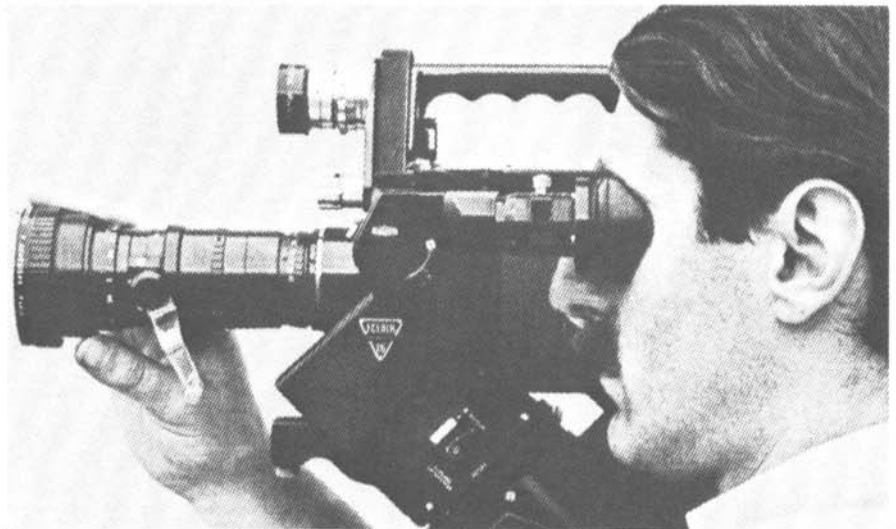
A new unidirectional microphone called Model SM5C has been announced by Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. It is an improved version of Model SM52 designed to minimize subsonic low-frequency transients resulting from rapid boom movement or wind. The microphone incorporates a 100-Hz hi-pass filter in the cartridge assembly to reduce subsonic transients which can overload the input stage of some recording channels and result in momentary blocking or distortion. It also includes a hum-bucking coil to improve SNR when the microphone is used in high-magnetic fields such as power transformers or lighting dimmers. The price is \$267.

The M675 Broadcast Production Master designed for use with the Shure M67 series of microphone mixers to provide a small broadcast console has been announced by Shure Brothers Inc., 222 Hartrey Ave., Evanston, IL 60204. The M675 augments the four M67 microphone inputs with four line inputs (two switchable to RIAA), cuing and monitoring facilities and a self-contained battery supply to power both the M675 and M67. When combined with the M63 Audio Master, the M675 can be used for tape duplication and equalization assignments. The unit's monitoring facilities include an internal speaker built into the front panel, a speaker output jack in the rear panel, a front panel headphone jack that automatically mutes the internal speaker or speaker output when used and a rear panel headphone jack which enables the engineer or announcer to monitor only program material. The M675 is 2½ in high, 11½ in wide and 7½ in deep. It weighs 5 lb. The price is \$250.

The ADRL Two-Faced Two-Timer, a timer/stopwatch enabling radio and TV production and engineering personnel to observe elapsed time simultaneously, has been announced by Television Equipment Associates, Box 1391, Bayville, NY 11709. The timer is available with either a three or a four nixi-tube display for maximum elapsed time of 9 min 59 s or 99 min 59 s. Single-faced models are also available, plus remote controls for Stop, Start and Reset. Controls can be interfaced with

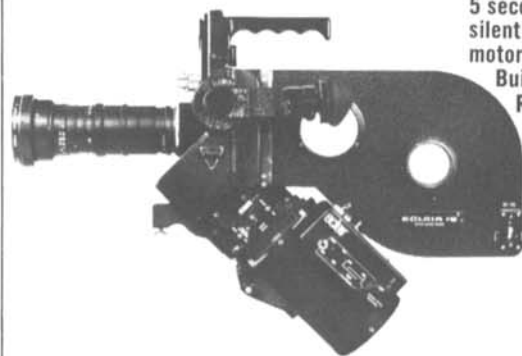
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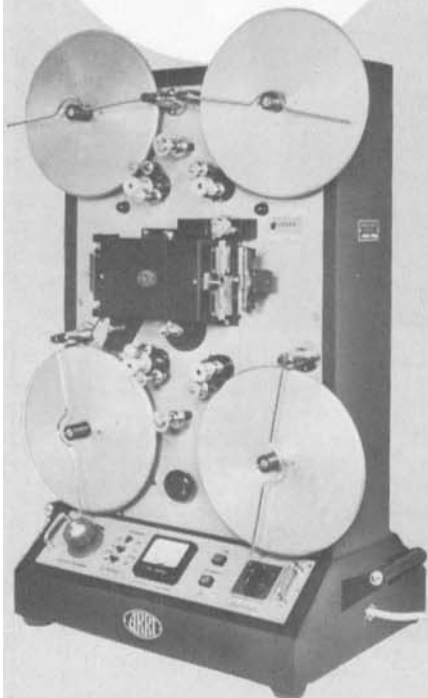
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A new **Time Mark Generator**, Model 226A, designed to supply narrow 1-V pulses at precise time intervals for calibrating the time bases of oscilloscopes and recorders, has been announced by Hewlett-Packard, 1601 California Ave., Palo Alto, CA 94304. A single front-panel control selects 30 time intervals ranging from 2 ns to 10 s in a 1, 2, 5 sequence corresponding to the sweep timing on most oscilloscopes. A crystal-controlled clock is incorporated to assure $\pm 0.002\%$ interval accuracy after one-half-hour warm-up. Marker output impedance is 50Ω . A 1-V trigger output pulse is also available. It can be used to trigger externally the oscilloscope being calibrated, or other equipment. A TTL-compatible programming option makes all ranges programmable with a 6-bit binary instruction. This enables computer control of oscilloscope calibration. Model 226A is priced at \$670. The programming option is priced at \$150.



A new **vector voltmeter**, designed to measure both amplitude and phase from 1 Hz to 13 MHz on a solid-state digital readout, has been announced by Hewlett-Packard, 1601 California Ave., Palo Alto, CA 94304. Designated Model 3575A Gain Phase Meter, the instrument has 80 dB dynamic range over its frequency range of 1 Hz to 13 MHz. It can handle input signal level from 0.2 mV to 20 V. Two input voltage ranges are set by front-panel controls. With a 10:1 divider probe, signals up to 200 V can be measured. Two channels are provided for phase measurements. One channel is for a reference signal and the other channel monitors the phase-shifted signal. Amplitudes of either channel can be measured. The ratio (in dB) of the two channels can be measured. A function switch on the front panel selects the amplitude of either channel or the ratio of the two for display on the left panel meter. The instrument uses specially developed logic circuitry to reduce measurement errors caused by noise. A frequency range switch on the front panel is set to reduce noise by filtering higher frequencies. Price of the basic Model 3375A (left panel meter only) is \$2,450. Options available include the right panel meter (\$400) and programming capability (\$720).

The **Plexiglas Mirror**, an image-reflecting plastic sheet, has been announced by Rohm and Haas Co., Independence Mall West, Philadelphia, PA 19105. The material is a transparent acrylic plastic sheet vacuum-metallized on its back surface with aluminum. A tough opaque coating protects the metallized surface. It has the image-reflecting characteristics of conventional plate glass mirrors, but it can be strip-heated and bent to fit around corners and can be cut into a great variety of shapes. It has more breakage resistance than glass mirrors and is much lighter. It is available in colorless form and in six

colors (amber, yellow, blue, green, gray and bronze). The sheet is produced in sizes ranging from 2 by 2 ft to 4 by 8 ft and in thicknesses of $\frac{1}{8}$ and $\frac{1}{4}$ in.

Prices of the $\frac{1}{8}$ -in sheets range from \$2.00 to \$2.50. The $\frac{1}{4}$ -in sheets are priced at \$2.40 to \$2.90.



The **Vanguard Model XR-35 projector**, designed specifically for medical research, development engineering, test engineering and other disciplines that require a simple, rugged projector, has been announced by Vanguard Instrument Corp., 1860 Walt Whitman Rd., Melville, L.I., NY 11746. The projector can operate at 30 frames/s, a slow-scan speed of 6 frames/s and a single-frame advance control for frame-by-frame analysis. The projector is reported to be flickerless and the direction of film travel can be instantaneously reversed. Model XR-35 is basically a wall projector where the image is projected on a conventional viewing screen. It can be converted to a film viewer by attaching the Model XR-11 Rear Projection Hood. Model XR-35 is priced at \$3,980. The rear-projection accessory (Model XR-11) is priced at \$225.

The **Noris daylight sound film viewer**, a table unit with a built-in screen and a loudspeaker with a frequency range of 100 to 18,000 c/s, has been announced by Karl Heitz, Inc., 979 Third Ave., New York, NY 10022. Designed for the Norimat super-8 (dual-8) sound cassette projectors, the sound film viewer can also be used with other sound projectors with a loudspeaker jack or as an external loudspeaker setup behind a large projection screen. It measures $8\frac{1}{4}$ by $7\frac{1}{4}$ by $7\frac{1}{4}$ in. The screen is 6 $\frac{1}{4}$ by 5 in. The price is \$49.95.

The **HPI Caritel**, a new projector cabinet with a vertical design that projects the image on a 14- by 14-in screen directly over the projector, has been announced by Hudson Photographic Industries, Inc., 2 South Buckhout St., Irvington-on-Hudson, NY 10533. The screen is made of a newly developed "daylight blue" plastic and has a nonreflective surface. The HPI Caritel folds flat to a 1-in thickness. It weighs 4 lb. The cabinet is 28 in high and occupies less than a square foot of desk space. It is priced at \$50.