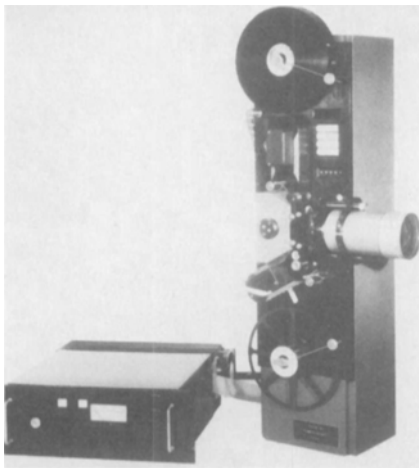


# New Products & Developments



**A projection system.** The Pacer-35, for use in television special effects videography, simulation applications, process photography, screen projection, background projection, post production viewing, and high speed film

inspection, was announced by Pioneer Marketing Corp., 1021 N. Lake St., Burbank, CA 91502. This 35-mm projector features micro-processor control electronics, allowing it to be a control source for programming as well as being controlled itself from a preprogrammed source.

The Pacer-35 features an optical/electronic film registration system for accuracy and eliminates the conventional mechanical intermittent film transport which causes film wear and tear. It operates at video speed (30 frames/s), motion picture speed at  $\frac{3}{2}$  pulldown (24 frames/s), and 20 frames/s at  $\frac{3}{4}$  pulldown. It features flicker-free projection at all speeds and has instant stop/start. Other features include 10-ms pulldown, predetermined stop, search, high speed rewind, 5-digit frame counter, 5-digit presettable counter, framing, and forward/reverse operation. The price of the Pacer-35 is \$15,500.

**A new type of film cleaning/conditioning system** said to consume 85% less cleaning solvent than any previous design has been an-



nounced by Lipsner-Smith Corp., 4700 Chase, Lincolnwood, IL 60646. Designated Model CF-3000, designed especially to meet the rising cost of petroleum-based solvents, the new system not only incorporates a number of improvements over the earlier CF-2 film cleaning system but has, in fact, changed the system by replacing the drying tower with a new low volume, high pressure air cushion which returns to the system the fluid and vapor previously lost in the drying tower. Venting requirements are thus reduced. Components include high capacity refrigeration coils for vapor condensation and a distilling system for solvent recovery. Usable fluids in the new system include regular solvent and solvent with CF-2 Plus Conditioner. The CF-3000 handles 35-mm and 16-mm film on reels or flanges. The price is \$35,000.

## Renowned PERFECTONE trio «High speed»

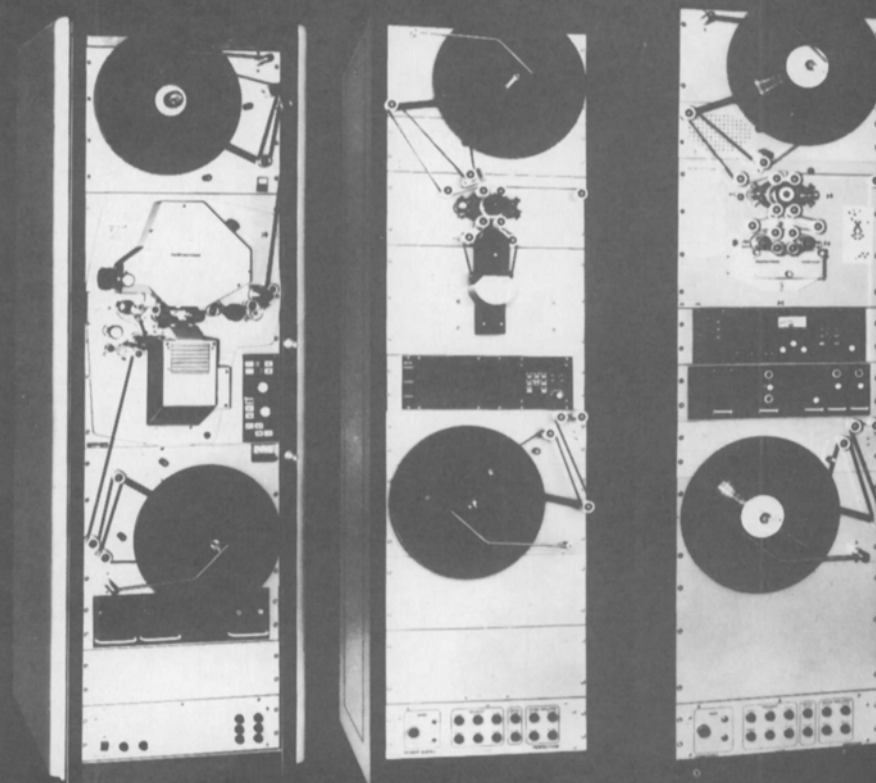
Three 16 mm machines for continuous synchronous motion in forward and reverse running. Speeds 24 or 25 cps or variable speed up to 30 times the normal.

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### SPECIFICATIONS:

Dimensions:

15" W x 15" D x 24" H

Tank Size:

10 Gallons

Power Requirements:

Model 610: 115 VAC 60 Hz., 1.2A Max.

Cathode Size:

Discs: 5.4" dia. — 8 discs

**\$695.00**

Model 610X: 220 VAC 50 Hz., 0.7A Max. **\$795.00**



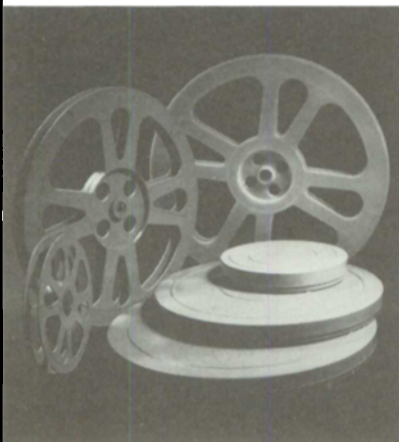
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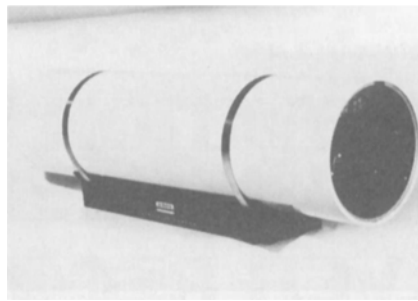
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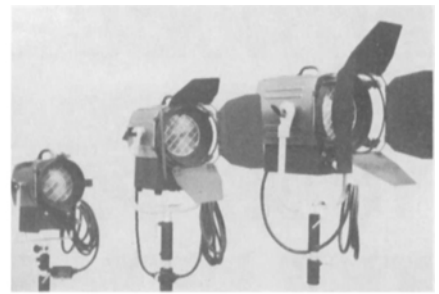
A low light television camera, the ISIT Model 2856C, was announced by Cohu, Inc., Electronics Div., Box 623, San Diego, CA 92112. Belonging to the 2800 Environmental Series, it features an automatic 1 billion to 1 light range, 450-line horizontal center resolution, underscan and overscan capability, and an environment-resistant, tamperproof, sealed housing with purge fittings allowing operation under adverse ambient conditions down to  $-40^{\circ}\text{C}$ . Options include a screensplitter, CCIR sync generator, and cable preequalizer. Available factory modifications allow underwater operation down to 200 ft. The price of the 2856C is \$8,555.



A waveform monitor, Model WM310A, featuring a plug-in video process board to allow quick replacement of a major failure, has been announced by Ultra Audio Pixtec, P.O. Box 921, Beverly Hills, CA 90213. All integrated circuits are in sockets and no burn-in is needed. In addition to line and field displays the WM310A shows expanded horizontal blanking and vertical interval. Displays are full-band, luminance or chroma only, and unclamped video exhibition for checking clamp quality of studio equipment. The unit can detect VITS (vertical interval test signal) presence, providing an external scope trigger pulse with user selection of TV lines 16 through 19. The price is \$900.

The **Ambiarc 200 W**, an open face, daylight fixture HMI light to be used on the mains or a generator, has been announced by LTM Corp., 21200 Nordhoff St., Chatsworth, CA 91311. This light can be used in very restricted areas without losing the advantage of the superior light output of the HMI daylight bulb. The bulb has been mounted in the axis of the light throw, allowing the light generated by the bulb to be used to its maximum.

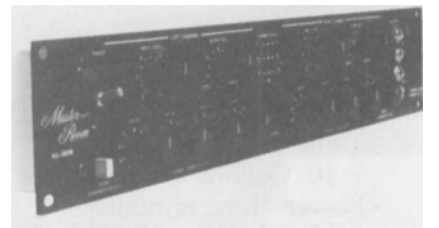
LTM also announced three models in the



new Miniline series (shown above), consisting of 1k, 2k, and 5k units. All-aluminum welded construction provides trouble-free service, does not rust, and cools faster. The simplicity of design makes everything accessible in case of damage. Prices range from \$250 to \$1600 for the 200-W Ambiarc.

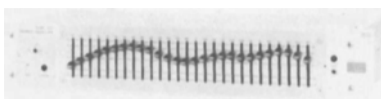


Three new lines of microphones were announced by Panasonic, One Panasonic Way, Secaucus, NJ 07094. The Panasonic broadcast quality professional series consists of five models: WM-1521, WM-1520, WM-1506, WM-1505, WM-1555. The price range is \$94.95 to \$299.95. The general purpose line consists of the following five models: WM-1326, WM-1325, WM-1323, WM-1315, WM-1400. The price range is \$49.95 to \$179.95. Models WM-1151, WM-1181, WM-1610, WM-1100, and WM-1150 make up the videotape recorder line. The price range is \$18.95 to \$49.95.

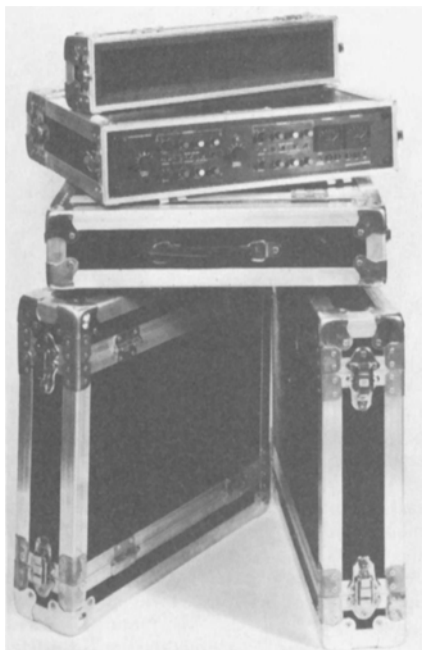


A compact, self-contained reverberation system, Model Master-Room XL-305 Acoustic Chamber Synthesizer, was announced by Micmix Audio Products, Inc., 2995 Ladybird Lane, Dallas, TX 75220. It is a stereo unit featuring two independent channels which are readily switchable to either mono mode or to stereo imaging of a monaural signal. Input and output level controls as well as dry/reverb controls are provided for each channel. Each channel also includes a four-band equalizer section which allows the reverberation system to effectively simulate the reverberant sounds of a live chamber or concert hall. The XL-305 is designed to be located in studio control rooms and will withstand high monitor

speaker levels without feedback or other acoustical interference. The price is \$1,350.



**A low noise audio equalizer**, Model 537, a successor to Model 527-A, has been announced by United Recording Electronics Industries, 8460 San Fernando Rd., Sun Valley, CA 91352. The 537 features SNR better than 110 dB at maximum output. It provides 12 dB of boost or cut at each of its 27 frequencies centered at ISO  $\frac{1}{3}$ -octave increments from 40 Hz to 16 kHz. Input capability is +20 dBm and output capability is +24 dBm. The 27 filters are active, minimum phase L-C networks that combine for minimum ripple and phase shift when used in combination. Gain adjustment on the front panel gives up to 20 dB gain. The 537 is self-contained with a regulated power supply. The price is \$796.



**Upgraded versions of a Compex limiter**, Model F760X-RS (shown above), and vocal stresser, Model F769X-R, were announced by Audio & Design (Recording) Ltd., 84 Oxford Rd., Reading RG1 7JL, Berks, England. Both have been modified to provide optional pre-emphasis in the peak limiter "side chain" of 50 or 75  $\mu$ s. Improvements in construction include 3- $\mu$ m gold-plated Elma switches, 4-mm brushed and anodized aluminum front panels, and internal improvements which eliminate most wiring harnesses. The prices are £935 for the Compex limiter and £795 for the vocal stresser.

**A line of seven motion-picture theater loud-speaker systems** has been announced by James B. Lansing Sound, Inc., 8500 Balboa Blvd., Northridge, CA 91329. The systems have been designed to provide high quality sound reproduction, ruggedness, and re-

liability. The line is intended to provide a broad range of theater house applications.

Model 4672 is a compact two-way loud-speaker system designed for use in small theaters. Components include a newly developed 15-in low frequency loudspeaker, a high frequency compression driver, and a radial horn all housed in a horn loaded enclosure. The price is \$918.

Model 4674 is intended for applications requiring high acoustic output from a moderately sized system. A 15-in low frequency driver is identical to the specially designed 4672 bass speaker. High frequencies are provided by a larger externally mounted radial horn and compression driver. The price is \$1254.

Model 4676-1, designed for installation in large theaters, is a two-way system engineered to deliver high level acoustic output over a wide frequency range with low distortion. For deepest bass reproduction, the system uses two 15-in low frequency loudspeakers housed in a long throw horn enclosure. A single compression driver and radial horn are used for high frequencies. The price is \$1746.

Model 4676-2, said to be the most powerful system in JBL's motion-picture loud-speaker line, has been designed to produce high sound pressure levels with low distortion in the largest theaters. Consisting of two horn enclosures, four 15-in low frequency drivers, two high frequency compression drivers, and a single controlled-dispersion radial horn, the 4672 is designed to provide great power capacity, efficiency, and dynamic range. The price is \$3186.

Model 4670 is intended for theaters that have limited space behind the screen. It is said to have high efficiency, wide dispersion, and full dynamic range in a compact package. Its specially designed slim profile enclosure contains two 15-in low frequency loudspeakers and an externally mounted compression driver, horn, and acoustic lens. The price will be announced later.

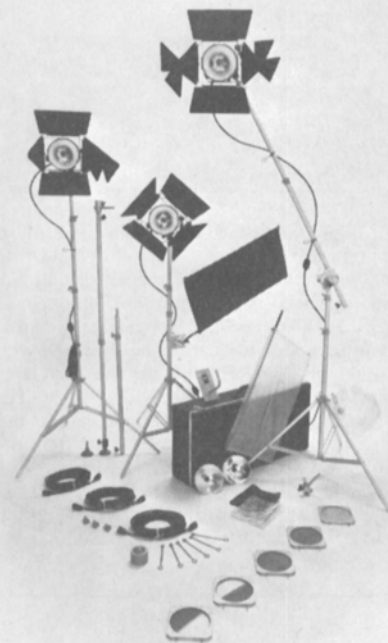
Model 4375, a high powered line array designed for use as an effects speaker, consists of four 5-in loudspeakers housed in a compact shallow enclosure. It offers wide dispersion and high clarity to provide complete surrounds coverage. It is priced at \$366.

Model 4301, designed originally for broadcast applications, is also useful as a surround or effects system for small theaters. The system consists of an 8-in low frequency loudspeaker and a 1.4-in high frequency driver housed in a vented enclosure. The price is about \$168.



**A multipurpose test instrument**, for audiotape recorders, audio amplifiers, pre-amplifiers, and turntables, was announced by Neal Ferrograph U.S.A., Inc., 652 Glenbrook Rd., Stamford, CT 06906. The

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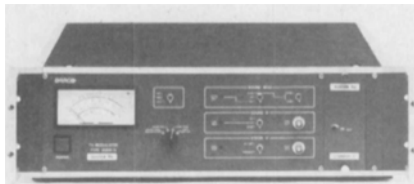
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RTS2 contains a low distortion audio oscillator, a stepped attenuator offering 100-dB output range, a precision voltmeter, a distortion meter, and a wow and flutter meter.

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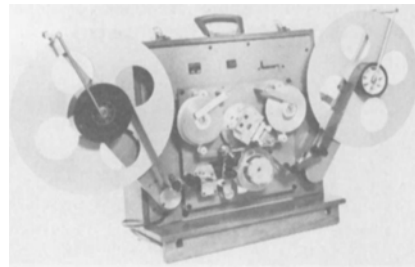


A high precision television modulator, applying SAW devices for VSB band filtering, was announced by Barco Electronic n.v., Noordlaan 5, 8720 Kurne, Belgium. The VSBM 1/S is available for systems M and BG as an IF modulator and can be equipped with a frontal plug-in RF converter for any television channel between 40 and 890 MHz. Temperature-controlled quartz oscillators offer high frequency stability for transmitter applications. Two video inputs, an auxiliary IF input, and a sound AF input are provided. The rugged all-metal case of the VSBM 1/S fits into a standard 19-in rack. A modular con-

struction allows easy exchange of all printed circuit boards. It is priced at \$5,232.

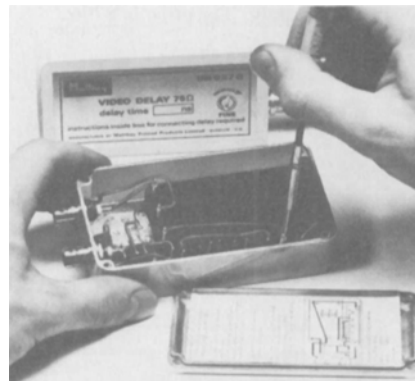
A line extender amplifier, Model 250, featuring an optional slope-compensated automatic gain control (AGC), was announced by RCA Cablevision Systems, 8500 Balboa Blvd., Van Nuys, CA 91409. Either a modulated video or continuous wave signal may be used as a pilot. To eliminate interference with amplifier response, the AGC is isolated in a separate compartment. The AGC utilizes a single pilot to correct for cable attenuation. For bidirectional operation, a reverse hybrid can be plugged in to the amplifier module. The hybrid can also be turned around to operate in the downstream direction for testing or special applications. Built-in diplexers minimize field alignment and facilitate interchangeability. The price of the line extender amplifier ranges from \$315 to \$436 depending on options.

The Codemaster, a machine for the edge numbering of film and magnetic tape, has been announced by Acmade Technologies Inc., Suite 201, 1640 Fifth St., Santa Monica, CA 90401. The machine, available in either 35mm or 16mm, uses a specially developed dry transfer tape. As the film passes through the machine, a rotating numbering head transfers a gold colored number to the edge of the film at 1-ft intervals. The machine can handle reels of film up to 2000 ft at a speed of 120 ft/min. The transfer tape which runs through the



machine twice is of sufficient length that one reel of tape can number up to 6000 ft of film.

The machine weighs about 20 kg. The film takeup plates and arms can be folded to fit in a portable carrying case. A footage counter is provided, and a "magic eye" ensures that the machine stops at the end of each tape. A safety cover is provided over the mechanism to protect the operator when the machine is rotating. Should the safety cover be lifted while the machine is running, an interlock switch automatically stops the machine. The Codemaster is available for either 240 V 50 Hz or 115 V 60 Hz. The price is about \$6267.



Video and pulse delay lines, Matthey Models UN 360 and UN 180, providing infinitely variable delay, were announced by Television Equipment Assoc., Inc., Box 260, S. Salem, NY 10590. Matthey video delays have built-in equalizers out to 5.5 MHz and an impedance of 75  $\Omega$ . Options include BNC connectors, rack mount units, and printed circuit board modules. The price of the UN 360 is \$338 and the UN 180, \$146.

Video Delay Series UN 097 provide the advantages of Matthey switchable delays without the switches. Six models cover a range of 15 to 665 ns equalized to 5.5 MHz, 75  $\Omega$  impedance. The unit, in a metal box with BNC connectors, contains a segmented delay module of 155 ns which may be connected in 5 ns steps. Model UN 097 G is shown above. Prices range from \$142 to \$490 depending on the amount of delay.



The Perf-Fix machine for film perforation repair, protection, and preservation (*Journal*, p. 706, Aug. 1976) now has two new features according to an announcement from Perf-Fix



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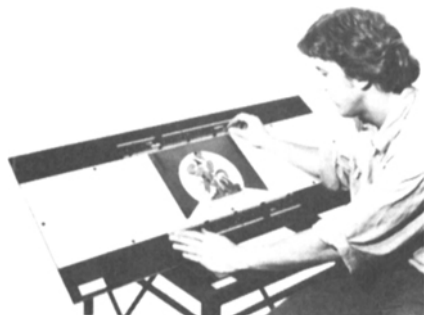
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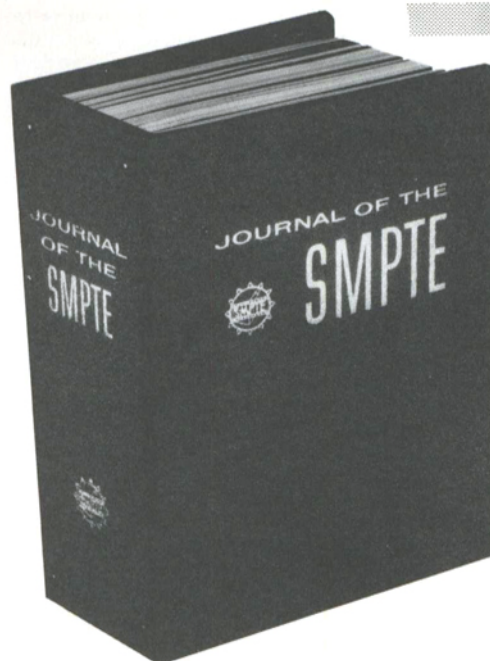
Company, 12381 Wilshire Blvd., Suite 203, Los Angeles, CA 90025. The new features are a drive crank for controlled slow speeds or rapid application of repair tape, and multiple slotted sprockets with accompanying cutter and fine-tip scissor for versatility in trimming film damage and cutting tape. The PF-35D or 16/35D allows double edged repair of 35mm film and filmstrips and total image repair of filmstrips. Prices of the machines range from \$210 to \$295. (The 1976 prices were \$275 to \$295.) In addition to lower prices, each machine purchase is accompanied by a free repair tape package.



**An animation planning board**, used for checking and aligning of animation cels, rough layouts, and correlating art with existing backgrounds, was announced by The Fax Co., 374 S. Fair Oaks Ave., Pasadena, CA 91105. The planning board, which includes 2-in bars compatible with the Fax animation disk, permits checking 12- and 16-field work and working with double or triple backgrounds. The bars have an 18-in center scale for control of east-west movement. The board has a white plexiglass window to permit back-lighting. The price is \$425 with Acme pegs, \$430 with Oxberry pegs.



**A roll around console** for 1-in Type C VTRs, Model 3100, has been announced by The Winsted Corp., 8127 Pleasant Ave. S., Min-



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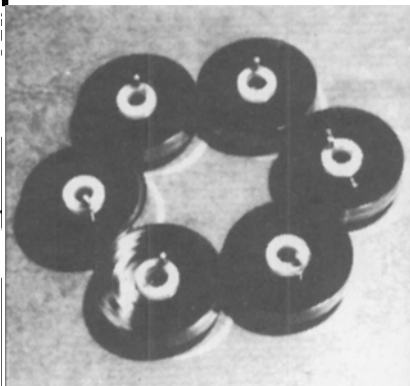
LaVezi's new "VKF" sprockets are adding life to all 35mm film, CS CinemaScope and standard KS film, by reducing film damage caused by abnormal contact with the sprocket.

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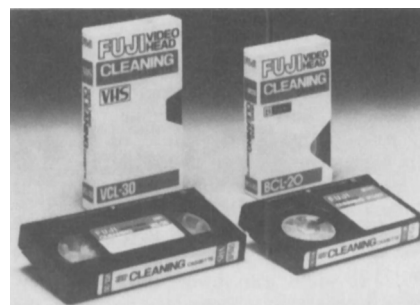
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neapolis, MN 55420. The VTR turntable rotates 360° for servicing and to allow turning the machine for better viewing or more flexible operation. The base cabinet has 19¼-in rack height for TBC or other controls plus a pullout shelf for equipment or tapes. The extended monitor shelf adjusts up or down in 1-in increments. Price of Model 3100 is \$879.

A 2-in helical videotape, especially designed for use with IVC 9000 series recorders, was announced by 3M, Magnetic Audio/Video Products Div., St. Paul, MN 55101. The Scotch 371 videotape offers more tape life and less dropout than earlier tapes. In addition, it has color noise advantages. The cleaner-running tape features a stabilized polyester backing with control wind treatment. This helps to save time by reducing downtime due to interchangeability problems. The price of the videotape is \$225.

VHS and Beta format head cleaning cassettes, VCL-30 (VHS, 30 ft) and BCL-20 (Beta, 20 ft), were announced by Fuji Magnetic Tapes, 350 Fifth Ave., New York, NY 10001. At the first appearance of picture "snow," an indication of clogged heads, the cassette should be inserted into the deck and



run for 10 seconds. One 10-s run will clean the heads completely, eliminating oxides and binder residues. If snow is still visible, another 10-s run should be made.

Each cassette can be used a recommended maximum of 90 times with each complete pass yielding 30 cleanings, and the tape can be used three times. The price of the VCL-30 is \$25; the BCL-20 is priced \$18.50.

Further information about these items can be obtained 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.

C. Francis Jenkins	"Stereoscopic Motion Pictures"	Jan. 1919
Lee De Forest	"The Phonofilm"	May 1923
D. L. MacAdam	"Quality of Color Reproduction"	May 1951
Rodger J. Ross	"Film in Television"	June 1958
Peter C. Goldmark	"Color Electronic Video Recording"	Aug. 1970

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