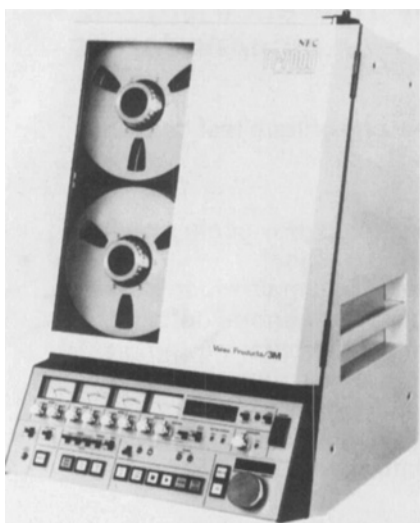


New Products & Developments



The 3M/NEC Model TT-7000 1-in, high band, helical scan videotape recorder, featuring an advanced-technology aided-track-following option, audio and video confidence heads, and unobstructed rack mounting, has been announced by 3M Company,

P.O. Box 33600, St. Paul, MN 55133. 3M and NEC (Nippon Electric Co.) recently announced an agreement to market the NEC system, modified by 3M's addition of the aided-track-following option, in the U.S. and Canada. NEC will market the full system elsewhere.

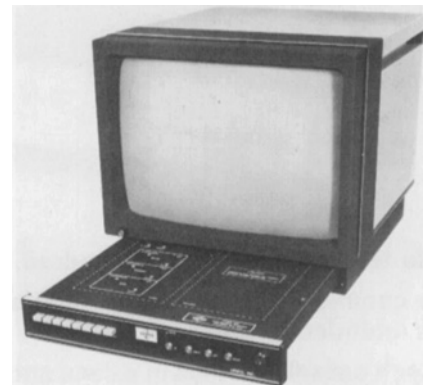
The TT-7000 system uses the full-scan Type C format. It is designed for production studios, TV remote vans, and TV studio use. The aided-track-following feature includes an instantaneous servo system controlled by a microprocessor.

Precise editing and speed variation with no loss of synchronization is made possible through the use of the aided-track-following option combined with the optional NTC-10 time base corrector. Speed may be varied from one-quarter reverse to twice forward; still-frame capability permits study and small increment editing motion. Other features in the 3M/NEC system include an optional tape timer counter and a built-in FM calibrate oscillator/marker. Either tabletop or rack mounting is possible. The recorder is priced at about \$42,000. The aided-track-following option is priced at \$10,000 and the NTC-10 time base corrector is priced at \$21,950.

Three new videotape editing systems have been added to the ECS-100 series according to an announcement from Convergence Corp., 1641 McGaw, Irvine, CA 92714. The ECS-102A is an entry level, single source editing system featuring cruise control, trimmable in/out points, and operating with both 3/4-in and 1-in VTRs. The system can be used for ENG editing, animation, and automatic dialog replacement. The price of \$10,000 includes two 3/4-in interface packages and a full video status display generator.

The ECS-103A is a multiple source cuts-only videocassette editing system. The system has the capability of employing additional source VTRs with cuts-only editing. Other features include split audio and video edits, 99 scene store and recall, and high speed search. It is priced at about \$12,500. The price includes two 3/4-in interface packages with a full status display generator.

The ECS-103B can be used as a sophisticated single source system or as a multi-source, on- and off-line post production editing system with A/B roll capability and switcher control for special effects. The system works with both 3/4-in and 1-in videotape formats and has the capability of producing an industry standard edit decision list with full effect notation. The price is about \$17,000.



The PCM-500 series of professional color master studio monitors has been announced by Lenco, Inc., 300 N. Maryland St., Jackson, MO 63755. The monitors feature a black-matrix shadow-mask precision in-line gun CRT which is said to have certain advantages over the Delta-gun tube. Resolution of the PCM-500 monitors is 625 lines or more and convergence controls are simplified. A switch-selectable comb filter in the luminance/chrominance separator allows the operator to select either the comb filter or a conventional notch filter. The monitors also accept both NTSC and RGB inputs. Differential amplifiers are incorporated at the inputs of the monitors for maximum hum rejection. All signal input preamplifiers are mounted on a single printed circuit card with BNC connectors for minimum return loss.

Brightness, contrast, chroma, and hue controls have an internal preset. Other controls on the slide-out front panel include comb filter in/out; NTSC A/B; RGB; monochrome only; align (blue only); underscan; and internal/external sync selection. With the exception of the underscan switch all front panel controls are remotely controllable. An optional remote control panel is dc controlled and may be placed up to 1000 ft from the monitor. The monitors can be converted to any of the PAL system standards by changing

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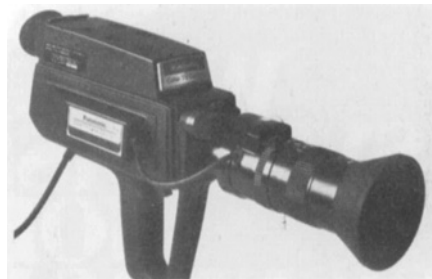
We've never put our name on anything that wasn't the best.

the decoder board. Prices range from \$4995 to \$5695.

The Digital Slow Scan Transceiver, Model 285, has been announced by Colorado Video Inc., Box 928, Boulder, CO 80306. The unit is available in transceiver, transmitter, or receiver configurations and provides television picture transmission over a wide variety of data channels. The 285 incorporates frame freeze for stop action at the transmitter, a repeating "freeze-and-scan" mode for surveillance applications, and continuous display at the receiver as each new image "wipes off" the previous one. The 285 features serial digital transmission at rates from 2400 to 500 kbit/s and requires no adjustment when changing rates (i.e. the 285 tracks the modem clock rate). Modem interface is EIA RS232C and MIL STD 188C compatible.

The 285 accepts standard television signals from camera, videotape recorder, or vidiodisk recorder and produces a standard television output signal for viewing on conventional CCTV monitors. Images from the 285 may be recorded on videotape for permanent file copy. The operator may choose left-to-right or top-to-bottom scanning to suit the subject matter and may transmit either a single field (shorter transmission time at reduced resolution) or a full frame of video (normal transmission time at full resolution). Transmission times vary according to the gray levels chosen, either 64 (6-bit) or 256 (8-bit) resolution and bit rate. Prices start at \$9000 for receive only.

A compact color television camera designed mainly for use with Omnivision II VHS recorders to provide a color video recording



system has been announced by Panasonic, One Panasonic Way, Secaucus, NJ 07094. Designated Model WV-3320, the camera is designed primarily for outdoor applications and in remote locations using Panasonic's VHS portable recorder NV-8400. It can be used indoors for simple recording with VHS models NV-1000A, NV-8200, or NV-8310 using an optional ac adapter. The WV-3320 uses a 1-in color vidicon and an automatic iris control zoom lens. The tube features low lag and low retention of after images. It produces 250 lines of horizontal resolution (luminance) with an illumination of 140 fc at $f/4$. The viewfinder, mounted on top of the camera, is a 1 $\frac{3}{8}$ -in CRT which doubles as a monochrome playback monitor. Also located in the viewfinder are light intensity indicators and a tally light. The camera has a built-in electret condenser microphone.

Features include a 17-102-mm, $f/2$, 6:1 zoom lens with an auto/manual iris switch. An iris indicator located in front of the camera head on top of the lens shows the selected setting. Other features include internal setting, factory-set white balance, and manually adjustable R and B levels. Price of the WV-3320 is \$1345.



Two portable color cameras, Models WV-3200 (shown above) and WV-3210, have been announced by Panasonic, One Panasonic Way, Secaucus, NJ 07094. Each camera is self-contained with a $\frac{2}{3}$ -in stripe filter integrated vidicon, receiving power from the Panasonic videocassette recorder or power supply/camera ac adapter. Model WV-3200 has a zoom lens with automatic iris power control. The zoom lens characteristics are: 11.5-70 mm, $f/1.8$ producing 240-lines horizontal resolution (luminance) with an illumination of 140 fc (1400 lx) at $f/2.8$. Minimum illumination is 10 fc (100 lx) at $f/1.8$. The 1 $\frac{3}{8}$ -in CRT tiltable and detachable viewfinder, also used for VCR playback, is mounted on the camera head which can be right or left eye operated. Synchronized audio and video recording are controlled by a single silent trigger located on the camera handgrip. Other features include a back-light correction for the strong-contrast scene, built-in color temperature setting for indoors and outdoors (3200 K and 5500 K), built-in factory set white balance setting by R and B gains controls, and others. Price of the WV-3200 is \$1100.

Model WV-3210 has a zoom lens with

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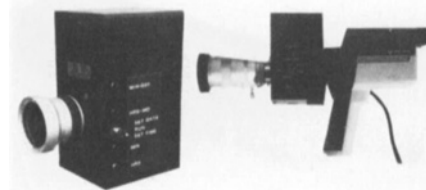
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automatic iris power control, 14–56 mm, $f/1.8$ producing 240-lines horizontal resolution (luminance) with an illumination of 140 fc (1400 lx) at $f/2.8$. The camera has a through-the-lens optical viewfinder. It is priced at \$950.



A rotating viewfinder mount, an accessory for the RCA TK760 camera, has been announced by Tele-Cine Inc., 5434 Merrick Rd., Massapequa, NY 11758. The camera operator can rotate the viewfinder to either side of the camera while maintaining full tilt capability. A locking screw permits the operator to secure the viewfinder to prevent accidental rotation. The viewfinder mounts on top of the rotator. The price is \$195.



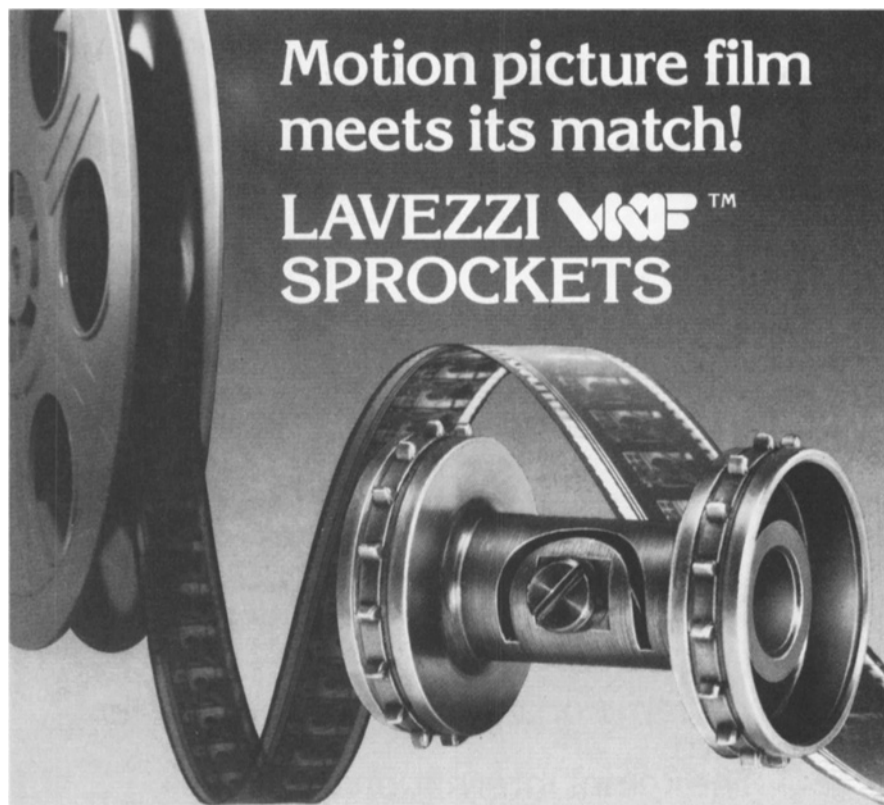
A time and date generator for 16-mm film cameras and video portapak television cameras has been announced by Visual Methods, Inc., 35 Charles St., Westwood, NJ 07675. Designated the TD-143, the time/date lens attaches to any "C" mount camera and optically annotates the edge of the film or vidicon camera. The information is located on either side or on the top or bottom of the film frame. After an initial setup, the TD-143 keeps time and date for four years and does not have to be reset until leap year. The time and date are set up by means of four pushbuttons and one toggle switch. The set time and date are viewed through a window by means of LED indicators. The unit is powered by 117 V ac with 8-h battery standby available during power failure or 12 V dc from the portapak batteries. The TD-143 screws onto the front of the camera and adds only $3\frac{1}{2}$ in to its length. Applications include surveillance, crime investigations, pollution monitoring, and other industrial applications requiring time and date annotation. The price is \$850.

A 30–70-mm zoom prime lens for 16-mm Eiki motion-picture projectors has been announced by D.O. Industries, 317 E. Chestnut St., E. Rochester, NY 14445. Designated Model DOZ-16-E, the lens projects a sharp picture and needs no zoom adapters. It has an $f/1.3$ – 1.8 aperture that maintains a bright picture throughout the 30–70-mm zoom range. The lens projects an image that reportedly can be 66% larger to 30% smaller than one projected by a normal 2-in lens. The new lens replaces the 1-, $1\frac{1}{2}$ -, 2-, and $2\frac{1}{2}$ -in prime lenses used in 16-mm Eiki projectors. Also offered is a 30–70-mm zoom prime lens for the Bell & Howell 500–1500 series, the



Singer 200 series, and Kalart and Viewlex projectors. The DOZ-16-E lens is priced at \$259.

A new television camera support head specifically designed for both in-studio and remote production applications has been announced by Innovative Television Equipment, 6445 De Soto Ave., P.O. Box 681, Woodland Hills, CA 91365. Designated the ITE-H6 Hydrocam™ the head incorporates a viscosity drag system offering a smooth pan and tilt action. Independent lock-in friction controls are incorporated for both pan and tilt. The ITE-H6 is equipped with a wedge adapter and dual telescopic control handles. It can support television cameras weighing up to 125 lb. Tilt angle is up to $\pm 50^\circ$ and pan rotation is 360° . Measurements are 9 in wide, 9 in high, and 9.5 in deep. The weight is 23 lb. The ITE-H6 Hydrocam is priced at \$1875.



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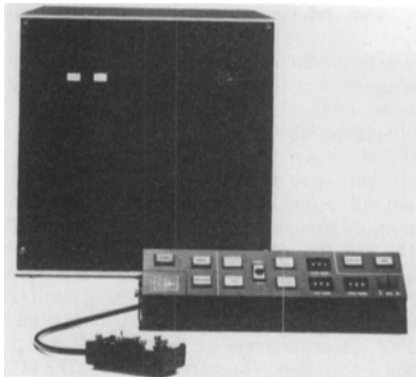
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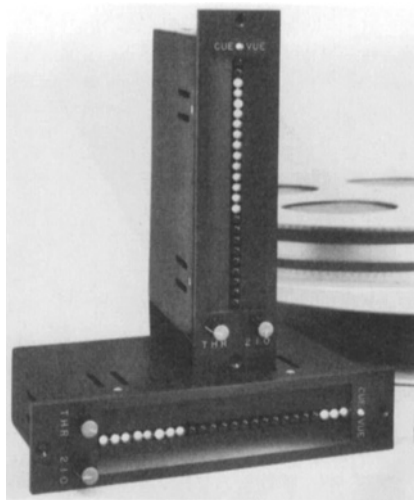
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The Cinetron 300 control system for animation stands, optical benches, and other special effects devices has been announced by Cinetron Computer Systems, 6700 I-85 North, Norcross, GA 30093. It is a three-axis unit, modular designed to use a digital computer pre-programmed to respond to pushbutton operator commands rather than typed commands. Features include infinite repeatability, forward or backward; shoot to frame inverse cine speed tapers for smooth acceleration and deceleration; and ease of operation. The price is about \$15,000.

Cue Vue®, Model CV 150, a device designed to simplify sound rerecording and enhance the sound mix by providing direct and precise visual indications of the approach, beginnings, and ends of blocks of sound on individual soundtracks, has been announced by Cue Vue, 16 Homer Lane, Menlo Park, CA 94025. The device takes the signal from an advance



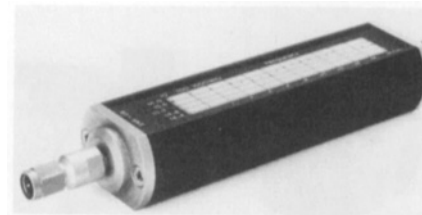
playback head, determines its length, and shows each block of sound approaching the regular playback head as a set of traveling lights on a column of LEDs.

Designed for mounting at the console or podium, the CV 150 works with all tape gauges and speeds and features two adjustable scanning rates with sensitivity control. The price of \$695 includes a display unit, low noise preamplifier and power supply. The pre-scan head is not included.

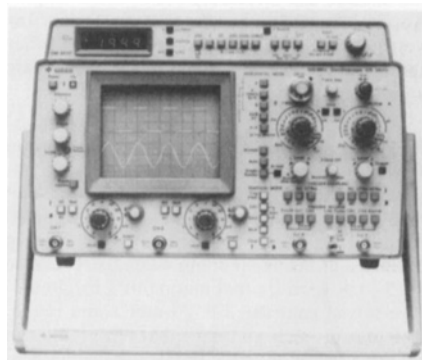
A special effects generator designed to provide a convenient means for creating flickering light source effects has been announced by The Great American Market, P.O. Box 178, Woodland Hills, CA 91364. Designated



the SPE-2, the device can simulate light from a fireplace, television receiver, candle, etc., for television and motion-picture productions. The flicker rate of the SPE-2 is continuously adjustable from very slow to very rapid. The unit is of all solid state construction operating on four type AA self-contained batteries. It can be plugged into any 120-V-ac 15-A outlet. Two threshold levels are provided to accommodate filament lag. A 15-A fuse provides circuit protection. The SPE-2 is 7½ in wide, 4½ in deep, and 4 in high. The price is \$169.90.



A solid state noise source, Model HP 346B, has been announced by Hewlett-Packard, 1501 Page Mill Rd., Palo Alto, CA 94304. The noise source (10 MHz to 18 GHz) offers improvements which reduce uncertainties caused by standing wave ratio (SWR) mismatch, change of SWR from the noise-on to noise-off conditions, and limitations in measuring the accuracy of excess noise ratio (ENR). SWR is low with < 1.3 db in the 10 to 30 MHz range, < 1.15 db in the 30 MHz to 5 GHz range, and < 1.25 db in the 5 to 18 GHz range. ENR is measured and charted individually at 20 cardinal frequencies for each source. Root sum of squares (RSS) uncertainties of ENR calibration points vary from ±0.1 db at MHz to ±0.19 db at 18 GHz. Nominal excess noise is 15.2 dB. The price of the noise source is \$1200.



A 100-MHz oscilloscope weighing 22 lb, designed especially for laboratory or field measurements on digital as well as conventional electrical/electronic circuits, has been announced by Gould Inc., Instruments Div.,

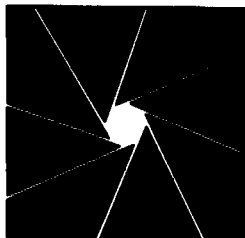
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3631 Perkins Ave., Cleveland, OH 44114. Designated the OS3600, the oscilloscope is a portable dual trace unit with a bandwidth from dc to 100 MHz (-3 dB). Vertical sensitivity is 5 mV/cm over the full bandwidth and 2mV/cm up to more than 85 MHz. The 8- x 10-cm CRT has a parallax-free internal illuminated graticule and uses 16-kV accelerating potential for bright displays even of narrow pulses occurring at low repetition rates. Display modes include CH1 or CH2 alone, CH1 and CH2 alternate or chopped, CH1 and CH2 added algebraically, and x-y. In addition, a trigger view facility displays up to three traces: CH1, CH2, and the internal or external signal triggering the main time base (up to four traces may be displayed in the alternate sweep mode, including CH1, CH2, the main time base intensified and the delayed time base). Horizontal sweep speeds of both the main and delayed time base are continuously variable over 22 steps from 50 ns/cm to 0.5 s/cm in 1-2-5 sequence with a maximum effective sweep speed of 5 ns/cm at x 10 expand.

An optional 3½-digit DMM add-on called the DM3010, available as a factory fit or retrofit, can measure signal amplitude (±2%, ±2 digits), time (±1%, ±2 digits), and frequency (reciprocal of an equivalent period ±1 digit). It can also be operated independently to measure dc voltage, dc current, and resistance. The OS3600 oscilloscope is priced at \$2699 complete with probes. With the DM3010 option the price is \$3299.

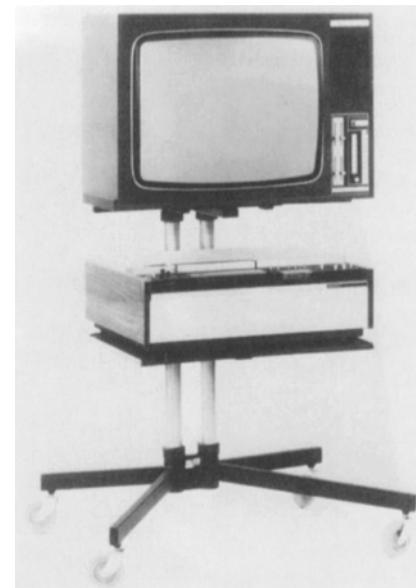


Two new test instruments, Model LFC-944B VHF/UHF TV field strength meter (shown above) and Model LCG-138 VHF signal gen-

erator, have been announced by Leader Instruments Corp., 151 Dupont St., Plainview, NY 11803. Model LFC-944B provides for measuring levels of 20 to 120 dB relative to 1 μV on VHF channels and 30 to 100 dB relative to 1 V on UHF channels. A built-in attenuator accommodates inserting up to 80 dB of attenuation in 10-dB steps. The new VHF/UHF test instrument also offers VHF channel selection with accurate detented tuning and continuous UHF tuning for channels 14 to 83. The instrument is portable and battery powered. It is priced at about \$512.

Model LCG-138 is a calibrated source of test signals for injection into CATV and MATV systems. Used in conjunction with the LFC-944B it permits the user to make quantitative measurements of cable loss, amplifier gain, and overall system gain. This signal generator also provides calibrated outputs on two high and two low VHF channels at levels from 60 to 10 dB relative to 1 μV in 10-dB steps. It is battery powered. The price is about \$244.

A video system trolley, Model VS/1000, has been announced by KLM Assoc., Inc., 11810 Charen Lane, Potomac, MD 20854. The VS/1000 is said to carry a complete video system, including television monitor, video recorder, and other equipment, as a mobile unit. The television monitor is placed on an adjustable bearer. This unit will hold cabinets from 16- to 39-in wide. Video recorders or



other equipment are carried on a height-adjustable platform, Model P27.

The VS/1000 has been developed to meet high standards of safety and stability. The trolleys have been designed to recover safely from tilt angles exceeding 20° in the normal direction of travel. Carrying capacity is 250 lb. Trolleys may be dismantled for storage or transportation. The price of the trolley/platform combination is \$280.

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VHS and Beta format videocassette head cleaners, have been announced by the 3M Magnetic Audio/Video Products Div., 600 Third Ave., New York, NY 10016. Each ½-in head cleaner cassette contains three or six minutes (depending on the recorder's playing speed) of cleaning tape. According to 3M engineers, the cleaner should be used whenever a recorded video picture appears snowy or unclear. If the user has a recorded reference picture, the head cleaner cassette is stopped when the picture becomes clear. If a reference picture has not been recorded, the cleaning tape should only be played for about 30 seconds per use. The head cleaners are priced at \$22.95 each.

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.

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