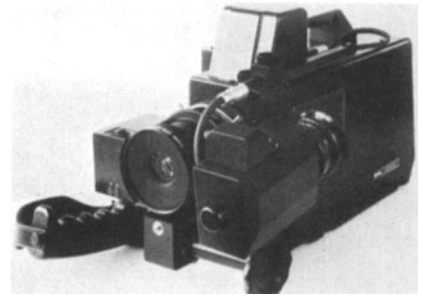


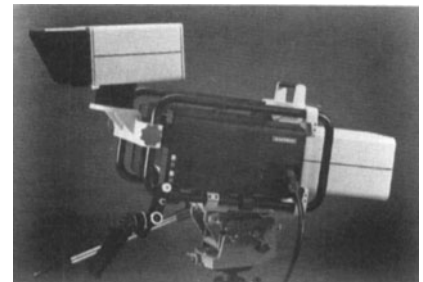
NEW PRODUCTS AND DEVELOPMENTS

Tri-standard video projector systems with tri-standard VHS recorders have been announced by Video Automation Systems Inc., Upper Shad Rd., Pound Ridge, NY 10576. The VHS recorders operate on all television standards (NTSC, PAL N, PAL, SECAM and PAL M) allowing playback and recording of any television

signal in color. The video projectors also operate on any television standard. One projector is completely self-contained with a 42-in lucite screen. The other projector system provides 350 lm onto a screen measuring up to 14 ft in width. The projector can be mounted from the ceiling or on a stand.



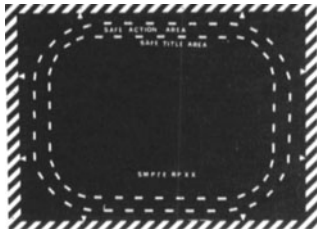
The EC-35 electronic cinematography camera has been announced by Ikegami Electronics (USA) Inc., 37 Brook Ave., Maywood, NJ 07607, as an alternative to the 35-mm film camera. It employs $\frac{2}{3}$ -in Plumbicons with circuitry said to achieve a minimum of 100 percent modulation depth at 400 TV lines, aperture corrected. Both a horizontal aperture compensation and circuit detail correction circuit are provided. A dynamic beam focus circuit improves corner modulation. The camera has a microprocessor control for rapid automatic setup and registration. The automatic setup switch cycles the EC-35 through all setup adjustments including back-and-white balance and gamma tracking as well as all registration functions in less than a minute. A set of lenses that match the optical characteristics of the EC-35 and provide fields of view equivalent to those available for 35-mm cameras has been developed.



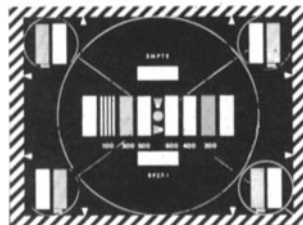
The BCC-21, convertible studio/field production camera, has been announced by Ampex Corp., 401 Broadway, Redwood City, CA 94063. An addition to the Ampex family of Digidig cameras, the BCC-21 provides operational versatility for both studio and field applications. It is equipped with a 7-in viewfinder and lens mount to accommodate a variety of either studio or field lenses. The Digidig cameras have the capability of utilizing triax and fiber optic cables as well as standard multicore cables.

The Marconi Mark IX B, an advanced version of the Mark IX, a fully automatic color television camera, has been introduced by Marconi Communication Systems Ltd., Marconi House, Chelmsford CM1 1PL, England. The Mark IX B is an all-electronic camera system with no motorized parts and with a dedicated microprocessor controlling the automatic regis-

SMPTE Television Test Films & Slides



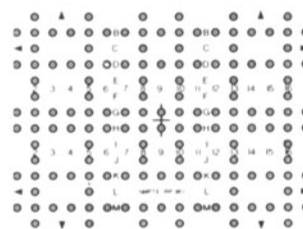
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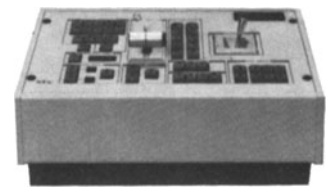
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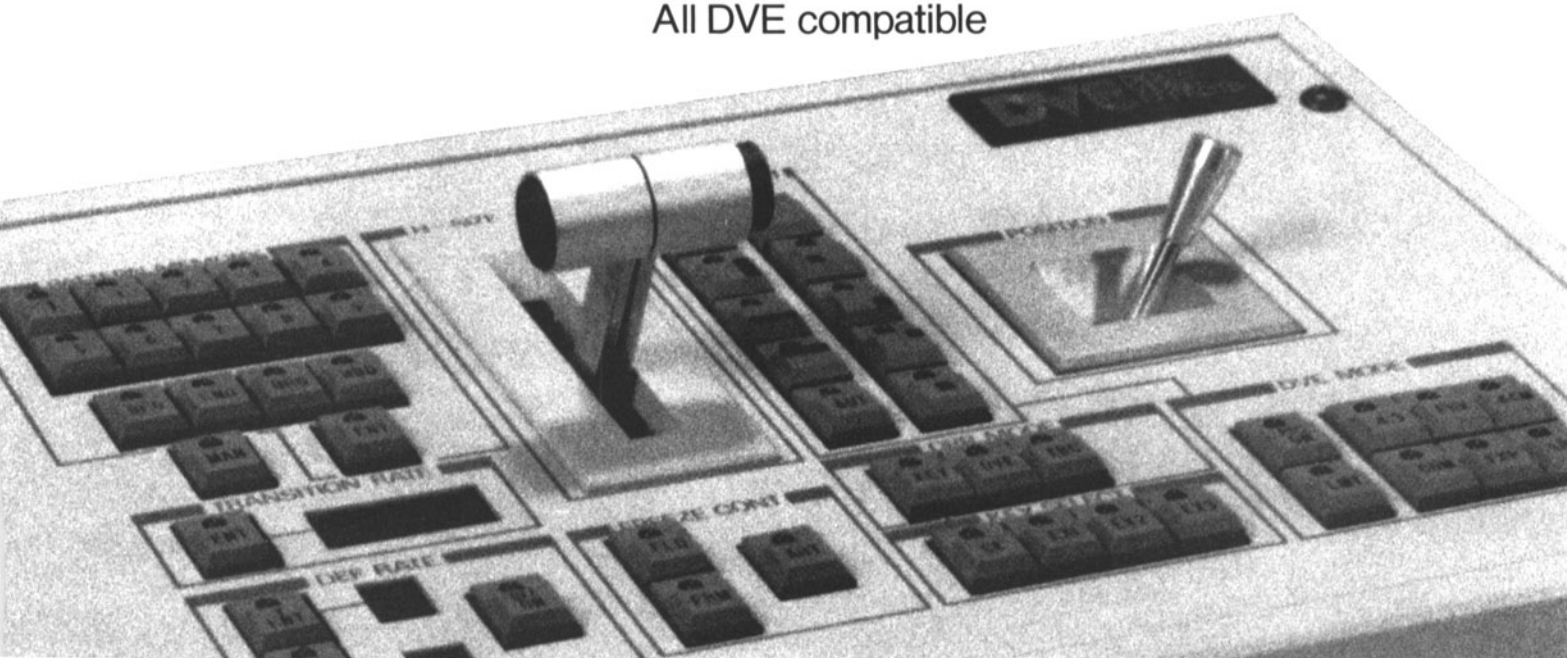
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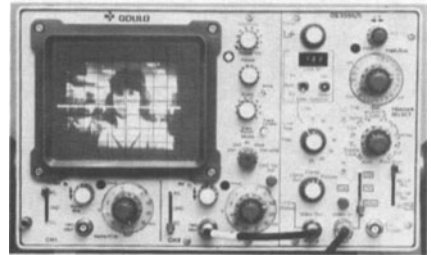
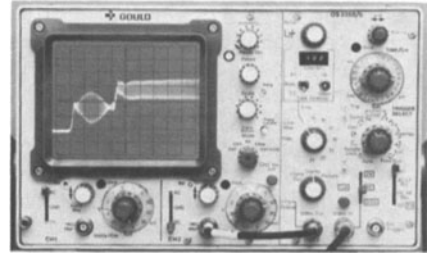
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tration sequence of each camera channel. It retains all the automatic features of the Mark VIII and Mark IX cameras.



A new TV monitor oscilloscope, the Gould OS3350/5, that combines the performance of an NTSC 525-line waveform and picture monitor with that of a general purpose 40 MHz dual trace oscilloscope in a single package, has been announced by Gould Inc., Instruments Div., 3631 Perkins Ave., Cleveland, OH 44114. The instrument is portable and can be used for testing and troubleshooting TV, CATV, CCTV, video recorder/playback and other video equipment in mobile TV, microwave repeater, broadcast station, and institutional, plant and production line applications.

A timebase generator allows the instrument to be used for line-by-line examination of 525-line waveforms or to display complete pictures. It accepts standard level composite video signals with or without sound-in sync signals and produces five different triggering modes: Line 15 through 21 in either field 1 or field 2; Field; Line Repetitive; Field Selector; and Line Selector. In Line Selector the chosen line is indicated on a three-digit LED display. A multiturn vernier control provides triggering delays up to 90 μ s, allowing parts of a line to be examined in detail. When the unit is used to display a TV picture, the triggering point selected may be displayed as a bright-up line on the picture, enabling a direct relationship to be established between the waveform and the picture.

In conventional operation, the Gould OS3350/5 functions as a general purpose 40 MHz, 5 mV/cm dual trace oscilloscope with a single timebase control. The price is \$4395.

In the top photo above, Line 102 of Field 2 is displayed and its number is shown on a three-digit LED. The bottom photo shows the oscilloscope being used as a 5-in TV monitor. The electronic cursor on the picture corresponds to the position of the line that is being examined in the top photo.

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The optical crown
for the king-pin film editor

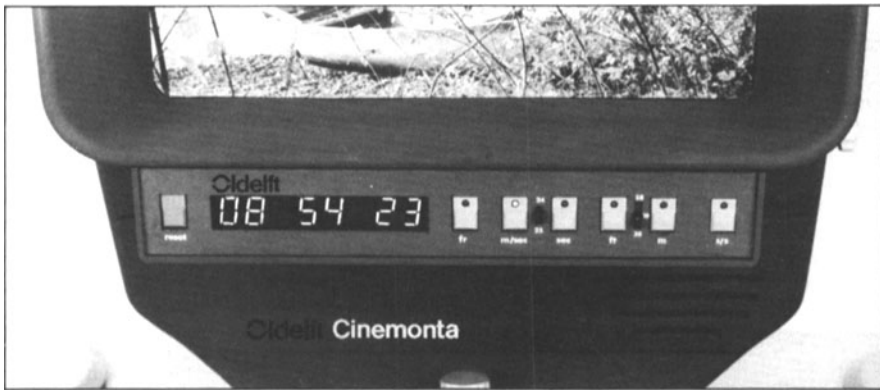
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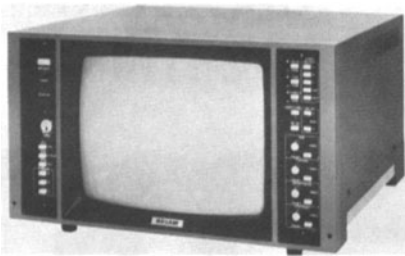
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A new series of professional color television monitors has been announced by Ikegami Electronics (USA), Inc., 37 Brook Ave., Maywood, NJ 07607. The monitors are equipped with advanced circuitry and in-line gun shadow-mask picture tubes to achieve good picture quality and stability. The need for magnetic convergence adjustments has been eliminated. The black matrix screen enables pictures to be displayed with a high degree of contrast even under bright lights. Close spacing of the phosphor dots results in a high resolution picture with more than 600 television lines. Use of I and Q demodulation results in accurate color reproduction. Extremely tight color locking is possible with the automatic frequency/phase control.

The VIE-124 Vertical Interval Encoder and the VID-125 Vertical Interval Decoder has been announced by Gray Engineering Laboratories, 504-P West Chapman Ave., Orange, CA 92668. The VIE-124 converts and displays any SMPTE longitudinal edit code input to Vertical Interval Time Code (VITC) output for encoding on any combination of vertical interval lines from 10 to 20 on both fields. The incoming time code is updated before modulating the video to maintain real time. The circuitry provides time base correction which assures only one set of data per incoming code frame regardless of the edit code speed or phase.

The VID-125 decodes both longitudinal edit code and VITC present on a composite video signal. A new SMPTE (cue) code is transmitted with the data derived from one of the two incoming codes selected automatically. The unit can demultiplex 320 separate user bits of the longitudinal or VITC code every 10 frames. The VIE-124 is priced at \$3450. The VID-125 is priced at \$3950.

A high speed VHS tape duplication system which produces copies of two-hour or four-hour VHS videocassettes in approximately four minutes has been announced by Panasonic Video Systems Div., One Panasonic Way, Secaucus, NJ 07094. The system, called Video Tape Printer (VTP), consists of a master recorder and a printer. The master recorder, with remote control capability, accepts and records video input signals in a pattern that is a mirror image of the NTSC color or black-and-white signal. The master, recorded on high coercivity 1/2-in videotape contained in a single reel cartridge, is then inserted in the printer for duplication.

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If proper presentation of your Super 8 films is important to you, then your equipment must be in perfect condition. To learn how well your Super 8 system performs, you'll need an SMPTE Test Film.

There are two basic types of test film. The first, for projection performance — picture only, is the SMPTE 8mm Registration Test Film (50 or 100 ft). This film has no sound track. Its purpose is to measure and help you adjust the optical and mechanical performance of your projection equipment. The patterns are designed to measure and adjust aperture size and position, jump, weave, travel ghost, lens focus, and film buckling.

The second type is for Super 8 Magnetic Sound. There are four all together, each of which was recorded on full-coat magnetic stock with a Super 8mm .1667-in pitch, and contains a 24-mil record in the edge track position.

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1. Azimuth Alignment Test Film (50 ft) which is used to align the azimuth position of the recording and reproducing heads on magnetic sound equipment.
2. Flutter Test Film (50 ft) to measure flutter introduced by sound reproducers, contains an original recording with extremely low flutter content.
3. Signal Level Test Film (50 ft) helps measure and balance the power level output from motion picture sound reproducers. The recorded level does not in itself indicate a program level, but provides a reproducible reference from which a recommended program level can be determined.
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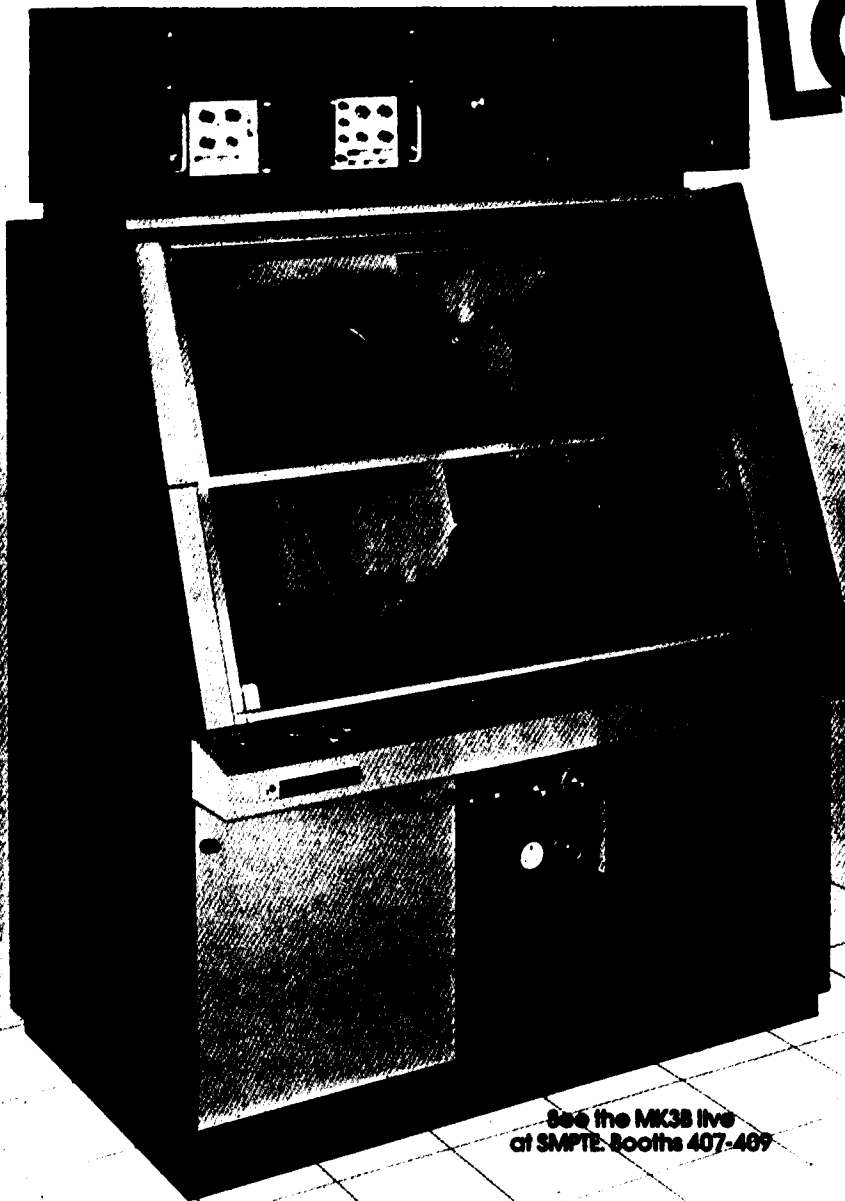
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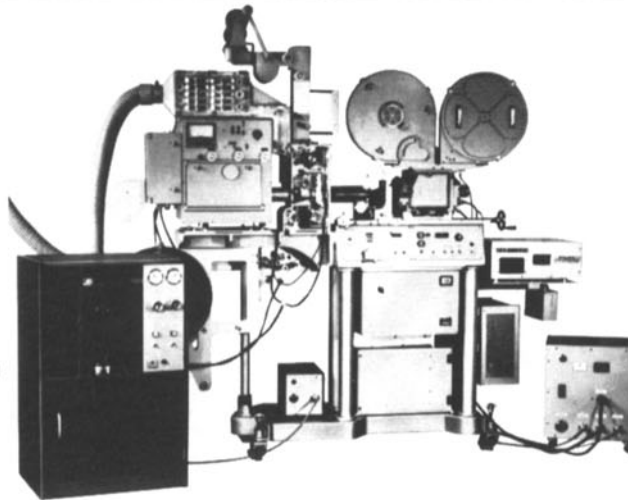


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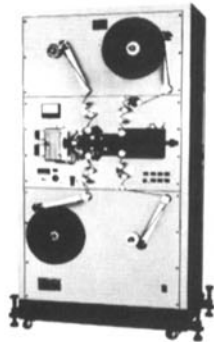


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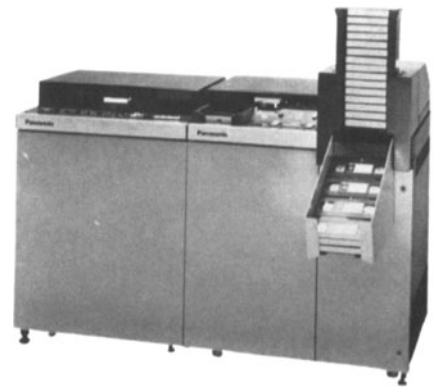


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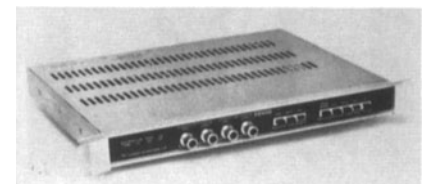
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The CapGen II character generator has been introduced by Pro-Bel Ltd., Terrace Rd., Binfield, Bracknell, Berks, England. The CapGen II character generator can produce proportionally spaced typeface style characters in a number of sizes in standard, condensed and extended forms. The typeface can be changed by interchanging a single printed circuit board. Two character generators are incorporated within the unit to provide separate preview and transmission outputs.

The complete generator, including an 800-page mini-diskette store is contained in 7 in of rack height. Separate keyboards with coaxial cable control are provided for title preparation and display only functions. Other features include an automatic centering and left-right justification system, word underline, flash, italics, color and tabulation. Roll and crawl facilities are also provided. A serial coded digit display input enables time and score information to be displayed or combined with captions.



The VCG-750 Series Video Character Generator, a microprocessor-based SMPTE/EBU time code instrument that reads and displays longitudinally recorded SMPTE/EBU time code and/or vertical interval time code, has been announced by EECO Inc., 1601 East Chestnut Ave., Santa Ana, CA 92701. The VCG-750 reads standard time code from videotape or other source at speeds ranging from zero to 60 times normal play. From the time code input the new unit extracts tape time and user bit data and outputs the data as video characters which may be "burned"

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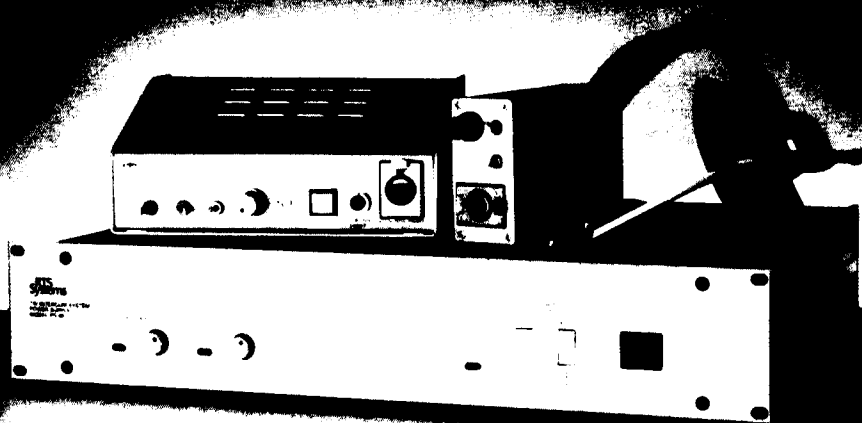
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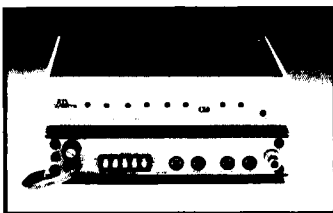
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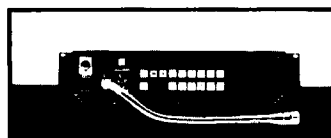
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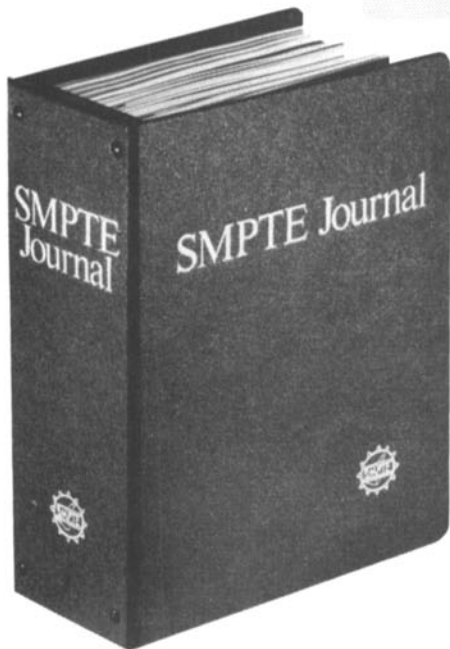
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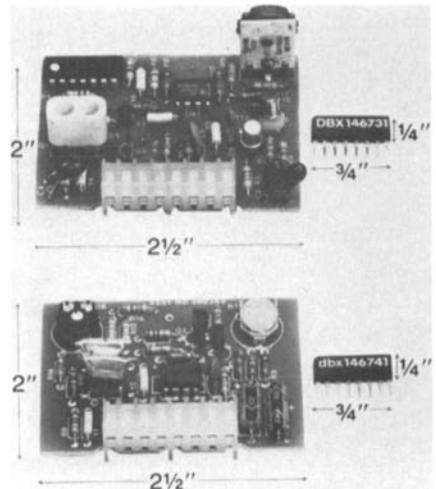
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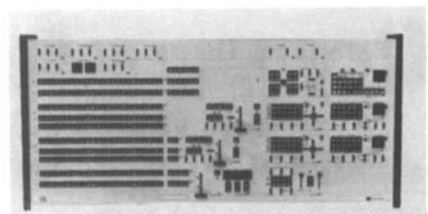
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into or superimposed over the source video for display.

In the vertical interval time code mode the unit is capable of reading time code at 30 times play speed, forward and reverse. An auto code source mode can also be specified in which switchover from serial to vertical interval time code occurs automatically at tape speeds below 1/5th play or whenever serial time code drops out or becomes invalid. Tape time and user bit display characters are available at two parallel video outputs that supply NTSC, PAL or SECAM compatible composite video.



An integrated circuit for its noise reduction system has been developed by dbx, Inc., 71 Chapel St., Newton, MA 02195, according to an announcement from dbx Executive Vice-President Zaki Abdun-Nabi. Two 1/10-in-thick chips 3/4 in wide and 1/4 in high replace the discrete circuitry for the voltage-controlled amplifier (top photo) and rms detector which comprise the system.



The CD-480 Model 10 teleproduction switcher, designed to permit the operator to handle fast-moving live production sequences such as live studio and sporting events programs, has been announced by Central Dynamics Ltd., 147 Hymus Blvd., Montreal, Que., Canada H9R 1G1. The 10-bus switcher incorporates two SFX amplifiers, each of which can control up to four video sources individually or in any combination and preview any transition without affecting the On-Air signal. Added effects capability is provided with a Master Mix/Cut system between the Preset and Program buses.

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Electro-Voice's Greg Silsby talks about the Sentry 100 studio monitor

When I first described to Electro-Voice engineers what I knew the Sentry 100 had to be, I felt like a "kid in a candy store." I told them that size was critical. Because broadcast environment working space is often limited, the Sentry 100 had to fit in a standard 19" rack, and it had to fit *from the front, not the back*. But the mounting hardware had to be optional so that broadcasters who didn't want it wouldn't have to pay for it.

The Sentry 100 also had to be both efficient and accurate. It had to be able to be driven to sound pressure levels a rock n' roll D.J. could be happy with by the low output available from a console's internal monitor amplifier.

The Sentry 100 also had to have a tweeter that wouldn't go up in smoke the first time someone accidentally shifted

into fast forward with the tape heads engaged and the monitor amp on. This meant high-frequency power handling capability on the order of five times that of conventional high-frequency drivers.

Plus it had to have a 3-dB-down point of 45 Hz, and response that extended to 18,000 Hz with no more than a 3-dB variation.

Since it's just not practical for the engineer to always be directly on-axis of the tweeter, the Sentry 100 must have a uniform polar response. The engineer has to be able to hear exactly the same sound 30° off-axis as he does directly in front of the system.

I wanted the Sentry 100 equipped with a high-frequency control that offered boost as well as cut, and it had to be mounted on the front of the loudspeaker where it not only could be seen but was accessible with the grille on or off.

I also didn't feel broadcasters should have to pay for form at the expense of function. The Sentry 100 had to be attractive, but another furniture-styled cabinet with a fancy polyester or die-cut foam grille wasn't the answer to the broadcast industry's real needs.

And for a close I told E-V's engineers that a studio had to be able to purchase the Sentry 100 for essentially the same money as the current best-selling monitor system.

I'm happy to report that we've achieved *all* our objectives.

Market Development Manager
Professional Markets

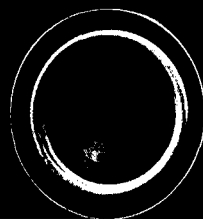
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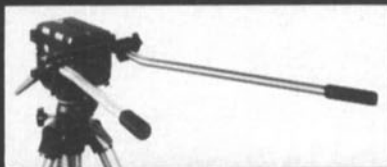


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switchers, dual key borders, title keyer, quad and extended effects modules are optional accessories which can be added to the switcher at any time. There are two utility buses that supply additional key and program sources to the quad, SFX processors, title keyer and the two Aux buses. The two Aux buses can be used as dedicated feeds to network, slo mo and digital video effects. Model 10 is available with 16, 24 or 32 inputs.



A flexible 16-port, fully protected lightwave data multiplexer has been announced by Valtec Corp., West Boylston, MA 01583. Called the Model LDM-9500, the unit multiplexes up to 16 EIA RS-232C data channels in asynchronous or synchronous formats for full duplex transmission over a pair of optical fibers. The LDM-9500 is configured to provide full protection. The entire electro-optical transmission system, including the fiberoptic cable is protected with a redundant hot standby transmission system. In case of failure of any of the components, the back-up system is automatically switched into operation. A four-fiber cable is required for a fully protected system. Features include standard diagnostic and visual indicators which allow easy monitoring of both channel and system status. The unit accepts the EIA 25-pin electrical plug as input and converts directly to optical digital transmission.



A new digital reverberation system, Model 8X32, has been announced by Ursa Major, Inc., P.O. Box 18, Belmont, MA 02178. It is designed to produce a wide range of natural and artificial reverberation effects for studio, broadcast, live performance and other applications. The microprocessor-based front panel has separate LED read-out and control for each adjustable reverberation parameter. Features include a bank of 32 nonvolatile storage registers that allow users to store and recall 32 complete reverb setups and to edit them at will. Four basic programs are available ranging from a small, fast-diffusing "Plate" to a large, echoing "Space" simulation. Within each of these programs, 16 decay times can be selected, and the level and delay time of both the early reflection pattern and the initial reverberation may be independently controlled. The system has a bandwidth of 8 kHz and a dynamic range of 80 dB. It is rack-mountable,

measuring 3 1/2 in high, 19 in wide and 10 in deep. The price is \$5995.



System 5, a digital electronic reverberation system, has been announced by Quad-Eight Electronics, 11929 Vose St., North Hollywood, CA 91605. The system incorporates a 15-bit digital design with full 14 kHz bandwidth to give a true acoustical room simulation. Dynamic range is 103 dB and signal-to-noise is 83 dBv. The unit includes four individual reverb programs: No. 1 is similar to a plate; No. 2 is a medium density reverb; No. 3 is low density; and No. 4 is straight echo. Four presets, 16 equalization settings and microprocessor control allow a total of 48,000 possible reverb effects. System 5 also generates a tape- or disk-compatible signal allowing the user to record the settings into memory for recall of any of the remote controller settings at any later date.



Four Mobile Production Systems (OB Vehicles) have been announced by Philips Broadcast Equipment Corp., 91 McKee Dr., Mahwah, NJ 07430. All four are self-contained, self-powered and are functionally designed with production, engineering and recording areas. They have ample storage space, dc lighting, air conditioning, power operated camera reels and rooftop camera production platforms. The line includes the A-10 (shown above). It has 10 ft of compact production space and capacity for one broadcast camera which can be expanded to contain two cameras. The B-14 has 14 ft of production space and capacity for two broadcast cameras which can be expanded to contain three cameras if required. The C-16 has 16 ft of production space with two cameras (or three if required). The D-22 has 22 ft of production space and capacity for three broadcast cameras which can be expanded to contain six cameras.

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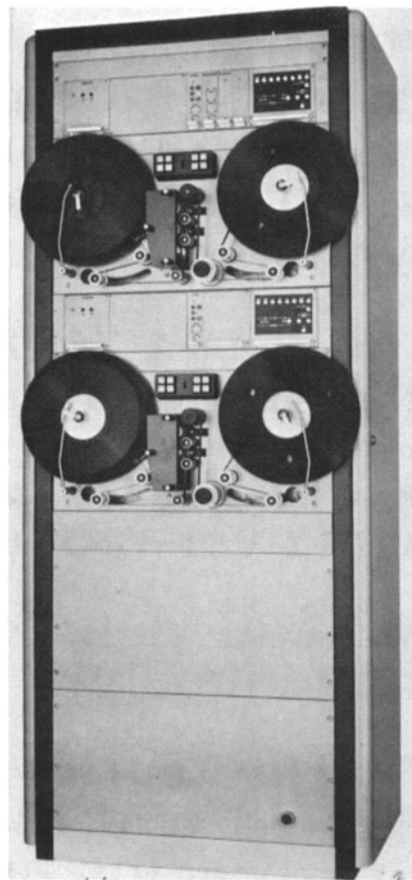
Standard equipment for all four vehicles includes zoom lenses, camera mounting, Philips videotape recorders, video production switchers, sync/test generator, waveform/vectorscope monitors, black-and-white and color monitors, audio mixer, microphones, cables, stands, cartridge tape recorder, and a complete lighting package.

A live color automatic computer setup television camera, the TC-85, has been introduced by Harris Corp., Broadcast Products Div., P.O. Box 4290, Quincy IL 62301. All operator functions are controlled by the computer and adjusted according to preset parameters. Each camera

has a built-in independent computer to eliminate camera interdependence in multicamera installations. This allows simultaneous camera setup, thus saving time and providing fail-safe performance.

A perforated sepomag film machine with capstan drive has been announced by Perfectone Products S.A., 2560 Nidau/Bienne, Ringstrasse 3, Portmoos, Switzerland. The capstan drive is employed as an alternative to the sprocket drive used on the firm's other magnetic sound film equipment but it is not intended to replace existing machines, the announcement stated. The capstan drive method provides the advantages of quick lacing and similar

operational handling to telecine and videotape equipment. The standard design provides for 16mm/35mm working without changes to the machine and 17.5-mm film can also be handled.



The equipment is available in two standard basic formations — a Simplex machine with a capacity of 2000 m of polyester film with the spools mounted vertically above each other, and a Duplex machine (shown above) having two separate transports with the spools mounted horizontally, each having a capacity of 1200 m. The microprocessor electronic control systems enable the machine to be used for various purposes such as dubbing, transfer, videotape or telecine, following with a wide variety of control methods, including pulse and code master control.

Gevacolor® Negative motion picture film Type 682 has been introduced by Agfa-Gevaert, Inc., 275 North St., Teterboro, NJ 07608. The new film replaces Type 680. It is said to offer excellent color rendition, very fine grain and superior definition. It has a recommended exposure index of 100 ASA in artificial light (3200 K) and 64 ASA in daylight (6000 K) using an appropriate filter (CTO 8 B or a Wratten 85). Type 682 is available in 35-mm and 16-mm for professional motion picture photography. It can be printed directly or via color intermediate film onto color positive print film. It is compatible with Process ECN-2.

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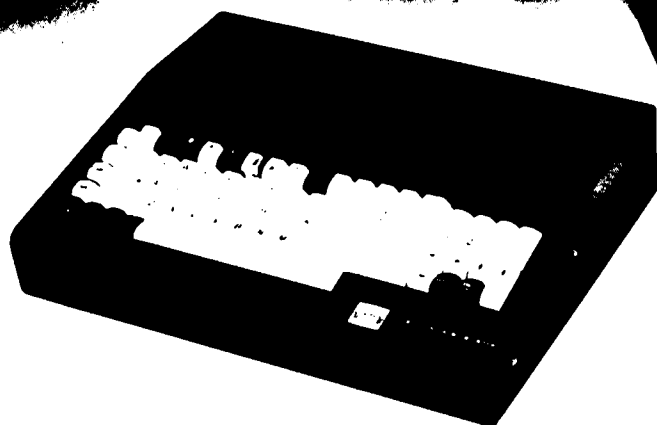
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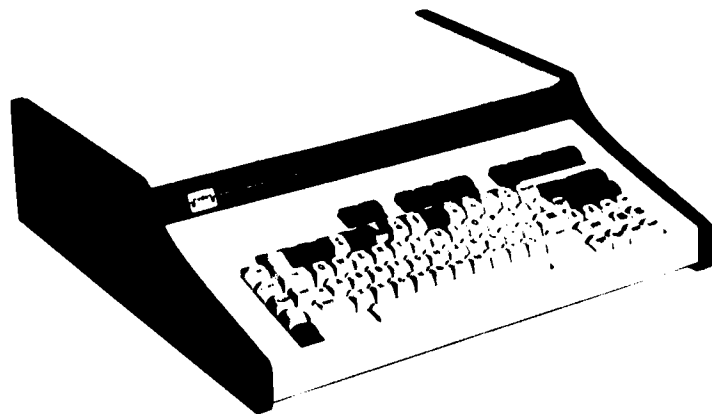
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The new **TPT-2500** titler offers features not expected in this price range: eight character sizes, upper and lower case, border line, underlining, graphics, flash, crawls, positionable title window, 32 page resident memory and optional 700+ page tape memory.

Operating features include: auto line and page centering, word/line open and close, tab and elastic memory.

Priced at \$4995.00



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Salt Lake City, Utah (801) 272-9296

► **Innovative Communications**



A single-tube color camera, the Sony BVP-110, designed for ENG applications, has been introduced by Sony Video Products Co., 9 W. 57 St., New York, NY 10019. Utilizing the new High Band Sati-

con Tricon (HBST) tube, the camera weighs only 6 lb without the lens. It requires only 9 W of power to provide broadcast standard video signals under almost any conditions with freedom from external control or support equipment. The BVP-110 and the Sony BVU-50 portable VTR combination can operate for up to two hours using a BP-90 battery pack. The camera can also be powered from any external 12-V dc power source. The price will be in the \$10,000 to \$15,000 range.

The All-Weather 15X9, 9-135-mm, $f/1.5$ ENG lens has been announced by Angenieux Corp. of America, 120 Derry Road,



Hudson, NH 03051. The aperture of $f/1.5$ and a transmission factor of 1.1 permits picture making in extremely low light levels. The aperture remains constant for more than 11X (at all focal lengths between 9-100 mm) so that long distance telephoto as well as angle shots can be made in poorly lighted areas. Features include diascope, a built-in 2X range extender and rocker switch control. It is weather sealed permitting use in rain, snow, excessive humidity and other inclement conditions.

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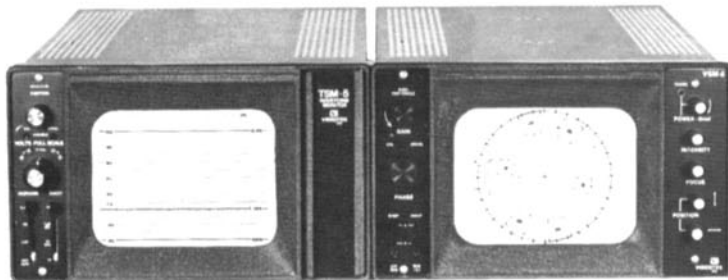


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A front of the lens filtering system for use on the Sony portable ENG/EFP 300 and 330 has been announced by Optical & Textile Ltd., Barnet Trading Estate, Park Rd., High Barnet, Herts EN5 5SA, England. Called the Colcine Matte Box, the system enables the use of a variety of Tiffen High Quality filters from fog filters to low contrast, diffusions, graduation filters, stars, etc. The Matte Box incorporates positions for two 75 X 75 mm and 100 X 100 mm, and an additional position for a polarizer which may be independently rotated. These effect filters used on the Sony BVP cameras are compatible with those of film camera filters, enabling the user to cut between film camera and electronic shots, utilizing the same effect.

The Co-Ax digital remote control system for Sony BVP-300/BVP-330 and Thomson MC-601/MC-701 ENG/EFP cameras has been announced by Cinema Products Corp., 2037 Granville Ave., Los Angeles, CA 90025. The system consists of a mini-CCU, a digital encoder (standard 19-in rack-mounted) and a camera-mounted decoder. The digital encoder is designed to accommodate two mini-CCUs to control two separate cameras, each equipped with its own decoder. A single lightweight coaxial cable connects the digital encoder and the camera-mounted decoder. The system is also available for



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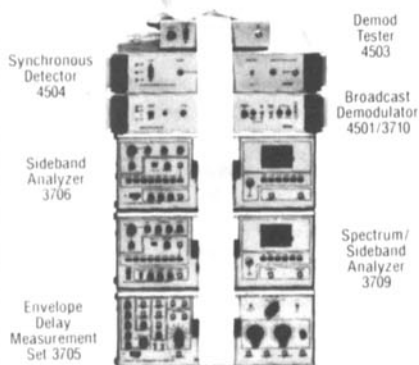
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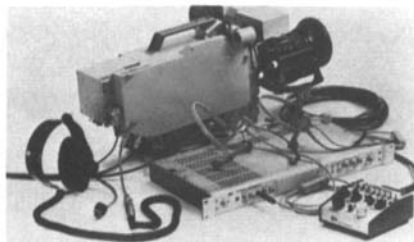
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RCA TK-76B/TK-76C cameras, the Ikegami HL-77 series and the HL-79A camera and the NEC MNC-71 series. Prices start at \$8500.

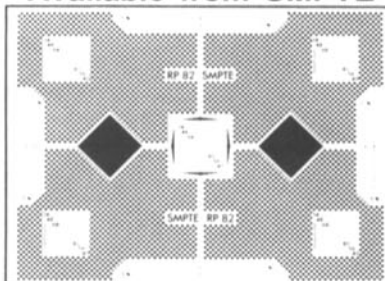
A digital multiple charger designed to charge seven Nicad Batteries simultaneously and independently plus dememorizing a battery on an eighth channel has been announced by Cine 60 Inc., 630 Ninth Ave., New York, NY 10036. Designated CATC 35, the device can be used with all types of Nicad batteries and voltage variations. Charging time for any specific battery depends upon its state of discharge. For example, a fully discharged 4 Ah battery can be fully recharged in 2½ h.

Each channel of the CATC 35 is an independently functioning plug-in module which is programmable according to the battery to be recharged. Features include a two-digit counter for setting the charge time, a digital clock which displays the remaining charge time and a toggle selector switch for selecting the appropriate charging rate for the battery to be recharged. Charging rates of 1.5 A and 200 mA are provided. The dememorizing (battery discharge) channel is equipped with a green light indicating the battery is discharging. The CATC is a line-isolated transformer type unit which operates on 110 V and 220 V. It is priced at \$2195 without charging cables.

A system for underwater movie-making consisting of the Fujica P-2 camera, Marine-8 P-2 housing and the underwater viewfinder has been announced by Fuji Photo Film U.S.A., 350 Fifth Ave., New York, NY 10001. The Marine-8 P-2 housing requires no assembly. A completely watertight unit when the "O" ring is properly sealed, it is designed for depth down to 100 ft. The Fujica P-2 camera requires no focusing or exposure adjustments. The fixed focus Fujinon 11.5-mm $f/1.8$ lens can produce sharp results from infinity to less than two feet in bright light. The aperture is automatically controlled by a built-in, sensitive CdS light meter and has a range of $f/1.8$ to $f/22$. The P-2 also incorporates a wide angle (220°) shutter to provide low light capability.

The underwater viewfinder can be slipped on top of the housing. When front and rear sights are properly aligned, parallax is corrected at 10 ft. In order to prevent important subjects being accidentally cut from the picture, the viewfinder provides a 90% field of view underwater and 70% topside. The Marine-8 P-2 system is priced at \$204.95.

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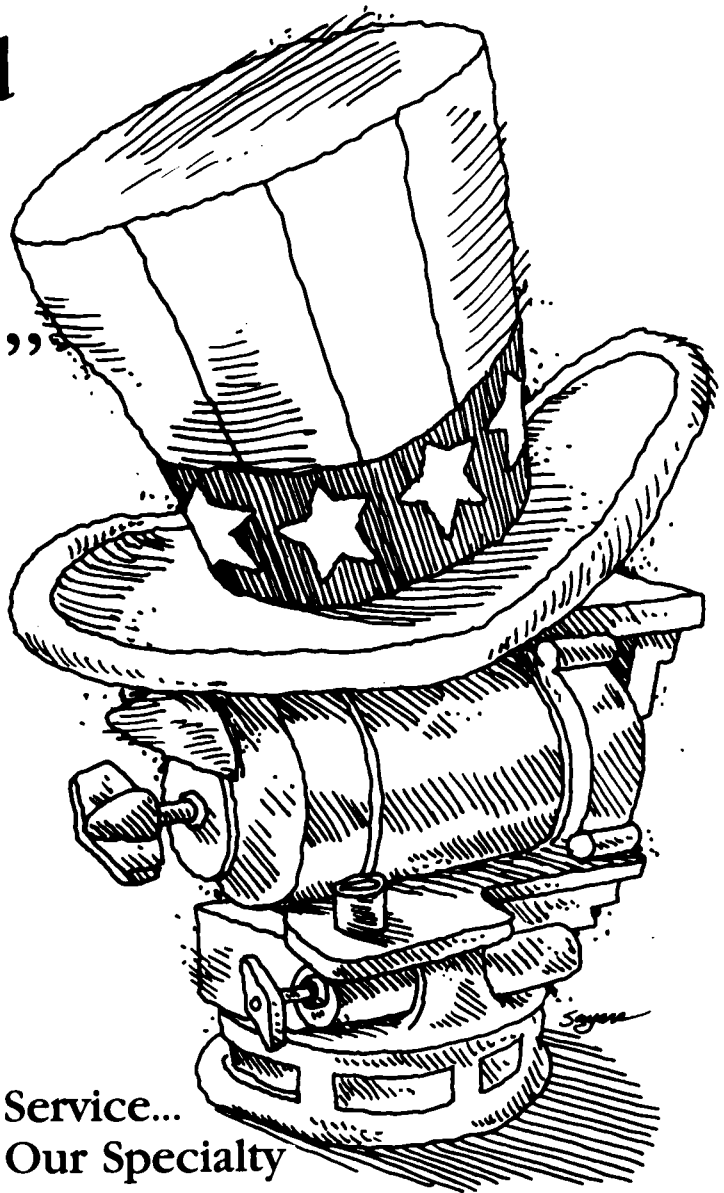


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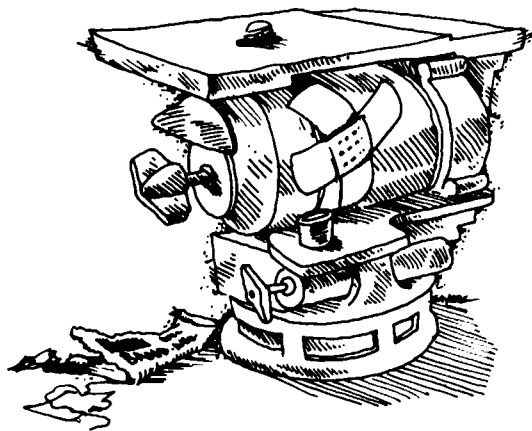
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