

# New Products & Developments



The GP-7, a tri-electrode single-tube color television camera for ENG applications, has been announced by Hitachi Denshi America, Ltd., 58-25 Brooklyn-Queens Expwy., Woodside, NY 11377. Although housed in a die-cast aluminum body, the camera weighs only 13 lb. It is offered in a genlock model and has adjustable blanking widths, both horizontal and vertical. Designed for simple field operation, the camera requires no registration, and color balance in any light can be accomplished by the adjustment of only one knob. Other features include automatic sen-

sitivity control (10 to 10,000 fc). The GP-7 can be powered from an internal battery or battery belt, from a VTR or an ac adaptor. A wide range of accessories is available. The price is \$4250. The self-contained camera without genlock is priced at \$3750.



A color television camera using a single tri-electrode pickup tube has been announced by Hitachi Denshi America Ltd., 58-25 Brooklyn-Queens Expwy., Woodside, NY 11377. Designated the GP-5, the new camera is said to have the capability of processing color signals in the same manner as three-tube

color cameras. Simplicity of operation is provided for by only two controls; one for contrast and the other to correct for incandescent, fluorescent or outside light. The electronic viewfinder shows the picture that will be recorded. The camera can operate with any cassette videotape recorder. Remote control of the videotape recorder is on the camera, as well as a built-in microphone. Both video and audio playback can be monitored at the camera. The price of about \$1385 includes a 6:1 zoom lens, electronic viewfinder, ac adapter, camera cable, and cables to desktop ½-in cassette videotape recorders.



The Betacord three-hour videocassette recorder, Model VTC9100A, has been announced by Sanyo Corp. of America, 505 Fifth Ave., New York, NY 10009. The recorder is equipped with a built-in LED digital clock/timer, memory digital counter, camera and microphone inputs for live recording. Other features include a handheld pause control for instant editing and the Sanyo L-750 three-hour cassette. Also included is a switchable RF converter operated with a single switch for channels 3 or 4. The price is \$995.



The DNR Series Portable Noise Reduction Unit (Dolby A) has been announced by Allotrope Ltd., 36/38 Lexington St., London W1R 3HR, England. The unit consists of a compact case which has provision for two Dolby A-type noise reduction modules plus the associated buffer amplifiers, automatic record/play and power switching, and battery supply. Signal and switching logic levels have been chosen for compatibility with Nagra IV single channel and stereo recorders, but accessories are available to facilitate adaption to other machines. Dolby A-type using noise reduction modules can be automatically mode switched between encode, during record, and decode during playback. The unit's dimensions are 13 × 8½ × 2¾ in; the weight is about 10 lb. The price is \$2175. A number of accessories are available.

A microprocessor-controlled acoustics analyzer, the IE-17A, the capabilities of which include measurement of reverberation time (RT<sub>60</sub>) in ½- or 1-octave bands has been announced by Ivie Electronics, Inc., 500 West

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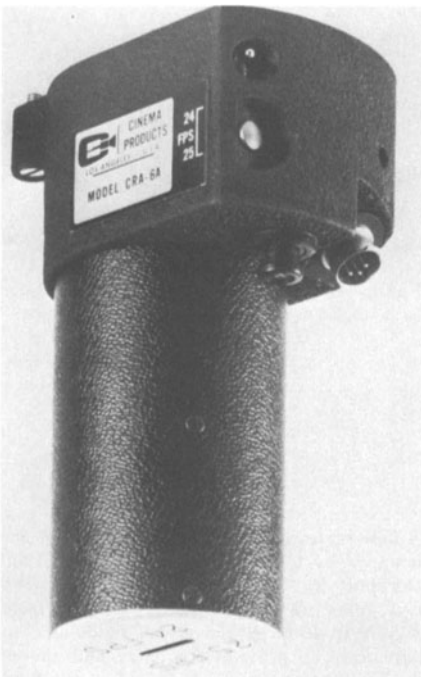


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1200 South, Orem, UT 84057. Used as an accessory to Ivic's IE-30A, the IE-17A has a built-in source control which provides tracking  $\frac{1}{2}$ - or 1-octave bandwidth filters for pre-filtering room signals. Room delays are measured accurately to tenths of milliseconds for the direct wave or for any reflection. Using the time-gating feature of the IE-17A, the sound pressure level and spectral content of a given reflection can be isolated, measured and compared with the direct wave.

The instrument can be programmed to control (1) the pulse width of the source; (2) the precise time that the IE-30A begins analysis; (3) the precise time that the IE-30A stops analysis; and (4) a programmable cycle rate. The IE-17A can transfer any IE-30A screen pattern to an X-Y or strip chart recorder automatically.  $RT_{80}$  can be plotted using either of the two formats. The IE-17A acoustics analyzer is priced at \$1300.



New and improved versions of the CRA-6 and CRA-6/A (shown above) crystal-controlled motors for Arriflex 35 IIC cameras have been announced by Cinema Products Corp., 2037 Granville Ave., Los Angeles,

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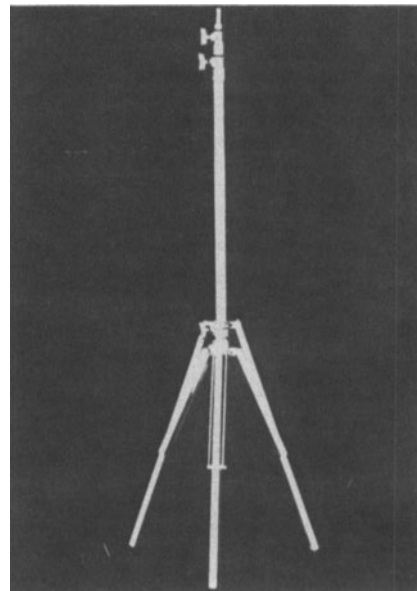


CA 90025. All the electronics are contained within the motor housing making the motors extremely light and compact. The CRA-6 model, which runs at 24 frames/s only, is priced at \$1600. The CRA-6/A model, which runs at 24 or 25 frames/s, controlled by a selector switch, is priced at \$1700.



A time-code generator/reader for indexing magnetic tape, oscillographs or strip charts and for reading time codes from magnetic tape has been announced by Datametrics Inc., 340 Fordham Rd., Wilmington, MA 01887.

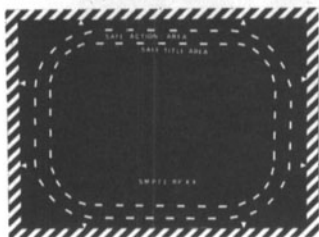
Designated Model SP-425-R/G, in the generate mode the instrument produces pushbutton-presetable pulse rates to synchronize and operate peripherals and auxiliary equipment. As a reader it can decode time-code information over play-back-to-record ratios from 1:16 to 200:1 and better. An error-bypass feature minimizes the effects of extraneous noise. For digital readout, the unit incorporates an LED display. When used to generate time codes, the instrument operates as a digital clock and produces modulated serial time-code information. As a reader it provides a front panel display and parallel outputs to the tape search unit. Options include slow code outputs for oscillographs, ac or dc power, and straight binary seconds data included in the time code and in parallel outputs. The SP-425-R/G is priced at \$1525. Read-only and generate-only models are priced at \$1275 each.



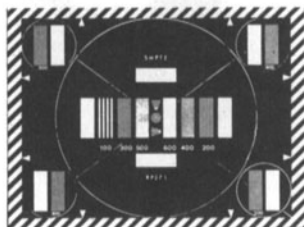
The Beefy Baby Aluminum stand, weighing 6½ lb, has been announced by Matthews Studio Equipment, Inc., 2405 Empire Ave., Burbank, CA 91504. It collapses to 40½ in for storage and extends to 11 ft. Features include butyrate feet to facilitate easy movement when in use to avoid any marring of stages in special "set" situations. The ¾-in diameter mounting pin enables it to be used with most lightweight quartz fixtures. The stand has a leg spread of 44 in. The price is \$86.

# SMPTE

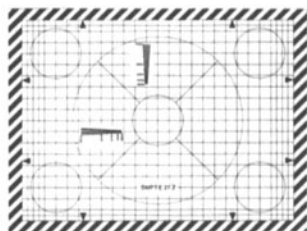
## Television Test Films & Slides



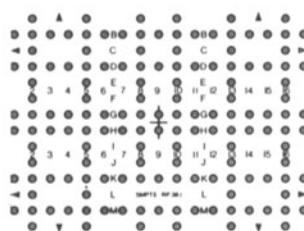
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Deflection Linearity

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- Color Television Subjective Reference Films and Slides.

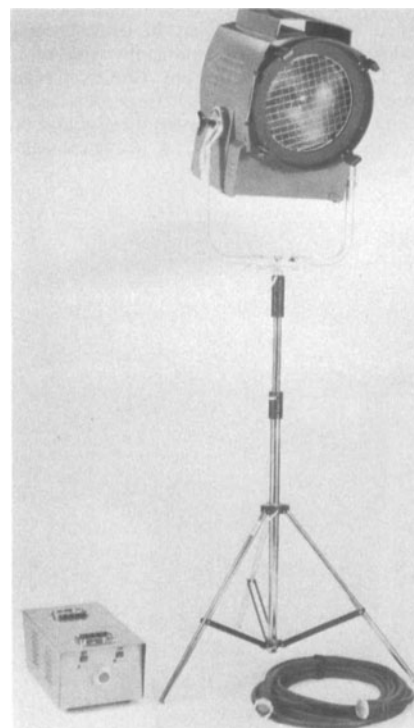
\*Also available in 8 X 10 transparency.

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A new series of HMI Luxarcs has been announced by LTM Corp. of America, 21200 Nordhoff St., Chatsworth, CA 91311. The new lights are compact in size ranging from 575 W to 4000 W and are of modular construction. To provide efficiency and speed, the striker tray can be removed in the field without disconnecting the wires using only a screwdriver to remove four screws. Prices (with ballast and cable, but without bulbs) range from \$2305 to \$6885.

## A New Book From SMPTE—

# ONE-INCH HELICAL VIDEO RECORDING

High performance combined with low costs point toward a rosy future for one-inch helical recording. SMPTE's new book, *One-Inch Helical Video Recording*, offers up-to-the-minute, in-depth information on this format, from manufacturers and users.

### Contents

- An Overview of One-Inch Helical Video Recording, *Frederick M. Remley, Jr., Univ. of Michigan, Ann Arbor, Mich.*
- Proposed SMPTE Type C. Helical-Scan Recording Format: A Subcommittee Report, *David Fibush, Ampex Corp., Redwood City, Calif.*
- The Development of National Standardization of the One-Inch Helical Video Tape Recording Systems, *Alex E. Aiden, SMPTE, Scarsdale, N.Y.*
- BCN Digital Store: Economical Accessory for Production and Post Production, *Hans-Peter Maly, Robert Bosch, GmbH, Fernseh Group, Darmstadt, W. Germany*
- Technical Description of Sony's Portable One-Inch Machine, BVH 500; First Discussion of its Technical Parameters, *M. Morizono, Sony Corp., Tokyo, Japan*
- Mechanical Design Considerations for Helical Scan VTRs, *Dennis Ryan, Ampex Corp., Redwood City, Calif.*
- Outdoor Program Production Utilizing Compact Equipment, *Ichihiko Hishida, Tokyo Broadcasting System, Inc., Tokyo, Japan*
- User's Experience with Type B "BCN Helical" Portable and Studio Editing VTR, *William D. Kelly, WNEW-TV, New York, NY*
- Videotape Program Production at CBS Studio Center, *William G. Connolly, CBS Television Network, New York, NY*
- A New Edit Room Using One-Inch Non-Segmented Helical VTRs, *William C. Nicholls, CBS Television Network, New York, NY*
- Post-Production Experience with One-Inch Videotape, *Denny Fussell, Tricomm, Hilton Head, S.C.*
- Post-Production and Production Using One-Inch Helical Videotape and VTRS, *E. Grey Hodges, Emerson F. Lawson, and Robert W. Dycus, Jefferson Productions, Div. of Jefferson-Pilot Broadcasting Co., Charlotte, N.C.*
- PANEL DISCUSSION—One-Inch Helical Video Recording, *Joseph Roizen, Moderator, Telegen; Panel Members: Howard Steele, Sony Corp.; Charles Urban, BBC/London; William G. Connolly, CBS Television Network; E. Grey Hodges, Jefferson Productions; Denny Fussell, Tricomm Productions; David Fibush, Ampex Corp.; Henry Zahn, Bosch-Fernseh; William Kelly, WNEW-TV.*

New one-inch helical video recording promises broadcast quality results using equipment that should prove to be much less expensive than 2-inch quad. The technology has been accelerating toward making one-inch tape recording equipment more readily available, especially now since standardization of one-inch tape equipment has been accomplished.

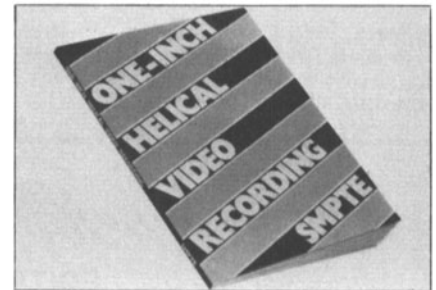
Now there is a new book on this very important subject—a book that will bring the entire subject of one-inch helical recording into focus. The book, titled *One-Inch Helical Video Recording*, contains all the one-inch recording presentations given at SMPTE's February 1978 Television Conference in Atlanta.

### How Can This Book Help?

If you think your operation will eventually go one-inch, this book is required reading. Certainly, if you're contemplating new equipment purchases within the next few years, a survey of one-inch tape capabilities must be made. To make the proper evaluations, you'll need all the information that's available. And most of what's available now on the subject is contained in SMPTE's new book.

Here's a brief rundown of what the book includes.

- An overview of one-inch helical recording.
- A summary of standardization activities.
- Reports from major manufacturers like Ampex, Bosch and Sony.



- Reports on the experience of current users.
- Perhaps the most interesting part of all, the transcript of the panel discussion that was held at the Conference. Potential users who attended the Conference asked questions and revealed what was on their minds. The manufacturers and current users—the real experts—provided all of the answers. This detailed, no-holds-barred discussion forms a particularly helpful section of the book.

That, of course, is just a small sampling of what to expect in the book (see table of contents for specific details). This book is crammed full of information that will make you knowledgeable on the subject of one-inch recording.

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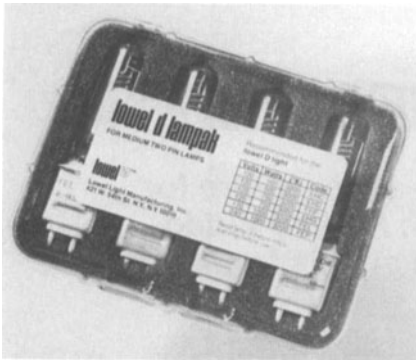
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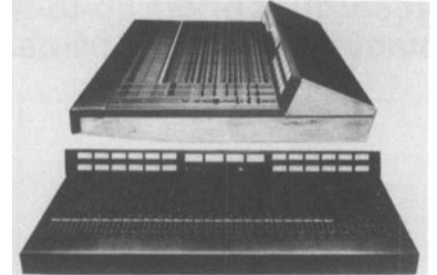


**Lampaks**, containers for storage of quartz lamps, have been announced by Lowel-Light Mfg., Inc., 421 W. 54 St., New York, NY 10019. The plastic containers measure about

4½ × 5½ × 1¼ in. The Quartz-D Lampak stores four lamps; the Tota-Light/Softlite Lampak, five; and the Omni-Light Lampak stores six lamps. The Lampaks are labelled with the ANSI code, color temperature, voltage and wattage of the lamps recommended for use with that system. The containers are priced at \$7.50 each.

The **AnimeX® Anamorphic S 8/2X projection lens** designed for the Cineavision® system has been developed by ISCO Optische Werke GmbH, P.O. Box 208, an der Luter D-3400, Göttingen, Federal Republic of Germany, a subsidiary of Jos. Schneider & Co. The Cineavision system makes possible the projection of a wide-screen or CinemaScope image from a compressed film picture in the super-8 or 16mm format. The effect is achieved by the use of cyl-

inder lenses which are effective in only one direction. The height of the image remains unchanged while the width is doubled. The lenses can be used on all commercially available super-8 projectors. The new ISCO lenses are said to sharpen significantly the image projected on the screen, to maintain focus without readjustment and to add substantially to light-transmission efficiency.



The **Syncon**, an A&H studio audio console, has been announced by Audiomarketing, Ltd., 652 Glenbrook Rd., Stamford, CT 06906, exclusive distributor for A&H Electronics. Free routing enables any module to be designated as a subgroup master for a minimum of switching, re-routing or patching operations. Quad, stereo and monaural tape machines can be driven simultaneously. Tape monitoring can be switched from 24 or 16 tracks to quad, stereo or mono. The Syncon contains essential multi-track studio requirements, including 4-band equalization plus dual parametric controls which overlap in the critical mid-range region.

Features include +26-dBm maximum output level, equivalent input noise of -127 dBm, and interchangeable piggyback line amplifier modules for easy servicing. Other features include talkback circuit routing with a 20-Hz oscillator in the Slate mode, separate monitor level controls provided for studio solos and control room, echo which can be returned to the console in quad main and main remix faders that are stereo ganged for quad mastering. Each module also features quad panning using left-right and front-back pots (monitor and remix). The main frame of the 28/28 console measures 57 in. It can be quickly updated (in about 5 min) from 8-track to 24-track. Prices range from \$12,000 to \$22,500, depending on size.

The **Picot 2000**, a 16/35mm recorder for perforated magnetic film featuring a sprocketless monocapstan drive of the tape without a pinch roller, has been introduced by Fougerolle S.A., Picot Department, 39 rue Victor Hugo, 93500 Pantin, France. In addition to the sprocketless monocapstan drive, features include instant format changeover (16mm to 35mm or vice versa) and a tape capacity of 1800 m with 90-µm tape. The machine can be remotely controlled.

In local operation a numeric slave loop (quartz controlled) ensures a tape running at theoretical nominal speed. This speed is corrected by means of a phase comparator using the mains frequency and the signal transmitted by the tape perforation sensor.

When interlocked the theoretical-speed slave-loop is corrected by a position slave loop using the signals issued by the pilot and the perforation sensor through a digital memory and a digital/analog converter.

If the pilot machine runs faster than 30 times the nominal speed (in 16mm), the difference in position between the pilot and the slave machine is stored in the numeric memory, the capacity of

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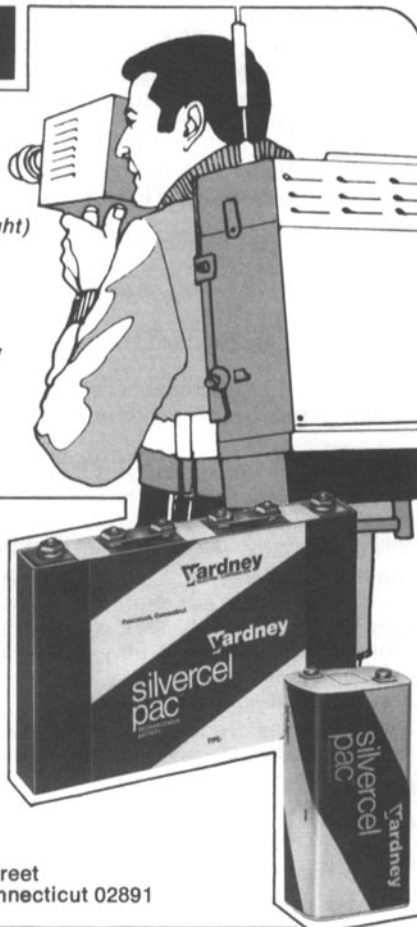
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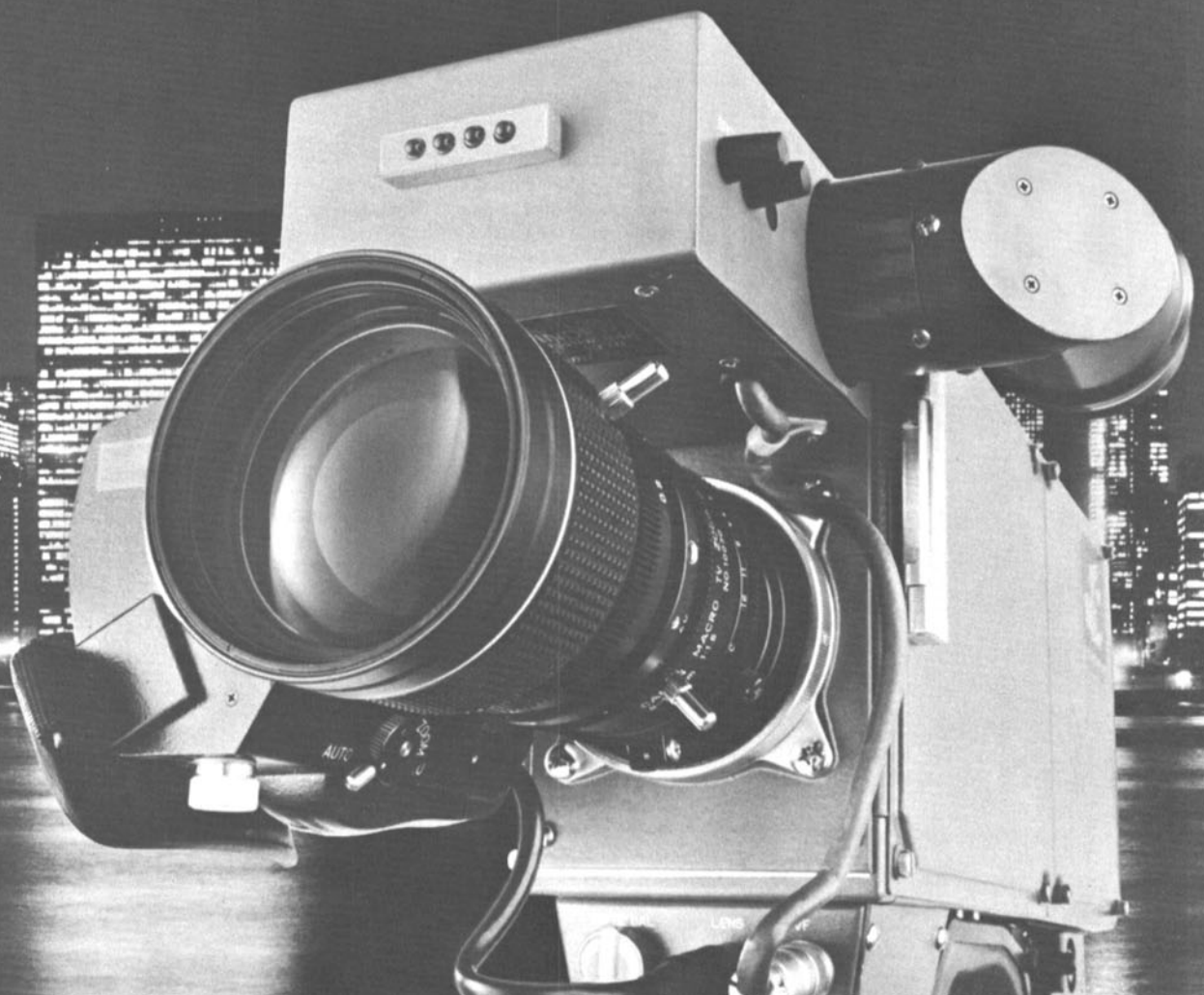
to 118mm. Its built-in fluorite element for more accurate color correction. And its minimum object distance as short as 0.8m (31.5"). The lightweight J13x9B is available with a money-saving modular accessory package, giving you all the flexibility you need in the studio or field—now and in the future.

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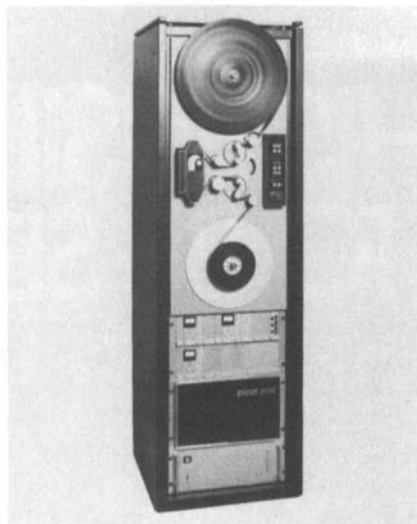


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which exceeds the total capacity of the tape. By the addition or subtraction of a pulse in the numeric storage, the manual position shift of a machine with regard to the pilot can be carried out either locally or by remote control, either with the generator or by pressing one of the two pushbuttons.

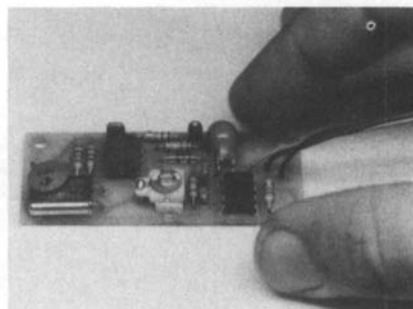


The Upright/Flatbed U/F 16 editing console, announced by Cinema Products Corp., 2037 Granville Ave., Los Angeles, CA 90025, is based on a new design concept incorporating the best features of upright editing machines with those of modern flatbed editing tables. The basic design employs coaxial sprocket wheel assemblies and six terraced horizontal feed and take-up plates accepting one 16mm picture track and two 16mm magnetic soundtracks. The terraced arrangement makes each feed and take-up plate readily accessible to the editor without stretching and provides him with an ample table-top work area. The sprocket wheel assemblies are arranged in straight-line vertical synchronizer configuration for easy marking, syncing and cutting of the film. Short lengths of picture and soundtrack may be hand-fed through the sprocket wheels without using feed and take-up plates.

The U/F 16 also features a hollow polygon prism system for continuous flickerless projection on a bright 8- x 10-in screen, crystal-controlled sync sound speeds of 24 and 25 frames/s with infinitely variable speed control from 0 to 240 frames/s forward and reverse, and electronic time/footage counter with optional keyboard entry. In addition the unit has been designed to accept a future time-base coding option. Prices begin at \$7200.



A telescoping microphone designed to eliminate extraneous sounds has been announced by AIC Photo, Inc., 168 Glen Cove Rd., Carle Place, NY 11514. A special built-in feature focuses the sound-capturing facilities of the microphone directly at the subject being photographed, suppressing any sound coming from behind the camera. Designated the Bauer 14-424, the microphone is said to be vibration-free. It is designed for operation on the handgrip of the Bauer Slimline cameras, such as the S50XL. Through the use of an extension cable it can convert to a handheld microphone to capture sounds not in line with the shooting axis of the camera. The price is about \$57.40.



A new crystal sync generator for cordless double-system cinematography has been announced by Tobin Cinema Systems, 3227 49 Ave., S.W., Seattle, WA 98116. Designated the TX-7, the device has been designed for custom installation inside most pilot or stereo-cassette recorders. It measures 25.4 x 61 mm and is less than 12.7 mm thick. The output is a 60-Hz sinewave of 1.25 V rms amplitude with a calibration accuracy of  $\pm 3$  parts per million at 20°C and  $\pm 30$  parts per million over the operating temperature range of the associated recorder. The output is free of even-order harmonics and contains only 1% of odd-order harmonics for the minimum audible crosstalk from the pilot track to the audio channel(s). An AT-cut crystal of 3932.160 kHz is used for high stability. A trimmer adjustment is provided for recalibration if required, without need for future circuit modifications. Two other versions are available — one for regulated -10-V power and the other for +12- to +35-V power that need not be regulated. On special order, modifications are available for other regulated supply voltages. Connection is with three wires. Each unit is priced at \$75.

A new junction-field-effect device that can be used as a replacement for first playback stage tubes in most Ampex professional audiotape recorders has been announced by VIF International, P.O. Box 1555, Mountain View, CA 94042. Called the VIF 1006, the device utilizes solid-state and JFET technology to withstand the high (B+) voltage supply of vacuum tubes

# Film 79

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## **TECHNICAL PROGRAMME**

This 6th Biennial International Film and Television Technology Conference and Exhibition to be organised by the British Kinematograph, Sound and Television Society, will again provide a forum for technicians in the international film and tape communications industry.

Papers will be presented on topics broadly outlined as follows:

**Film and Television Production Techniques and Technology**  
**Laboratory, Sound and AV Technology**  
**Training & Education**  
**Maintenance and Servicing**

## **EXHIBITION**

Some 60 exhibitors, at an international level, will display and demonstrate their latest equipment and services.

## **OUTSIDE VISITS**

In addition to the papers presented at FILM 79, there will be an Outside Visits Programme for which BKSTS Conferences have become so well-known. These will be dovetailed into the Papers Programme and will include opportunities to visit studios, laboratories, TV stations, equipment manufacturers and other places of interest to the technical delegates.

## **SOCIAL PROGRAMME**

The Social Programme during the Conference week will include receptions, screenings of recently-released films and a Ladies' Programme.



*For details of delegate registration contact:*  
**William Pay, Conference Co-ordinator, FILM 79,**  
**British Kinematograph, Sound and Television Society,**  
**110-112 Victoria House, Vernon Place, London WC1B 4DJ, England. (Tel. 01-242 8400)**

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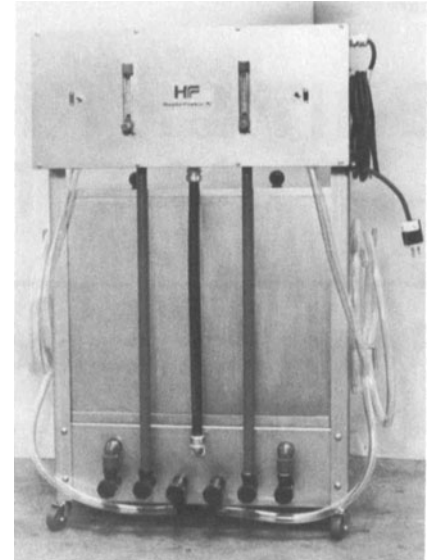
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and can simulate the tube's performance. The VIF 1006 is said to have a lifetime estimated to be some 600 times longer than that of tubes, with no drift or aging. The tube replacement does not require major circuit modifications, and the circuit's normal trimmer components can be used for tuning. The VIF 1006 tube replacements are priced at \$33 each. Adaptors required for some Ampex models are priced at \$16 each.



A compact, portable cart (the HF Smart Cart), designed to provide mixed chemicals properly metered to any processing machine, has been announced by Houston Fearless 76, 833 East Walnut St., Carson, CA 90746. The cart is simple to use, eliminating mixing and transferring of chemicals. It uses any type of chemistry. The unit contains two 10-gal tanks, adequate for most machines for several hours. It is priced at \$1300.



The Vidi-Vuer Movieloop system designed to make action-movie instruction accessible to individuals has been announced by DataFilms, 2625 Temple St., Los Angeles, CA 90026. Designed especially for safety training for high-risk workers, each Movieloop cartridge shows the hazards of a particular job. The film can be cranked forward at the worker's own speed, cranked backward for "instant replay" or held still so as to read a caption or study a frame at leisure. The Vidi-Vuer with 12 Movieloop cartridges showing specific safety procedures is priced at about \$225.