



Grant Loucks

PMPEA headquarters are at 6440 North Central Expwy., Suite 806, Dallas, TX 75206.

The WOSU Broadcast Engineering Conference will be held July 20-22 in the Fawcett Center for Tomorrow, Ohio State University, Columbus, Ohio. Twenty-six papers on topics planned for all engineers and technicians who are engaged in the profession of broadcasting have been scheduled for the three-day meeting. The papers cover such subjects as radio, television CATV, satellite, and the administrative/engineering side of relations with the FCC. The conference will include an exhibit of products shown by well-known manufacturers.

Consolidated Film Industries (CFI) has announced the award of an exclusive worldwide license to Hollywood Film Company to make and distribute the Stroboscan Inspection Viewer, recently the winner of a Class II Academy Award for Technical Achievement. This inspection viewer uses a strobe lamp to permit continuous viewing of film as it comes off a developing line, permitting immediate correction of any flaws detected.

Film/Video Equipment Service Company, 1875 South Pearl St., Denver, CO 80210, has established a professional optical department for all makes of professional cine, ENG/EFP, and studio broadcast lenses, it was announced by Dean Schneider, President. The new department will be staffed by factory-trained technicians under the management of Ron Coty.



William A. Koch



Joerg Agin

Eastman Kodak Co. announced two appointments in the Motion Picture and Audiovisual Markets Div. William A. Koch has been appointed Assistant General Manager. He was formerly Sales Manager and is succeeded in that post by Joerg D. Agin who was formerly in the Photographic Div. as Assistant to the General Manager.

Koch joined Kodak in 1949 and Agin joined in 1967.

Dorothy Smith— Advertising and Exhibits Manager

Dorothy Smith is the newly appointed Advertising and Exhibits Manager for the SMPTE. She comes to the SMPTE from the Special Libraries Association in New York City, where she was Conference and Exhibits Coordinator and Advertising Manager.



Ms. Smith is currently a member of the Board of Directors of the National Association of Exposition Managers, New York Chapter, holding the post of Treasurer. She became a member of the association in 1979 and a member of the board in 1981. She explained that the various impressive exhibits held at the New York Coliseum in past years, such as the boat show, the auto show, the jewelry show, etc. where the latest models were seen in bewildering profusion, were arranged by members of the association. Ms. Smith pointed out that these huge exhibits are in direct line from the trade fairs of the middle ages, continuing such traditional features as jugglers, cartoonists, musicians, and singers to entertain the crowds.

Ms. Smith's professional background includes a position with Eastern Airlines Sales and Training division, to which she was appointed in 1961. Her duties consisted mainly of training employees in telephone techniques, e.g. how to keep the customers happy even if the requested flight was unavailable, and how to "sell" reservations and tickets—in 1961, air travel was a less commonplace mode of transportation than in the late 70's and early 80's, Ms. Smith explained.

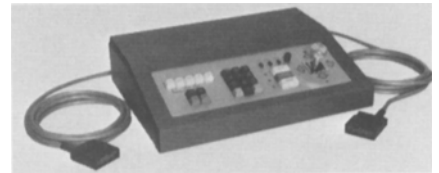
Following the Eastern Airlines post, she became Manager of Travel Service at Citibank in New York, supervising a staff of 17. She had attended the City University of New York, majoring in Business Administration, Advertising and Marketing.

In her new post of Exhibit Manager for the SMPTE she will have the responsibility for arranging the Equipment Exhibit for the SMPTE Conferences. She will assign exhibit booths and act as liaison between the Conference Chairmen and the exhibitors.

The Society is fortunate in having a person with Ms. Smith's background and experience as Exhibit Manager.

NEW PRODUCTS

The microprocessor-based **VE-90 videotape editor** with joystick control has been announced by the Professional Video Division of US JVC Corp., 41 Slater Drive, Elmwood Park, NJ 07407. The unit operates with continuously variable tape speed and single-handed control on control track or standard SMPTE time code. It is compatible with most 3/4-in and 1/2-in VCRs, and is configured with JVC Tapehandler players and recorders. The VE-90 allows the operator to do assemble or insert editing, and perform one-second fades to and from black. It generates NTSC black, which is convenient for adding a control track. Other features include high speed search; cruise, which shuttles the tape at the fastest speed in forward and reverse;



auto-tag, which automatically loads the last record-out point as the next record-in point is completed; recall, which calls up the last keyboard entry; and swap, which provides access to alternate VCR controls.

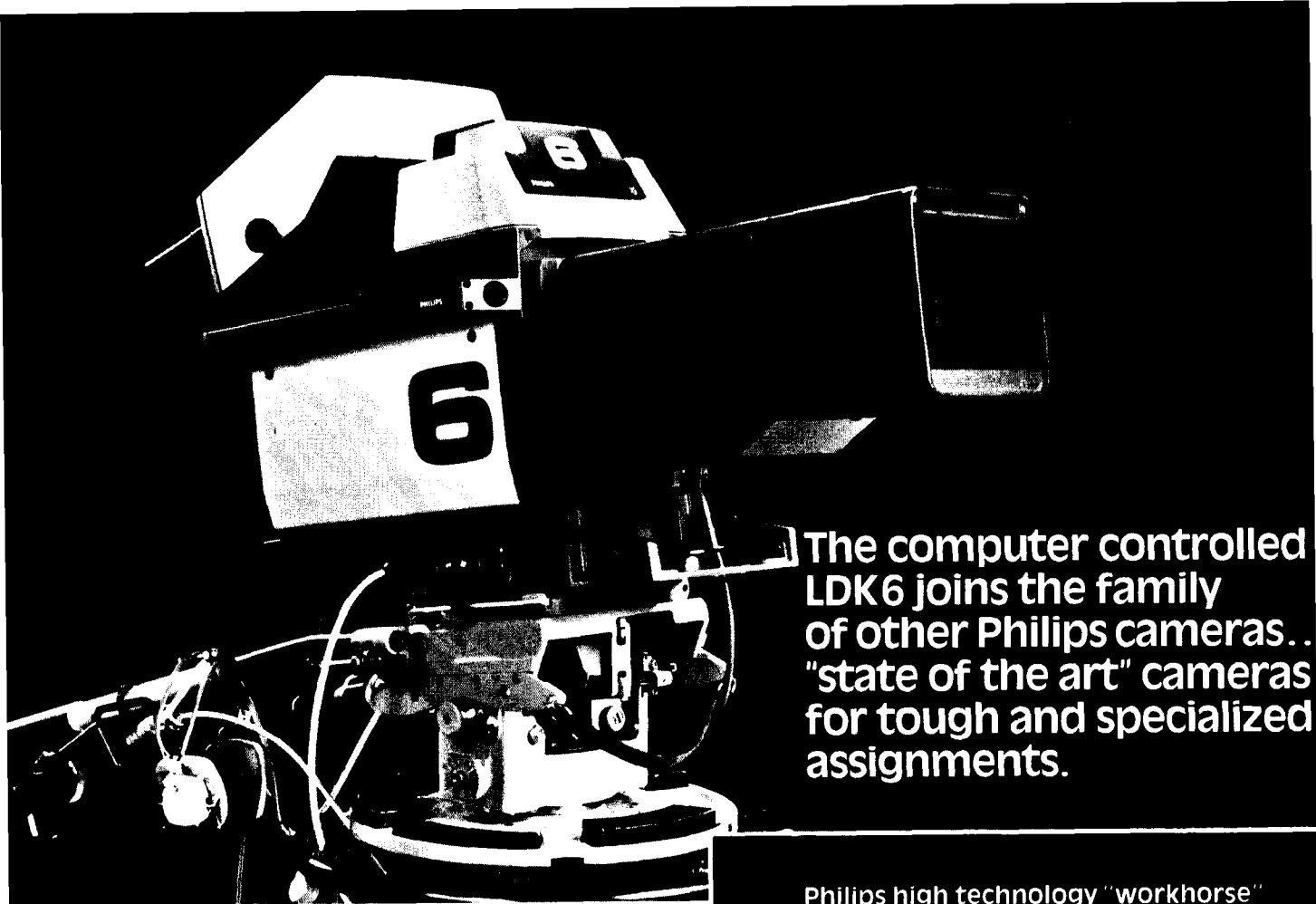
Two new portable color video cameras, the GP-41D and the GP-6M, have been announced by Hitachi Denshi America, Ltd., 175 Crossways Park West, Woodbury, NY 11797. The GP-41D uses the Hitachi 2/3-in tri-electrode vidicon tube, which produces each primary color signal individually. It has auto iris and automatic sensitivity control for low light conditions. An omni-directional microphone at the rear and a boom microphone on the front are built in. Warning indicators in the built-in viewfinder show VTR start, video level, battery warning, and white balance. The camera is adaptable to other manufacturers' recorders.



The GP-6M uses a 2/3-in single-frequency Saticon tube. It has an $f/4$, 12.5-75

Continued on page 662

SMPTE Journal, July 1982



The computer controlled LDK6 joins the family of other Philips cameras... "state of the art" cameras for tough and specialized assignments.

A new era has been launched with the all new LDK6 field and studio triax camera with "distributed intelligence" to control, report and diagnose. These features now mean the operator can concentrate on creative camerawork.

For the first time, individual microcomputer and data communication facilities in each of the main system units provide an unequalled degree of intelligence within the system.

Other unique features include:

- Simultaneous multi camera computer controlled setup... partial or automatic.
- Diagnostics for on line anticipatory, and off line on-demand fault indication.
- Digital scan correction for spectacular reduction in corner errors.
- Wide Band RGB video over triax.
- Multiple camera settings can be stored and recalled instantaneously during production.
- 4 lens memories to automatically adjust for different lens parameters including back focus.
- Built-in diascope so standard lenses can be used including LDK5/25 lenses.
- Either 25mm or 30mm Plumbicons® can be selected.
- Two-wire data bus permits easy and economical expansion.

LDK5B and 25B are rugged and reliable high quality cameras. The all triax LDK5B has become a standard for tough remote requirements, and continues to be the first choice for quality field productions. The multi-core LDK25B is a first line studio camera... and surprisingly affordable.

LDK14S and SL EFP/Studio cameras are ready for any shoot out and comparison of automatic features... and require only a simple adapter for triax conversion. The LDK14SL with Low Output Capacitance diode gun Plumbicons® offers an unusually high S/N Ratio (57dB) and higher resolution.

LDK44 is a new modular 3-in-1 versatile and economical broadcast quality ENG/EFP/Studio camera. No other camera offers the features and flexibility at such a low price.

Philips high technology "workhorse" cameras continue to be the choice of demanding broadcasters for quality pictures, reliability, flexibility and low cost of ownership.



For your present or future camera requirements, put yourself behind any one of these Philips LDK cameras and compare... quality, reliability, ease of operation, flexibility, and cost of ownership. Call or write for full details.



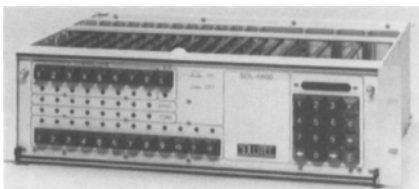
CENTRAL DYNAMICS CORPORATION

The U.S. Broadcast Company for ■ CDL ■ PHILIPS ■ American Data
900 Corporate Drive, Mahwah, NJ 07430 201-529-1550

mm lens with power zoom and auto iris; built-in electronic finder with white-balance indicator; unidirectional boom microphone; built-in filters; SNR 46 dB; resolution of 260 lines; and automatic sensitivity control.

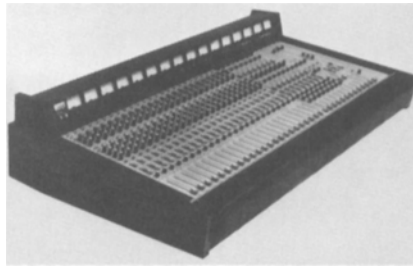


The Datacopy C322 Filmless CCD Array Camera has been introduced by Datacopy Corporation, 1070 East Meadow Circle, Palo Alto, CA 94303. It resolves the visual field with 4.5 million picture elements, sensitivity of 0.4 microjoules per cm² at saturation, and dynamic contrast range of 500:1. The system is reported to eliminate blooming, burning, gain, and offset drift problems associated with vidicon tubes. High resolution provides quality imaging for applications requiring image recognition, storage, or reproduction. The high sensitivity permits use under low illumination; large dynamic range allows wide choice of aperture settings without loss in contrast. The camera head is compact and accepts most 35-mm camera lenses. Price for camera head alone is \$7,850. The complete stand-alone camera system is priced at \$13,700.



An automated broadcasting system, the SOL-6800, announced by H. A. Solutec Ltd., 4360 Iberville St., Montreal, Que., Canada H2H 2L8, controls up to eight VTRs using standard remote connectors. The unit continually detects the video signal and, if needed, can switch automatically to emergency or fill-in inputs until the following event in the sequence is reached. The keyboard allows the operator to program sequential real-time or asynchronous events and to monitor them on the alphanumeric display. Its communication link allows it to be integrated into a master computer control system.

The Tascam M16, 16-Track Mixing Console with 24 input positions and a 16-track monitor section, has been introduced by TEAC Corporation of America, 7733 Telegraph Rd., Montebello, CA 90640. Up to three independent stereo mixes, or six mono mixes, can be done simultaneously. It has four-band parametric-type sweep



EQ on every input position, switchable high- and low-pass filters, phase reverse switches, separate mike and line trim pots, mike attenuator, and a mike-line-remix switch. The M16's solo system offers both postfader solo and PFL (prefader listen) on the inputs, as well as solo on the 16-track monitor and the 8 effects returns; solo is stereo and tracks the pan pots. A special feature is solo remix mode, which changes the solo logic so the operator can press an input solo to hear the "original" signal, or press both solos to hear the combined input program with its effects contribution.



A new recorder, which allows stereo recordings to be synchronized to film, has been announced by Studer Revox America, 1425 Elm Hill Pike, Nashville, TN 37210. The Studer A80RC-2/2-PFMN-VU is a special version of the A80 recorder, featuring a center-track FM pilot tone and resolver system. It is fully compatible with the Nagra-Kudelski system. The resolver system also incorporates a converter for changing 50 to 60 Hz and 60 to 50 Hz, allowing synchronization of "international" tapes. Standard features of the Studer A80RC series include servo-controlled capstan and spooling motors, and electronic tape timer with zero locator. Full track versions with Nagra-compatible neo-pilot tone, with or without resolver, are also available. Price for the A80RC-2/2-PFMN-VU is \$12,300.



Unisyn, a versatile synchronizer for audio and video postproduction, has been announced by Ampex Corp., 401 Broadway, Redwood City, CA 94063. The synchronizer can interface with audio and video

recorders without special external interfaces. One Unisyn is required for each recorder. The system can lock up to 16 transports in sync. The software automatically adapts to transport dynamics for optimum cueing and fast lockup. The unit provides wide-range, continuously variable speed lock. The slave recorder can lock to the master, even when the master speed varies dynamically from 1/4X to 2X the play speed, and synchronization of a slave can be controlled to 0.01 frame accuracy. Each slave recorder can locate and synchronize ten separate segments in one continuous pass of tape on the master recorder. Eight optically isolated time-code controlled outputs are assignable to ten events. The price is \$6,450.



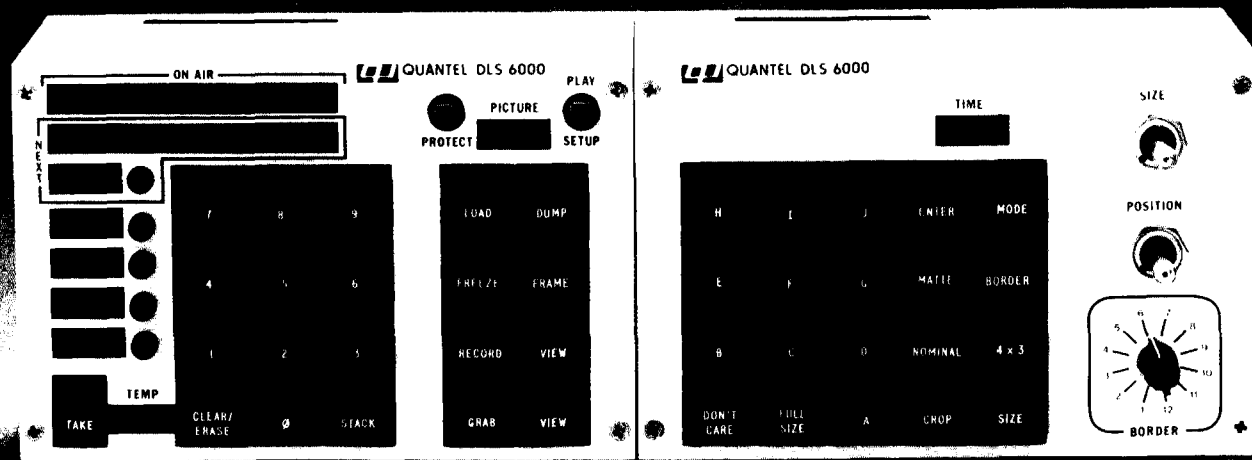
BETA, VHS, and 3/4-in duplication systems have been announced by Video Automation Systems, Inc., Upper Shad Rd., Pound Ridge, NY 10576. The systems are automated and operate from a central console. The solid state Auto-Dupe controller can control any number of VTRs when used with the company's expansion modules. Any desired mix of formats is available. The master console includes audio and video switching for quality control checks of the slave VTRs during and after recording. Time base correctors, monitors, and audio-video distribution are located in the central console. The systems are available in all world television standards.

An automatic videocassette duplication controller was also announced. It can automate VHS, Beta, and 3/4-in recorders used in duplication systems. By depressing a pushbutton, the recorders can be placed in any mode, and any mix or number of recorders can be controlled by one master controller. The automation controller can program the master playback VTR so it can go into play mode when the slave recorders go into record mode.

The T-Audio, a new, twin-capstan, four speed tape recorder, has been developed by the Nagra-Kudelski Group of Switzerland and is being marketed by Nagra Magnetic Recorders, 19 W. 44th St., New York, NY 10036. The recorder is offered in two-track and stereo versions, and features a detachable, individually controlled keyboard for fully operational remote capabilities. It

Continued on page 666

The Quantel DLS 6030.



Every other way to store stills is obsolete.

Introducing the state-of-the-art in electronic still-storage—the Quantel DLS 6030 digital library system.

Obviously it stores still pictures. Up to 800 on each small Winchester disk drive. And with the quality that is a hallmark of Quantel. But the DLS 6030 goes far beyond still-storage.

It is the only electronic still-store with production effects capabilities. So now you can compress still pictures to any size. Crop them to remove unwanted material. Position them anywhere you want. Put borders around them. And dissolve from one shot to the next.

You can even build up totally new pictures—composites or montages—from existing material.

And you can always retain your "originals" in their pristine state.

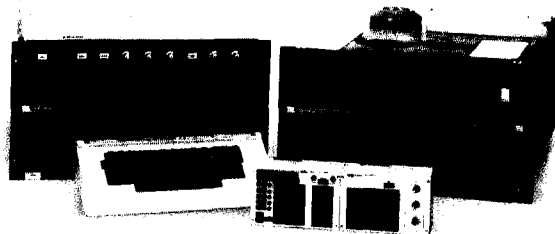
The DLS 6030 lets you browse through its disk library to select the pictures you need, and gives you unprecedented facilities for on-air editing, previewing, and presentation.

Off-loading? You can dump all the pictures—in digital form—onto

standard videotape. Then reload at the remote site via any VTR. The transfer is digital, so there's no generation loss.

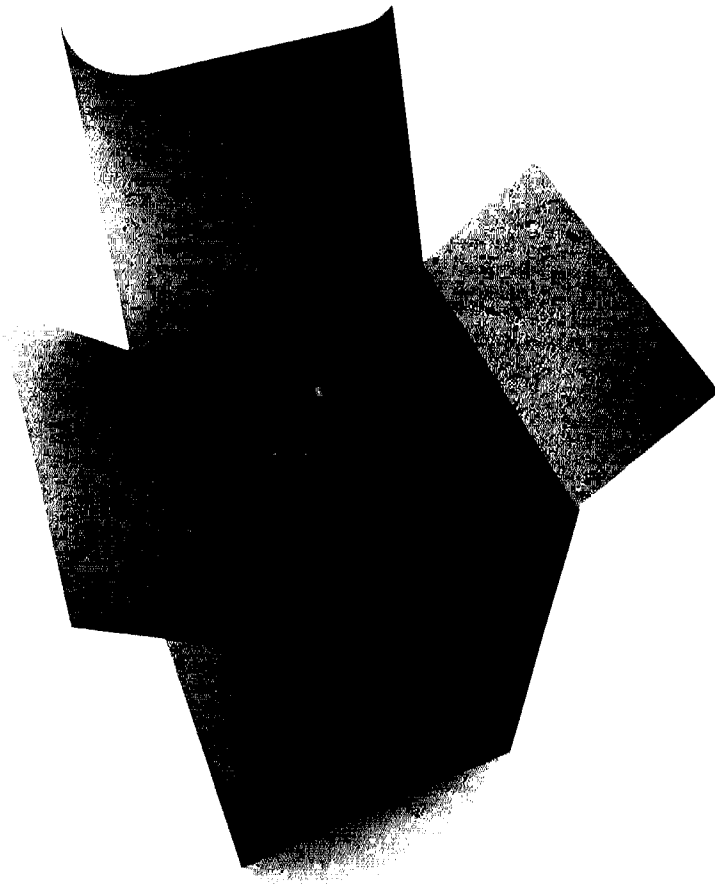
Because Quantel's technology is leading-edge, the DLS 6030 is small—about one-quarter the size of still-stores using older technology—and draws far less power. So it's ideal for mobile operations as well as the studio.

There's nothing else like it. See for yourself. Call your local MCI/Quantel representative. Or get in touch with us directly at 415/856-6226. Micro Consultants, Inc., P.O. Box 50810, Palo Alto, California 94303.



MCI/QUANTEL
The digital video people.

**NEVER BEFORE HAS
THIS VITAL
COMPONENT BEEN SO
SUCCESSFULLY
INTEGRATED INTO A
1" VIDEO RECORDER.**



SONY INTRODUCES A 1" VIDEO RECORDER TAILORED TO THE PEOPLE WHO USE IT: THE BVH-2000.

Because Sony probably has more experience selling and servicing 1" VTR's than anyone else, we're in an unequalled position to understand the wishes of 1" video users.

And now, Sony announces wish fulfillment for the broadcast industry: the new BVH-2000 1" video recorder.

WHY "BVH-2000" WILL MEAN DIFFERENT THINGS TO DIFFERENT PEOPLE.

In broadcast recording, there is no such thing as one typical situation.

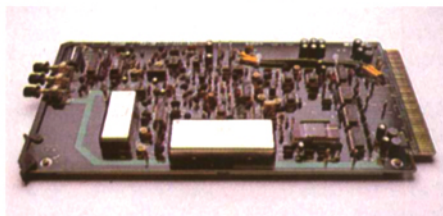
That's why there's no one single BVH-2000.

The BVH-2000 actually allows you to "design" the VTR you need for your own particular applications and budget.

You can choose among three different control panels—ranging from a basic model to one with virtually every possible feature and function.

And the tape transport system, signal system, and control section can either be combined into a single unit, or separated easily and installed in a 19" rack or console.

The BVH-2000 also gives you far greater latitude in setting up your entire recording system. Various remote-control connectors enable you to interface your system in a variety of ways for studio, mobile, and editing configurations. Direct interface with U-matic® and Betacam™ is possible, too. The BVH-2000



Plug-in time base corrector (optional).

also has an optional plug-in time base corrector.

What's more, the BVH-2000's lighter weight and smaller size (almost 50% less than its predecessor) make it as ideal on the road as it is in the studio.

And because of the ever-increasing number of applications requiring longer program times, the BVH-2000 provides up to 2 hours of tape time.

A VTR THAT LEADS THE SIMPLE LIFE.

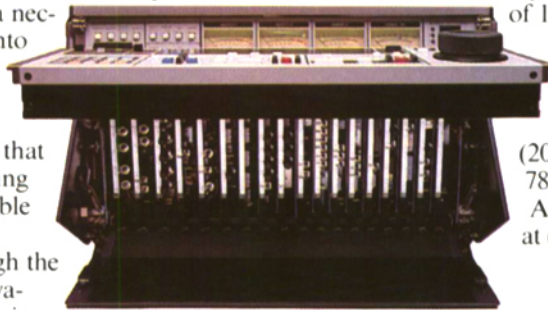
In the BVH-2000, unlike most other VTR's, microprocessors are used to their full advantage. All data necessary for servo control are channeled into a central processing unit, making the operator's control over all systems and functions simpler and more precise.

Life is made simpler yet by the fact that every necessary function control, metering facility, and electronic module is accessible from the front.

Even the way the tape moves through the recorder has been simplified. One innovation—an extremely precise servo mechanism



The BVH-2000 (shown with Type-III control panel).



Front access to all electronic circuits and modules.

—permits the entrance and exit guide posts to move about 10mm away from the drum during threading. The result is the easiest threading system ever in a 1" video recorder.

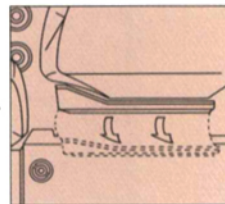
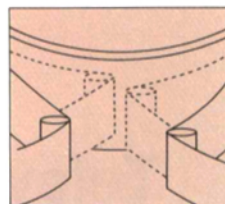
THE MOST ARTICULATE VTR EVER BUILT.

The BVH-2000 removes much of the mystery from maintenance, too. It literally tells you about malfunctions—usually well before you'd notice them yourself—through a microprocessor-governed self-diagnostic system.

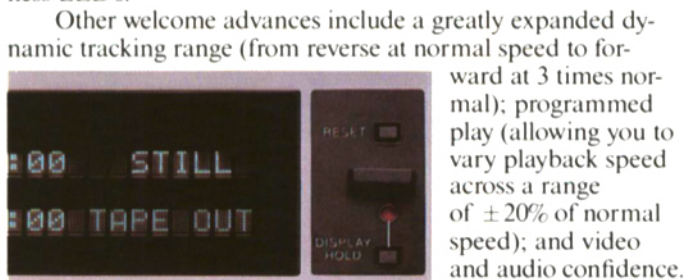
The system includes various alarm functions and numerous checks to confirm that everything is working properly. Most defects can be easily found—allowing for far less complicated maintenance and repairs, and reducing downtime considerably.

And because the best way to simplify maintenance is by lessening the need for it, the Sony BVH-2000 has been designed to be virtually maintenance-free down to the last detail. For example, only brushless DC motors are used, and all incandescent lamps have been replaced with high-brightness LED's.

Other welcome advances include a greatly expanded dynamic tracking range (from reverse at normal speed to forward at 3 times normal); programmed play (allowing you to vary playback speed across a range of ±20% of normal speed); and video and audio confidence.



To simplify threading, guide posts automatically move away from drum, and audio head cover opens.



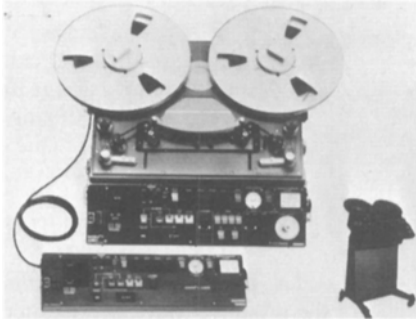
Display board for self-diagnostics and other data-processing functions.

Remarkably, these are only some of the Sony BVH-2000's innovations. All of them add up to form the answer to virtually every need ever expressed by the users of 1" video.

To find out how it can answer yours, write Sony Broadcast, 9 West 57th St., New York, NY 10019. Or call us in New York/New Jersey at (201) 368-5085; in Chicago at (312) 860-7800; in Los Angeles at (213) 537-4300; in Atlanta at (404) 451-7671; or in Dallas at (214) 659-3600.

SONY
Broadcast

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provides keyboard selection of up to four recording calibrations for speed, tape type, and standard. It also features an interchangeable head assembly and is capable

of high-speed copying as a result of its ten m/sec spooling characteristics. Other features are servo-controlled editing plus a built-in cutter, servo-controlled tape transport with interhead tension sensing, variable playback speed control, and electronic counter with digital display. It functions on ac or dc.

VAS III, a new video animation system announced by Lyon Lamb, 8255 Beverly Blvd., Los Angeles, CA 90048, incorporates the latest advances in VHS formats for the testing of animation and special effects; it is also used as a production tool for shooting storyboards and animatics.

The new frame-by-frame recording system provides an instantaneous method of viewing stop-action tests before committing them to final production. **VAS III** functions include switchable recording speeds of 24 or 30 frames/sec and selectable frames per recording from 1-99. A video-generated frame counter is recorded in the video signal and displayed on the monitor. Playback is possible in forward and reverse, with ten slow-motion speeds. Price for the recorder with built-in microprocessor, black-and-white camera with 5:1 lens, and 9-in monitor is \$6,850.



Dynafex D-2B, a single-ended noise reduction system, has been announced by MICMIX Audio Products, 2995 Ladybird Lane, Dallas, TX 75220. It does not require any encoding or decoding, thus allowing it to reduce noise by up to 30 dB or more on virtually any audio source. Instead of preventing build-up of noise inherent in the tape-recording process, the Dynafex reduces noise on the original material by continuously analyzing and responding to the frequency content and amplitude of the signal. It is a two-channel system, each channel having a threshold control that determines at what signal level maximum noise reduction occurs. The unit can be adjusted for reference levels of +8, +4, 0, or -10 dB, permitting interface with broadcast, recording studio, and consumer equipment.

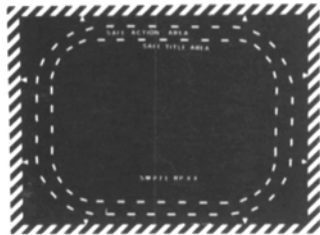
Head-cleaning cassettes, which will provide up to 900 VHS and 450 Beta cleanings, have been introduced by Fuji Magnetic Tape Division, 350 Fifth Avenue, New York, NY 10018. The VCL-10 (VHS) and BCL-10 (Beta) fit into recorders like ordinary cassettes and clean the heads in one ten-second pass. If the heads are excessively dirty, additional passes may be necessary.

The VR9775 Programmable Video Director, a front-loading videocassette recorder, has been announced by Zenith Radio Corp., 1000 Milwaukee Ave., Glenview, IL 60025. Standing 3 1/2 in high, the VR9775 can record up to four television programs unattended on different channels over a two-week period. The recorder is equipped with an infrared, wireless remote video action control that can operate all record and playback functions from anywhere in the room. Functions of the special remote include special effects such as frame-by-frame advance, variable speed, slow motion in forward and reverse, fast forward, pause, stop action and speed search. Speed search allows the viewer to select favorite scenes at 15 times normal speed in Beta III and 10 times in Beta II. Other features include

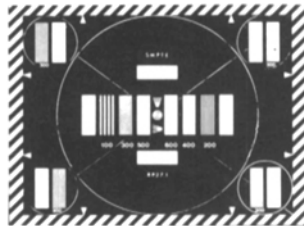
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SMPTE

Television Test Films & Slides



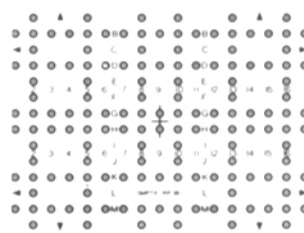
Safe Action and Safe Title



Alignment and Resolution



Operational Registration



Deflection Linearity

SMPTE's TV test films and slides are used for setting up and checking television studio cameras and telecine systems. These are manufactured under carefully controlled conditions to insure constant dimensions and densities.

Available in 35mm and 16mm film and in 2 X 2 slides

- Operational Alignment Test Pattern*
- Alignment and Resolution Test Pattern
- Operational Registration Test Pattern*
- Safe Action and Safe Title Test Pattern
- Mid-Frequency Response Test Pattern*
- Television Deflection Linearity Test Pattern*
- Color Television Subjective Reference Films and Slides.

*Also available in 8 X 10 transparency.

For free catalog, call or write:



SMPTE Test Film Dept.

862 Scarsdale Ave., Scarsdale, NY 10583
(914) 472-6606 (212) 562-5708

Think of us as your mike expert.



The 635A – Perfect design from the start

The Electro-Voice 635A is probably the most widely used broadcast microphone currently available. Yet it was introduced back in 1967! There are microphone companies that haven't been around as long as the 635A! What makes a microphone continue to be the broadcasters' favorite after 15 years in the field?

The 635A was designed to be used anywhere. Its screw-machined steel case and mechanically nested parts set standards for durability and ruggedness that the competition still strives for. It was the first omnidirectional microphone designed to have a shaped, rather than flat, frequency response. A rolled off bass response combined with a slightly rising high end make it perfect for vocal reproduction. And it was the first microphone of its type to feature an elastomer

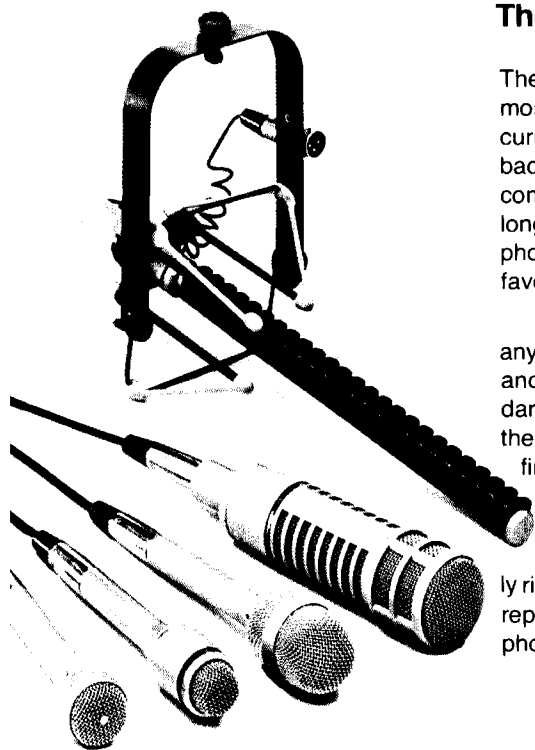
encased head capsule for reduced handling noise and additional protection from severe mechanical shock.

Despite all the technological advances in the broadcast, recording and sound reinforcement industries, the 635A continues to be the "audio man's screwdriver" - a microphone tool that can be used anytime, anywhere, for almost anything. When a product is designed right to start with, there's no need for it to become obsolete. All Electro-Voice professional microphones are designed with the same goal in mind. That's why people think of Electro-Voice as their microphone expert.

EV **Electro-Voice**[®]
a **gulton** company

600 Cecil Street, Buchanan, Michigan 49107

In Canada:
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Sounds. Re



recordists

Take your time with Aaton.

Once you're released from the servitude of the slate (and the clap-bang it imposes in an otherwise harmonious audio atmosphere) you can concentrate on what you like doing : playing with sounds, enticing them, capturing what is hidden in the image.

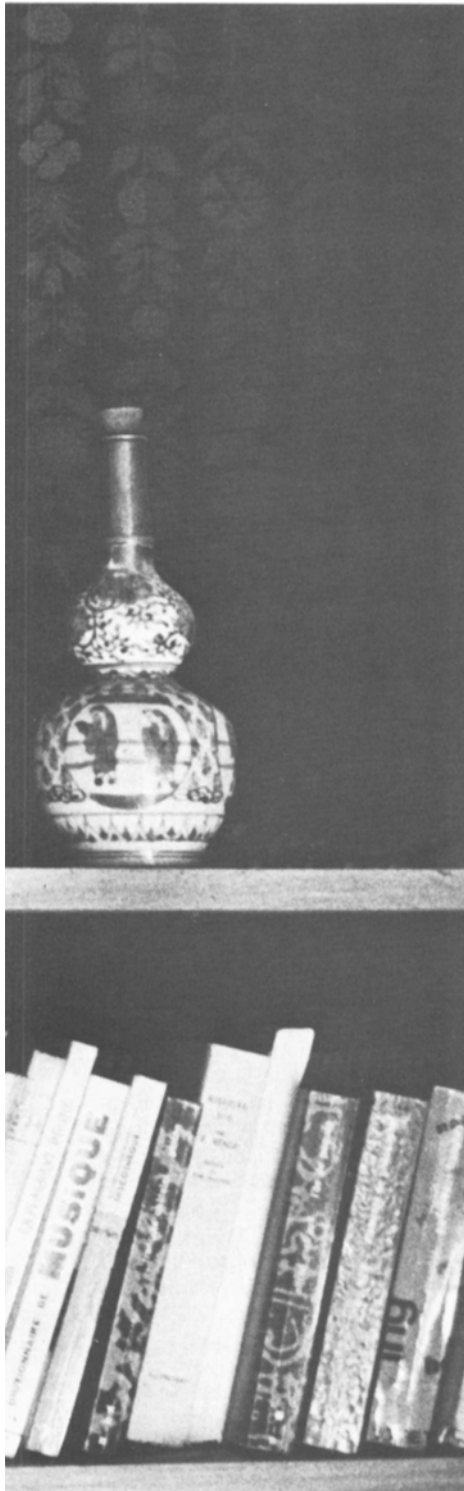
Forget chalk, slate, clapper. Don't get ordered around : it disrupts the filming atmosphere. Progressively evolve from pilotone + slate to *pilotime*.

Equipped with the compatible circuit installed by Aaton, the Nagra you have now can handle both. The time address recorded on the quarter inch pilot track will be laid onto the edge track of the full coat every second during transfer.

When it comes to editing, the time information printed right onto the fullcoat backing will be matched with ease to the clear time addresses exposed onto the film edge by Aaton 16 and 35 mm cameras.

Quietude. Serenity. Aaton

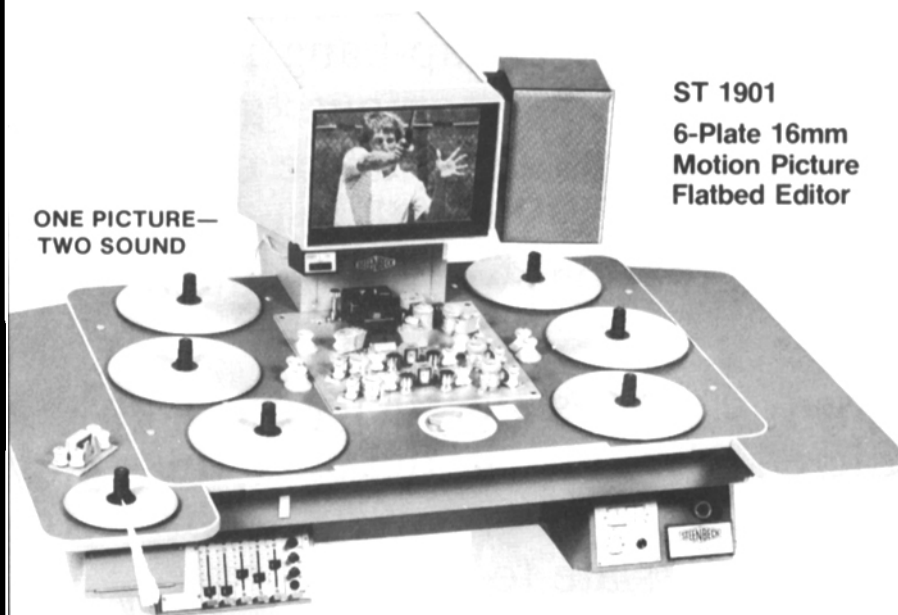
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NEED SIX PLATES? MINIMUM SPACE? ST 1901 IS THE ANSWER



ST 1901
6-Plate 16mm
Motion Picture
Flatbed Editor

- Very bright and sharp picture virtually without flicker through the use of an 18 faced revolving prism.
- Simple threading of picture and sound track with synchronizing points outside the right and left sprockets.
- Slide attenuators control volume.
- Each track can be disengaged from the motor drive and moved by hand.
- Simple operation: Steenbeck's single lever main governor improved for continuous control of speed from top reverse to top forward.
- Extremely fast start and stop. No noticeable transition from stop to sound speed.
- All mechanical and electronic parts are easily accessible for maintenance purposes.

STEENBECK

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Manufacturers of the Worlds Finest Flatbed Editors
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LED tape remaining indicator, electronic tape counter, LED tape speed indicator, automatic program index and audio dub.

JAN Telecine Projectors are available from International Projector Co., Inc. 6750 Northeast 4th Court, Miami, FL 33138. Three different models, all with synchronous motors, 120° shutters, and special gear-box systems are in production. Model EVMS is optical/magnetic with remote controls. It is mounted on an enclosed pedestal. Model EVM is the same as EVMS but without the pedestal. Model EVS is optical sound only and without a pedestal.

International 104 is a portable 35-mm motion picture projector available from International Projector Company, Inc., 6750 Northeast 4th Court, Miami, FL 33138. It features all gear drive, heavy-duty intermittent mechanism, solid state electronics, enclosed magazines, and a completely enclosed main frame for quiet operation. The projector is available for 110- or 220-V/50 or 60 Hz operation. It weighs less than 65 lb, including magazines, and measures 13.5-in. high, 16.5-in. long, and 8.5-in. wide. Options include single and dual projector, xenon lamp-house, aperture plate changeover, shipping trunk, pedestal, and lenses. The price is \$4,214 complete with cables, 400-watt tungsten-halogen lamp-house, bulb, and speaker.

The Aquastar IIIB large-screen video projector from Electronic Systems Products, 1 Tico Road, Titusville, FL 32780, is starting into production after a six-month pilot run. Designed to meet commercial standards, it has a 400-lumen peak light output. It can be focused on any flat or curved screen and projects an image from 4 ft to 25 ft wide. The unit weighs 75 lb. The price is about \$9,500.

The OS300, a 20-MHz dual trace portable oscilloscope, has been announced by Gould, Inc., 35129 Curtis Blvd., Eastlake, OH 44094. Features include Add and Invert displays for subtraction of dc or carrier signal components or for shifted baseline comparison, and an active TV sync separator for video color or broadcast sync timing. The two input channels are identical in performance with an accuracy of $\pm 3\%$. Sensitivity is continuously variable with independent adjustment via calibrated controls from 2 mV/cm to 25 V/cm. Input bandwidth extends from dc to 3 dB down at 20 MHz permitting examination of fast transients or pulse rises. Price of the OS300 is \$695.

The Model 5850 vectorscope with phase-amplitude targets generated by the CRT has been announced by Leader Instruments Corp., 380 Oser Ave., Hauppauge, L.I., NY 11787. Because the phase-amplitude targets are generated by the CRT,

they are illuminated and as easy to see as the vector points. Because the targets can be easily seen, a simple coaxial switching system permits one vectorscope to be used remotely to monitor several video sources. Phase and amplitude adjustments are made more accurate by the illuminated inner target display. Two loop-through inputs are included that can be selected for display by front panel pushbuttons, a test circle pattern is also selectable. The phase reference is chosen from either of the two composite video inputs and one of these can be switched to phase lock to a subcarrier input. Another front panel pushbutton switch selects either 100% or 75% saturation levels. A gain control permits continuous adjustment as well as a detented calibrated position. A phase control allows the display to be rotated through a full 360° circle.

A new spectrum analyzer system, the HP 3047A, has been announced by Hewlett-Packard, 1820 Embarcadero Rd., Palo Alto, CA 94303. The system provides fast, calibrated and automated measurements of amplitude and phase noise and of spurious signals and close-in signals. The noise floor for phase noise measurements is -170 dBc/Hz. Spectrum analysis measurements that used to take days or weeks can be completed in minutes with the 3047A. The system can be used in three measurement modes, phase noise, direct spectrum and noise sideband.

The phase noise capabilities of the 3047A enable it to produce fast, repeatable measurements on system components such as oscillators, amplifiers, multipliers and frequency references. Direct spectrum mode provides spectrum analysis measurements with resolution bandwidths as narrow as 0.02 Hz up to 40 MHz with fast Fourier transform (FFT) analysis speed. Because this mode is based on FFT it can be used to capture and observe intermittent signals. Noise sideband mode provides amplitude and phase noise measurements from 0.02 Hz to 25 kHz away from 20 Hz to 40 MHz carriers. Price of the 3047A spectrum analyzer system is \$79,000.

Model 761 TV Transmission System, being introduced by American Laser Systems, Inc., 106 James Fowler Rd., Santa Barbara Airport, Goleta, CA 93017, transmits base-band video up to 2000 feet using a narrow-beam infrared carrier. Performance is said to be studio quality that meets NTSC specifications. The invisible infrared light beam carrier is generated in a gallium arsenide semiconductor diode by means of current injection. The optical carrier can be modulated at very high frequencies, making it suitable for video plus multi-channel audio transmission. The low power of the transmitter is not subject to public health or FCC regulations, and anyone can set up and use the system. The low voltage and power requirements make battery power an alternative to the normal

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110/220 vac operation. The detector is an Avalanche photodiode, which gives the receiver the capability of over 100 dB of AGC range.

Model 3050 Digital Delay from Fostex Corporation of America, 15431 Blackburn Ave., Norwalk, CA 90650, allows selectable delay (echo) time in ten steps, from .13 ms to 270 ms. The user can adjust the modulation width to a maximum ratio of 1:4 and can control the modulation externally. The unit has separate output-level controls for both the unaffected sound and the effect, allowing them to be adjusted for optimum blend.

A microprocessor-controlled camera, Model HK-357A, was announced by Ikegami Electronics (USA), Inc., 37 Brook Ave., Maywood, NJ 07607. Designed for field and studio use, the camera features Diode Gun Plumbicon for high resolution and low lag, Dynamic Beam Stretch to reduce comet tailing, and Geometric Correction for near-perfect registration, auto iris, and auto white balance. A push of its microprocessor-activate button cycles the camera through a check and recheck of all setup and registration adjustments.

A new studio television camera, the KCI 90, was announced by Robert Bosch



GmbH, Geschäftsbereich Fernsehanlagen, 6100 Darmstadt, Robert-Bosch-Str. 7, West Germany. Its control concept allows digitizing, storage, and transmission of changes in the camera commands. In addition, the PCM dialogue and buffer storage allow up to eight camera chains to be lined up from one central control unit. Other features include delegatable control units and a new pickup tube combination.



A 13-in color television monitor, the TM-14PSN, that functions in all four world broadcast systems has been announced by US JVC Corp., 41 Slater Dr., Elmwood Park, NJ 07407. The monitor functions in NTSC (3.58 MHz), PAL, SECAM (CCIR and French), and modified NTSC (4.43 MHz). The monitor automatically selects the proper broadcast system under normal signal conditions. For weak or substandard signals the desired system can be selected manually. Front panel controls include a system selection dial plus an input selection dial that allows switching among three sources.

The TM-14PSN can be used for various applications. It functions as a camera monitor and allows switching between two cameras, and monitors recording on one or two VCRs. It can monitor two cameras and two VCRs at the same time and can also be used for simple playback. When connected to a tuner it can receive off-air broadcasts. The price is \$710.

The Tewee viewfinder, designed to assist the motion-picture or TV director in making composition and frame decisions and lens selection, was announced by Schneider Corp. of America, 400 Crossways Park Dr., Woodbury, NY 11797. The viewfinder features two control rings — film size and focal length. For motion-picture applications, it features a focal length range of 8.5- to 40-mm with the 16-mm format, 18- to 85-mm with the 35-mm format, and 40- to 180-mm with CinemaScope. For TV applications, focal

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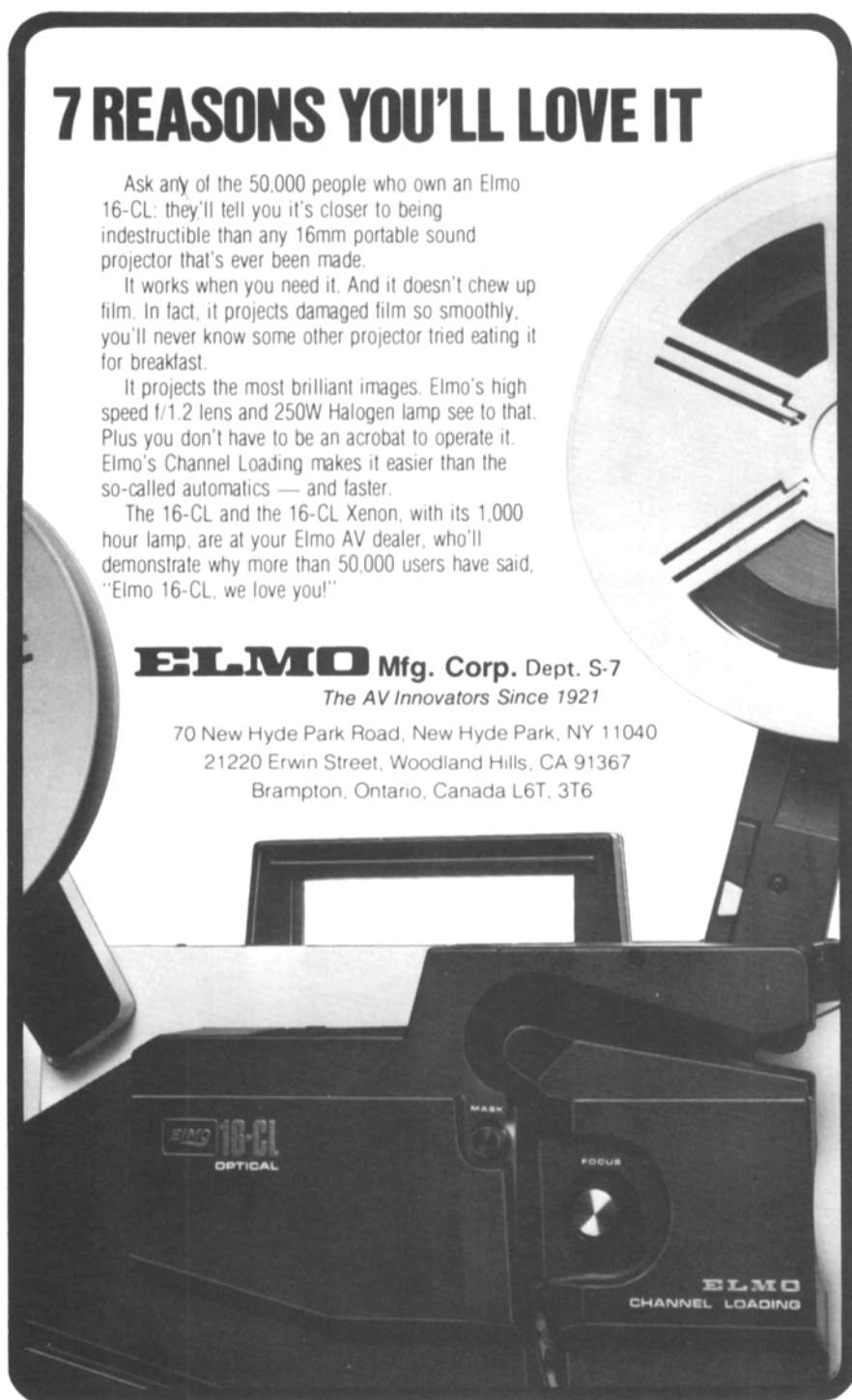
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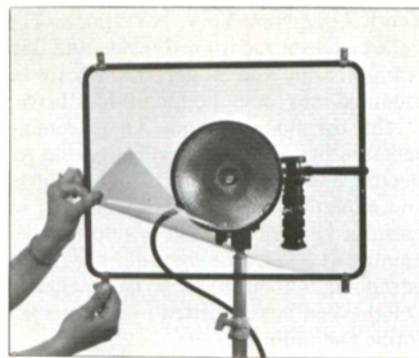


The Flair graphics systems, a micro-processor-driven method for "painting" television pictures, was announced by Logica Ltd., 666 Third Ave., New York, NY 10017. Designed for easy use by graphics artists, it requires no computer knowledge to operate. A large selection of brushes can paint in any of millions of different colors. Pictures can be taken from a monochrome video input and altered using drawing and "posterizing" functions.

A Schneider TV zoom lens was built-in diascope and 2X range extender has been announced by Tele-Cine Corp., a subsidiary of Schneider Corp. of America, 400 Crossways Park Dr., Woodbury, NY 11797. It is designed for use with the RCA TK-47 camera as well as other microprocessor-controlled cameras such as those manufactured by Ikegami and Hitachi. The lens, designated Model TV51/61, has a 15X zoom range and provides a wide horizontal viewing angle (55° at 16 mm)

with extended zoom capability out to 480 mm with the built-in 2X servo-controlled range extender.

The diascope is designed to assure consistently stable camera setup and long life performance. It has servo-controlled optical feedback of light to maintain constant color temperatures and light level. The diascope's integrating sphere light source virtually eliminates shading to achieve maximum flatness of field of the projected image. Three independently controlled light sources provide ease in adjusting diascope characteristics to match the camera and scene requirements. The TV51/61 lens with range extender and diascope is priced under \$30,000.



The 1000-W DP light replacing the Lowel Quartz D has been announced by Lowel-Light Manufacturing, Inc., 475

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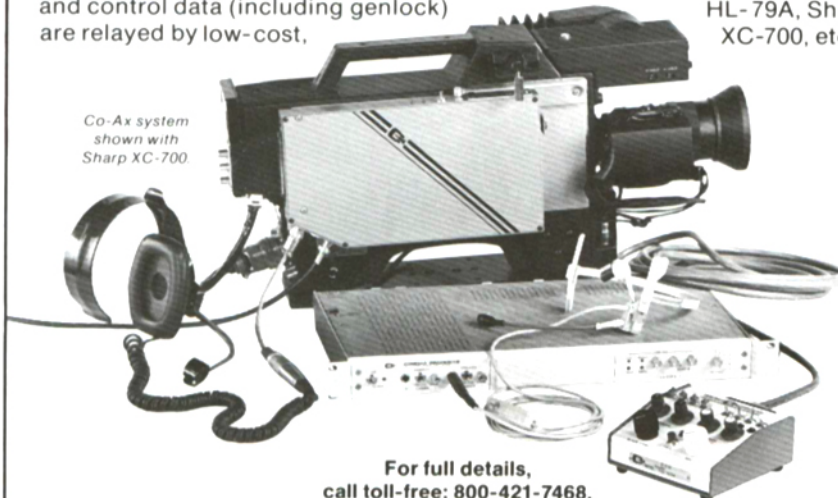
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Co-Ax system shown with Sharp XC-700.

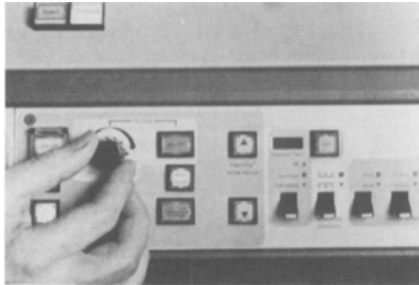


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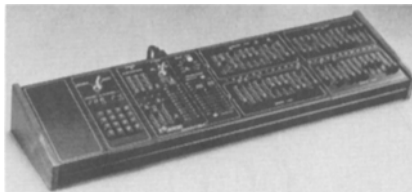
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Tenth Ave., New York, NY 10018. The light has been redesigned inside and out. An umbrella and a gel frame can be mounted into the light and all four leaves of the barndoor expand. An extremely versatile light, it has interchangeable reflectors and a wide range of light control and mounting components. A number of portable kits are available with prices beginning at \$975. The light alone without barndoors is about \$138. Existing Quartz D lights can be retrofitted to accept a gel frame and umbrella.



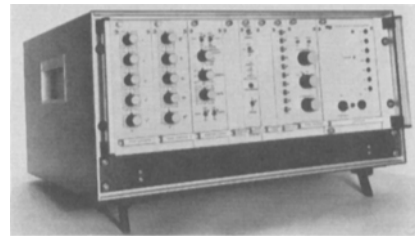
A new feature for the digital Mark III C telecine which offers true variable speed control has been announced by Rank Precision Industries, 260 North Route 303, West Nyack, NY 10994. The Varispeed option enables Rank Cintel's latest digital flying spot scanner to be run at speeds between 16 and 30 frames/sec without loss of

picture stability and quality. Because it can be interfaced with most types of audio compressor/expander, substantial variations can be made to normal running speeds without any change becoming noticeable to the viewer. Film running times can be tailored to fit programming time slots or standard videocassettes. Silent movies and archive footage can be replayed at the original speed and the 625/50 PAL user can have true 24 frames/sec reproduction. At the post-production stage Varispeed gives the director additional creative flexibility.



The Mantrix™, a portable lighting control console, has been introduced by Strand Century, 20 Bushes Lane, Elmwood Park, NJ 07407. The Mantrix is a manual, four-scene preset console incorporating eight submasters for control channel grouping. The console is designed to control one or more portable Strand Century C080 pack dimmers each of which contains 12.2.4 kW dimmers. Up to 24 C080 packs

(a total of 288 2.4 kW dimmers) can be grouped and controlled by 84 control channels in the Mantrix. Only one 4-wire cable is required to control up to eight C080 packs.

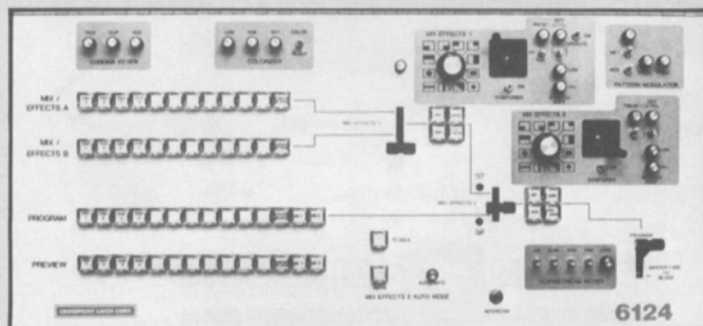


The Zone Plate Generator (VGE1032), designed to provide a range of test signals that can fully exercise a complex video system simultaneously in the horizontal, vertical, and temporal axes, has been announced by Television Equipment Associates, South Salem, New York, NY 10590. It enables the response of a unit in a television system to be fully investigated and tested. In addition to stationary patterns it can produce sine wave, square wave, or triangular gratings not only of varying pitch but also at varying speeds. The generator is switchable between NTSC 525 lines and PAL 625 lines. It produces signals digitally by using a Read Only memory whose inputs represent the

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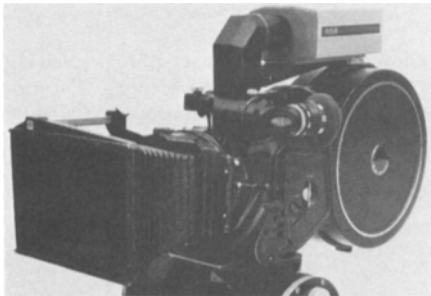
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phase of the signal at each sampling point. The generator can be used for development and maintenance of video equipment such as standards converters, frame stores, noise reducers, coding equipment, and special effects systems and mixers. The Zone Plate Generator is manufactured by VG Electronics Ltd. under license from the BBC.



A video assist for the Arri 35BL2 or BL3 cameras has been announced by Fries Engineering, 12032 Vose St., North Hollywood, CA 91605. It utilizes a 2/3-in low light level Nevecon black-and-white camera. The video's optical system can be iris-ed separately from the film camera for either interior or exterior lighting conditions. Both the video camera and monitor operate from 12 V dc batteries. The video can interface with recorders, special effects generators, switchers, etc. The video assist

has a 9-in monitor. The price is about \$3,600.



Three tape recorder/reproducers, the two-track Model 32, four-track Model 34, and eight-track Model 38, were introduced by Tascam, 7733 Telegraph Rd., Montebello, CA 90640. All accommodate up to 10 1/2-in diameter reels. Full sync recording is provided on all models. Models 32 and 34 run 1/4-in tape at 7 1/2 or 15 in/s, while model 38 runs 1/2-in tape at 15 in/s.

A portable VHS recorder with XLR connectors for audio has been announced by Hitachi Denshi America Ltd., 175 Crossways Park West, Woodbury, NY 11797. Designated the SV-650U, it is a two-four-six hour recorder. It has a 46 dB S/N ratio and weighs 11.6 lb (including battery), and power consumption of 5.3 W. Video Dub allows the addition of titles to a prerecorded tape. A remote control is included for freeze slow motion and high speed picture search. An optional tuner-timer can be programmed to record eight

segments over 14 days and function as a charger for the battery. Other features include microprocessor controls, power conservation, and BNC video connectors.

Seven super high grade videocassettes were announced by Fuji Magnetic Tape Div., 350 Fifth Ave., New York, NY 10118. They are said to have improved video and audio outputs and reduced dropout rates. A new Duroback coating helps the videocassettes maintain clear and accurate color reproduction after hundreds of plays. The seven lengths available are T-120, \$37; T-100, \$33.35; T-80 \$29.65; T-60, \$27; T-40, \$24.85; T-30, \$24.10; T-20, \$23.35.

A fluid head designed for use with lightweight film and video cameras was announced by KB Systems, 10407 62nd Place W, Everett, WA 98204. The KB Magic fluid head is capable of having a full 360° horizontal pan and a 180° vertical tilt. Weighing less than one pound, it comes in three models: 500, up to 5 lb camera weight, \$159.95; 800, up to 8 lb camera weight, \$199.95; 1000, up to 10 lb camera weight, \$249.95.

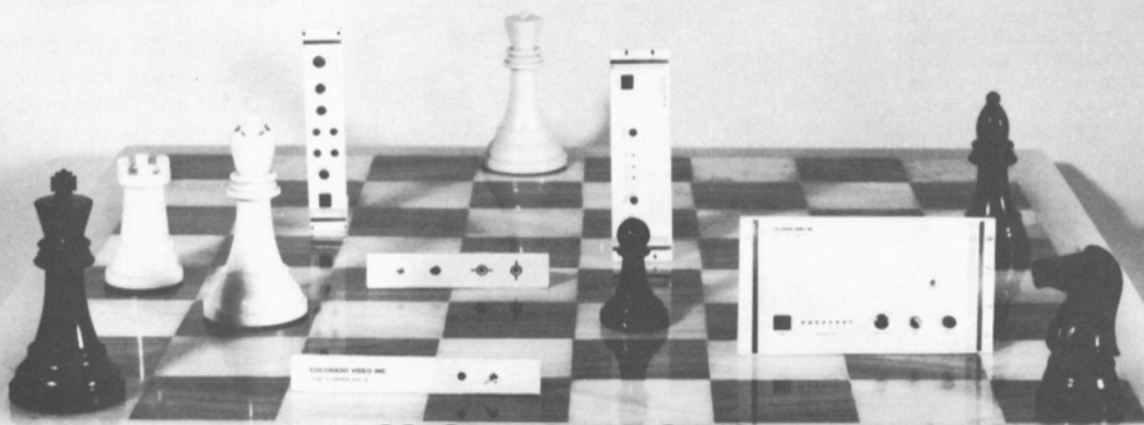
A new Gitzo head designed for video and cine cameras weighing up to 10 lb has been announced by Karl Heitz, 979 Third Ave.,

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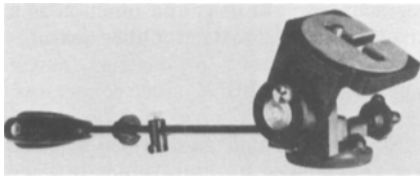
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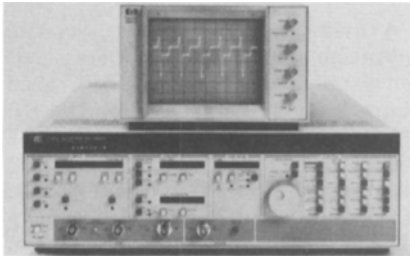


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New York, NY 10022. It offers fluid action panning of 360°, front tilting up to 30°, and rear tilting up to 360°. The tilt handle and the panning knob provide adjustment of the fluid action as well as tight locking in any position. The head is 3½ in high, with a 3¼ × 3-in platform and a T-shaped slit with a ¼-in or 3.8-in rapid adapter screw. The price is \$199.95.



A waveform recorder, the HP 5180A, was announced by Hewlett Packard, 3000 Hanover St., Palo Alto, CA 94304. Featured are a 10-bit analog-to-digital converter with a 20 MHz sample rate and a 16K word high-speed memory. Among its

applications for communications and television are digital video transmission; characterizing optical fibers used for communications; video time-base correction; and codec for digitizing mastergroups. The HP 5180A is pictured above with an HP 1340A display.



A time compression/expansion system for audio recorders, video recorders, and film projectors, called Timesqueeze Jr., was announced by Eventide Clockworks, Inc., 265 W. 54th St., New York, NY 10019. The system consists of an Eventide H949 Harmonizer and PTC960 precision tape controller. The user sets the desired percentage change on four thumbwheel switches. Timesqueeze Jr. is priced at \$5,000.

A fast-talking previewer, the Cinescan, was announced by Research Technology International 4700 Chase, Lincolnwood, IL 60646. The compact, tabletop previewer is less than three ft wide and comes with optional speech processing capability. It



eliminates the need for separate previewing rooms, projectors, and screens. The optional Quik-Trac speech processor module allows the operator to check sound films at twice sound speed and still understand every word clearly.



A new four-track mixer, Portastudio Model 244, was announced by Tascam, 7733 Telegraph Rd., Montebello, CA 90640. It comes with four-channel tape

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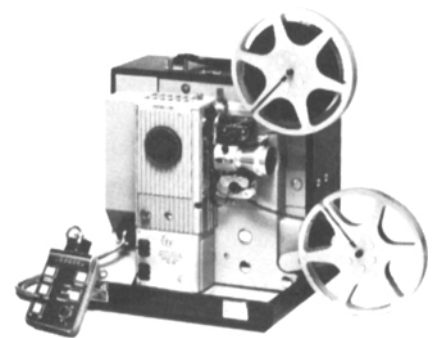
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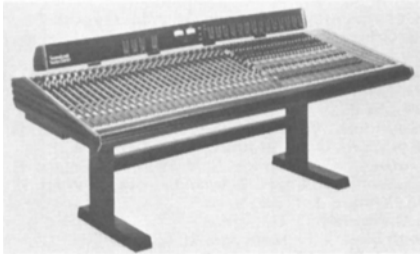
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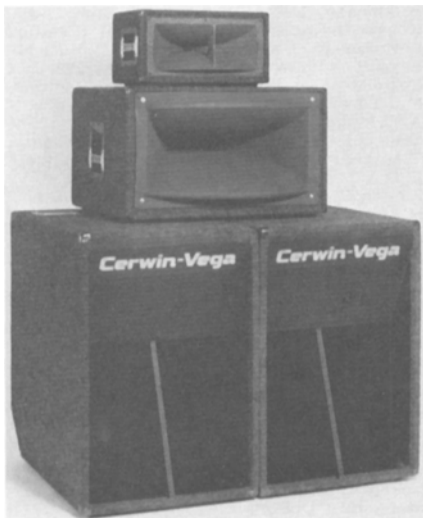
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outputs, permitting cassettes to be copied from one unit to another. Other features include a two-band parametric type sweep equalizer for tonal control, peak overload LEDs to aid in setting sound levels, as well as signal processors.

The **51-Series console**, comprised of multiple-application audio units for radio, television, and film production, was announced by Neve Electronics International, Cambridge House, Melbourn, Royston, Herts, SG8 6AU, England. The unit includes multitrack recording facilities that are suitable for both studio and mobile installations.



The **Series 2400 sound mixing console** was announced by Soundcraft Electronics USA, 20610 Manhattan Place, Ste. 120, Torrance, CA 90501. The console has 24-track routing, a facility to fit an optional automation system, and optional bar graph metering, and offers a choice of two mainframe sizes. Series 2400 is a split console. Operating facilities are presented on separate input and group output monitor modules.



A line of **theatrical sound products** was announced by Cerwin-Vega, 12250 Montague St., Arleta, CA 91331. The Cinema System (shown above) is a full-range, three-way system capable of sound reproduction from 25 Hz to 20 kHz. The system can be driven by a 600-W power amplifier. It is priced at \$2550. The Surround Sound theatre speakers, DSMT and SMT-1, are mid-treble units covering the range from 125 Hz to 16 kHz. They are priced respectively at \$600 and \$400. A

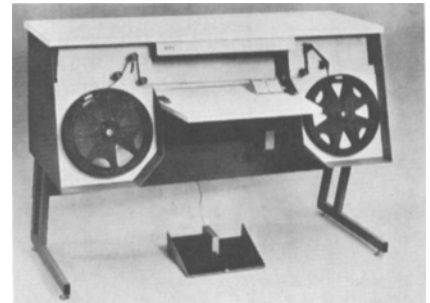
third Surround Sound speaker, Model FT-3, is a compact, three-way system that covers the range from 30 Hz to 16 kHz.

Also among the products announced: the FT-37 and FT-18, two one-cabinet systems with full-range performance; and two bass systems, the L36-JE and SW-18, which provide reproductions of earthquake, thunder, explosions, and other disaster sounds.



Two ultrasonic film cleaning machines, the CF-100 and CF-200, were announced by Lipsner Smith Co., 7 Cowley Mill Trading Estate, Long Bridge Way, Uxbridge UB8 2YG, Middlesex, England. The CF-100 was developed for professional

cleaning of prints, special negatives, broadcast films, opticals, and films for transfer to videotape. The CF-200 (shown above) removes all dirt and surface contamination from both celluloid and emulsion sides of film. Scratches are thoroughly cleaned, increasing the effective use of the liquid gate technique. It features a non-evaporative drying system.

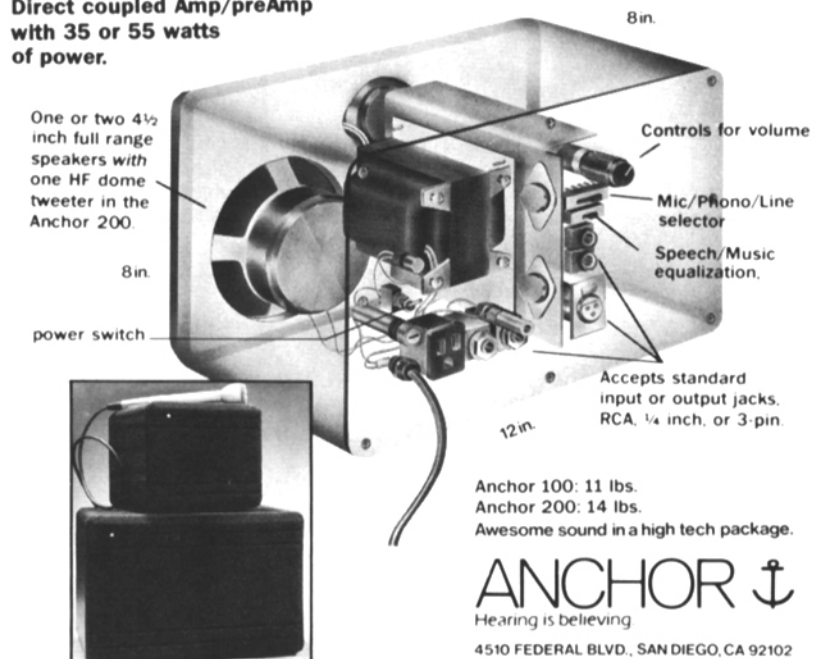


A **35-mm high-speed power rewriter**, designed for heavy-duty commercial use, was announced by Research Technology International 4700 Chase, Lincolnwood, IL 60646. It operates at speeds up to 2000 ft/min in forward or reverse, and has a maximum capacity of 2000-ft reels of 35-mm or 16-mm film. Featured are easy-to-operate foot pedals, solid-state chasses, and direct drive motors.

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