

AUGUST 1987 \$5.00

BME

BROADCAST MANAGEMENT/ENGINEERING



THE SOURCE

1987 Buyers Guide to Broadcast Equipment and Related Services

Every Bit a Studer



Introducing the D820X DASH Format Digital Audio Recorder

The wait is over. Digital has finally entered the Studer era.

For over 35 years, Studer has concentrated exclusively on one goal: designing and manufacturing the world's finest audio production equipment. So when it comes down to what professionals want, Studer delivers.

The D820X is no exception. Listen to it—carefully! You'll hear flawless sonic resolution, thanks to proprietary digital processing circuits and uncompromising analog input/output electronics.

Then do a razor-blade edit. Feel how the controls shuttle tape with effortless precision. Note how the meter overbridge panel provides comprehensive control of all operating modes and level adjustments.

Finally, tilt up the transport to examine construction and craftsmanship. No other digital recorder can match what you'll see.

The D820X is built to last. It's every bit a Studer.

STUDER REVOX

STUDER REVOX AMERICA, INC.
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Offices:
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- Robust Twin-DASH format at 15 ips • 14" reel capacity • PWM auxiliary tracks with configuration for CD subcode mastering data • Fully programmable operating keys • Service diagnostic displays • Internal operating system provides RS232 access to transport and digital audio operations.

Circle 100 on Reader Service Card



CTR124, CTR34 and CTR14 shown

The DYNAMAX® CTR30 Series

Our latest recorder has three decks

The DYNAMAX CTR30 Series of Three Deck Recorder/Reproducers is loaded with innovations. A built-in constant current recorder standard equipment on every unit. A unique trouble free motor that never needs adjustment. Proven CTR10 electronics. Audio switcher and mixer. Three cue tones. Independent removable decks, each equipped with a cleaning switch. And

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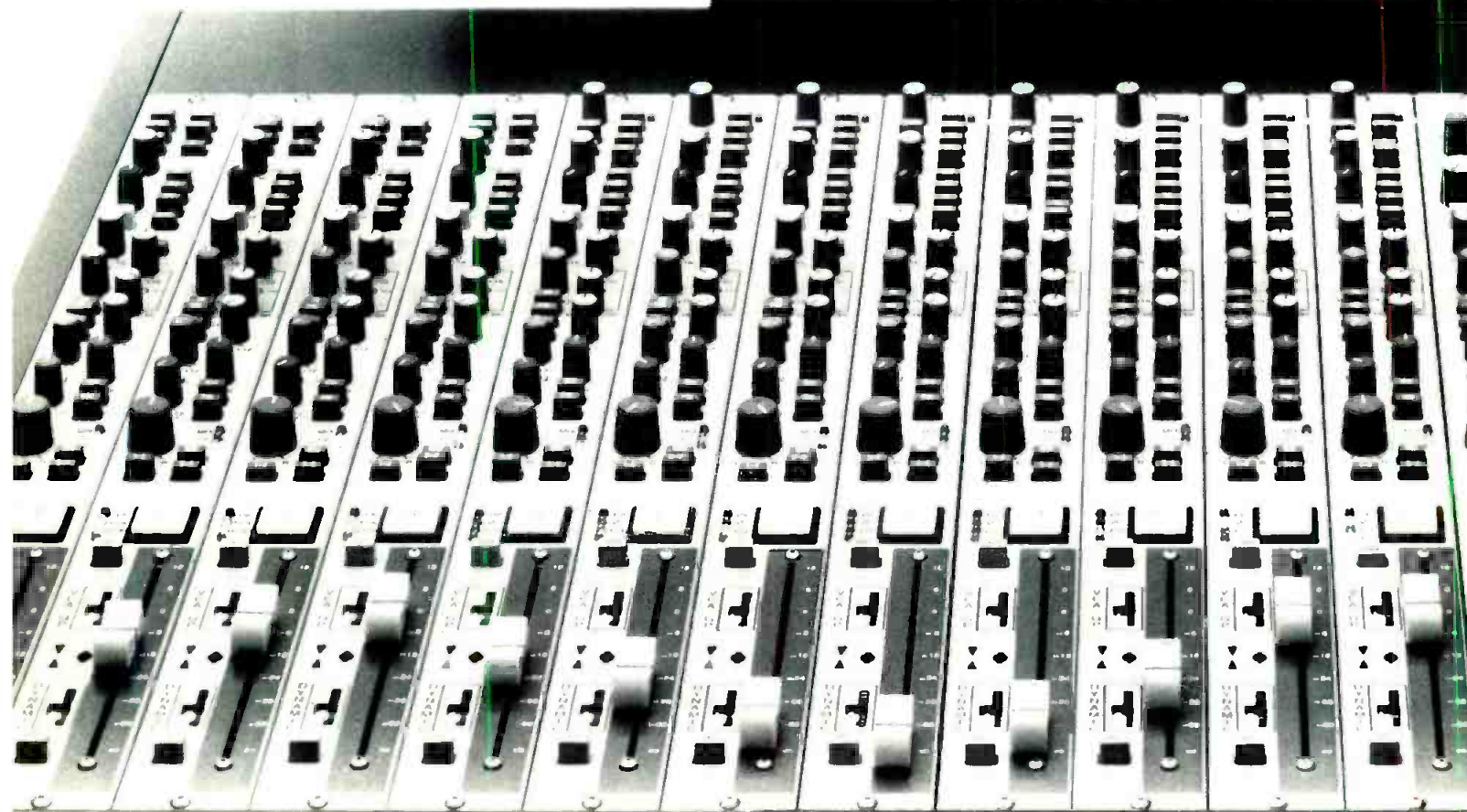
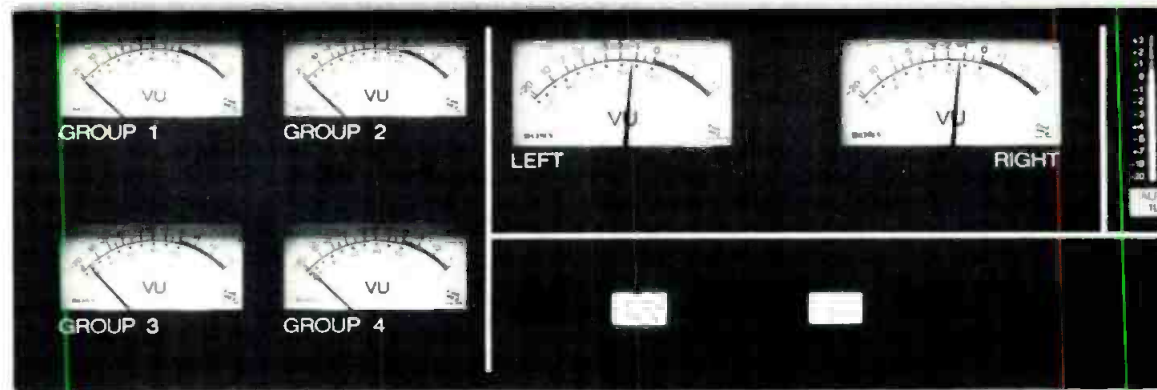
Fidelipac Corporation □ P.O. Box 808 □ Moorestown, NJ 08057 U.S.A. □ 609-235-3900 □ TELEX: 710-897-0254 □ Toll Free 800-HOT TAPE

DYNAMAX products are designed and manufactured in the U.S.A.

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reds of new mixers.

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If you need more flexibility, check under the top panels. Jumper blocks let you tailor lamp indication logic, insertion points, power-up logic and more.

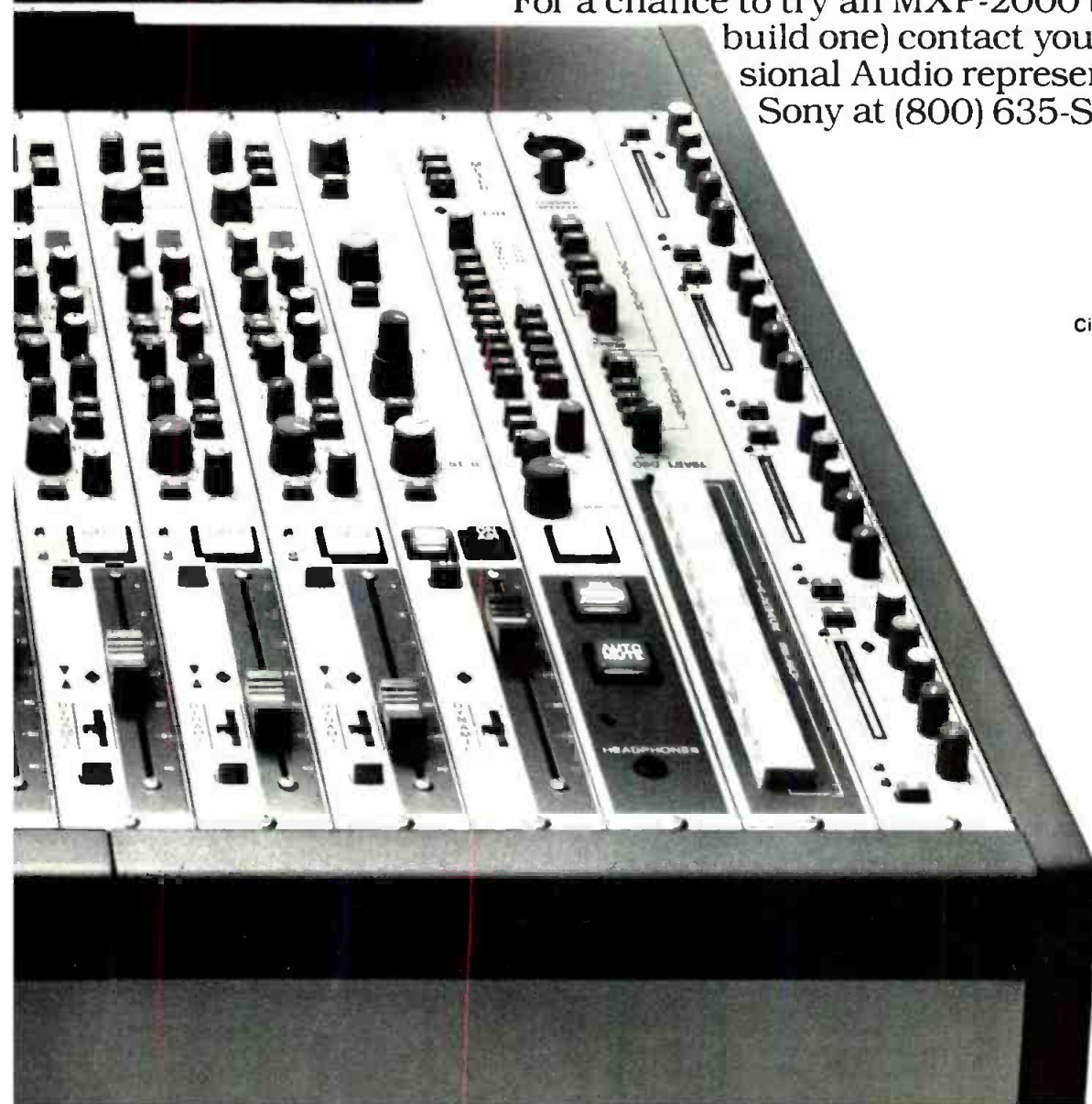
Best of all you can create a mixer that's just as much at home in an editing suite as it is in a control room. Because the MXP-2000 can directly interface to several popular video editors including the new Sony BVE 900/9000 series.

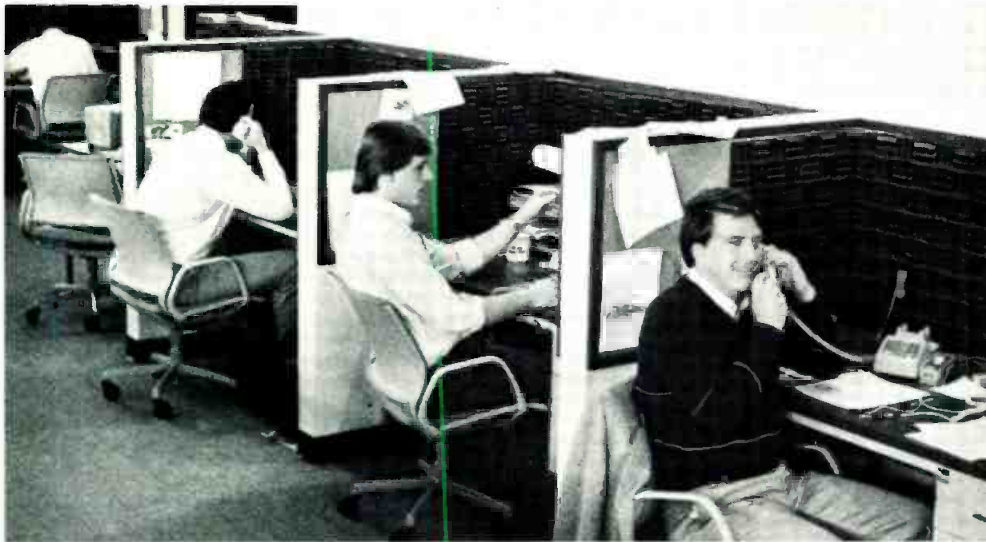
For a chance to try an MXP-2000 (or better yet build one) contact your Sony Professional Audio representative. Or call Sony at (800) 635-SONY.

SONY.

Professional Audio

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Nova

620

... and We Throw in the Sync.



Nova's 620 time base corrector gives you full frame of storage for special effects... a comb filter for top picture quality... a built-in sync generator and more... features that make this lightweight unit a heavyweight performer. And the Nova 620's low price produces a very special effect. Need we say more?
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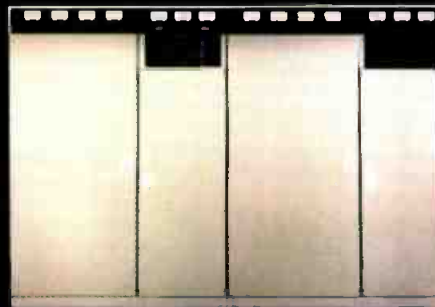
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BY EXPANDING WE'VE NARROWED

Whether you're choosing a monitor for its technological advantage, unique features or low price, you can own the monitor of choice: an Ikegami.

Now Ikegami has expanded its monitor line to include a state-of-the-art Auto Setup Color Monitor.



ASP-15 Auto Setup Probe

Ikegami monitors are available in 3-Series Monochrome, 5-Series Low Cost Monochrome, 9-Series Color

(In-line Gun), 10-Series Color (Delta Gun), 15-Series Color (Auto Setup) and 16-Series Color (Low Cost Professional) Models. What distinguishes Ikegami monitors from others is a commitment to research and development, and continued market analysis to meet the broadcasters' needs. The results speak for themselves. Today, Ikegami is proud of its reputation not only for the finest cameras, but the finest monitors. It's a reputation that we strive to maintain.

Consider the latest advancement in monitor technology: Auto Setup. Originally pioneered for Ikegami cameras and now available in the Ikegami 15-Series Broadcast Color Monitors.

With an optional Auto Setup Probe, the 15-Series is menu driven with data shown

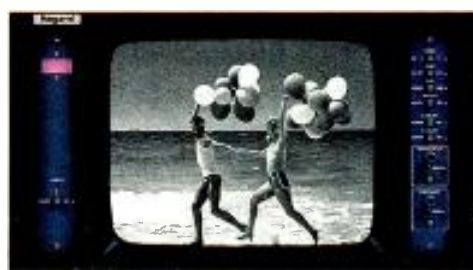
on the CRT. An optional Remocon Box provides for remote control operation. The CRT features a Fine Dot Pitch Shadow Mask for superior resolution, an In-line Self Converging Electron Gun, Controlled Phosphors and a Black Matrix. The 15-Series is available in 14" and 20" and uses a Digital Control System (DCS) to simplify monitor set up. When using the Auto Setup Probe, the following functions can be automatically set, at a reference level, and stored in less than 50 seconds: contrast, brightness, chrome, hue, RGB background and GB gain. Auto Setup is another Ikegami breakthrough.

The Ikegami 16-Series Low Cost Monitors feature an In-line Self Converging Electron Gun, a Black Matrix CRT, a Comb Filter/Trap, and front panel selectable A/B video and RGB video outputs.

Specifically designed for a wide range of production and broadcast applications, the 16-Series is available in 14" and 20" at surprisingly low costs, making the series extremely competitive. The introduction of the 15-Series and 16-Series monitor comes as the 9-Series and



TM 20-15RH Auto Setup Monitor with Probe.



OUR MONITOR LINE YOUR CHOICE.

10-Series continue to enjoy enormous popularity.

The 9-Series Broadcast Color Monitors incorporate In-line Gun technology, High Resolution Shadow Mask CRT's and American Standard Matched Phosphors. In a word, the 9-Series provides superb resolution (700 TV Lines), excellent stability, easy maintenance and low power consumption. Standard features include pulse cross; keyed back porch clamp video amplifier; pre-set contrast, hue, chroma, and brightness controls; on-demand degaussing; aperture correction; remote control capability and more. A 14", 20" and a 10" portable model is available.

The 10-Series Broadcast Color Monitors feature a high resolution (800 TV Lines) Delta Gun CRT, specifically developed for image quality, with nine-sector convergence controls and Feedback System (BFS) that detects and greatly reduces brightness changes due to current deviation in CRT emission. Available in 14" and 20" models, the 10-Series is remarkable for its picture quality. And this quality is equally evident in our 3H-Series Monochrome Monitors.

The 3H-Series of Professional Monochrome Monitors provides the high per-

formance necessary for technical evaluations. 9-inch configurations are available as: bare chassis, cabinet with handle; and for 19-inch rack mounting in an 8¾-inch height for



Sliding panels are featured on all color monitors.

single, single with WFM, single with Vector-scope space, and dual unit uses. 14-inch configurations are for cabinet use or for

19-inch rack mounting in a 10½-inch height.

Our monochrome monitor, the PM 9-5, is a low cost product that combines high reliability and superior picture quality. Features include: dual video inputs, pulse cross, keyed back porch clamp amplifier, and tally light. It's available for various rack-mount configurations.

Ikegami monitors fulfill your most demanding expectations, while narrowing your choice for the very best. For further information, call your Regional Ikegami Office for the dealer near you.

Ikegami

Ikegami Electronics (USA), Inc. 37 Brook Avenue, Maywood, NJ 07607
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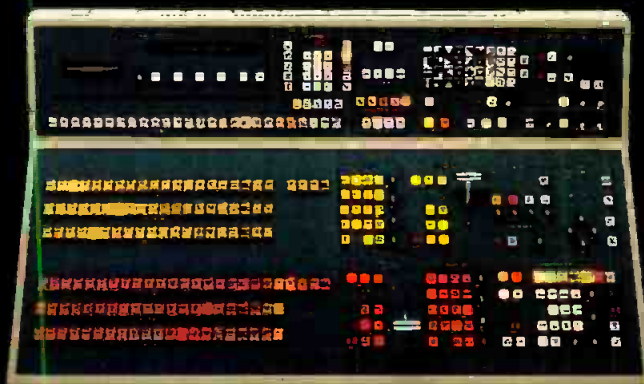
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Introducing the Model 200.

A powerful production switcher
that won't wipe you out.



The new Model 200 Production Switcher.
Two mix-effects, 20 inputs, five powerful keyers, an incredibly innovative wipe system,
nine color matte generators and an E-MEM® Effects Memory System.
More power than you ever thought possible for less than \$40,000.

See the Model 200 at NAB. Booth 3112.

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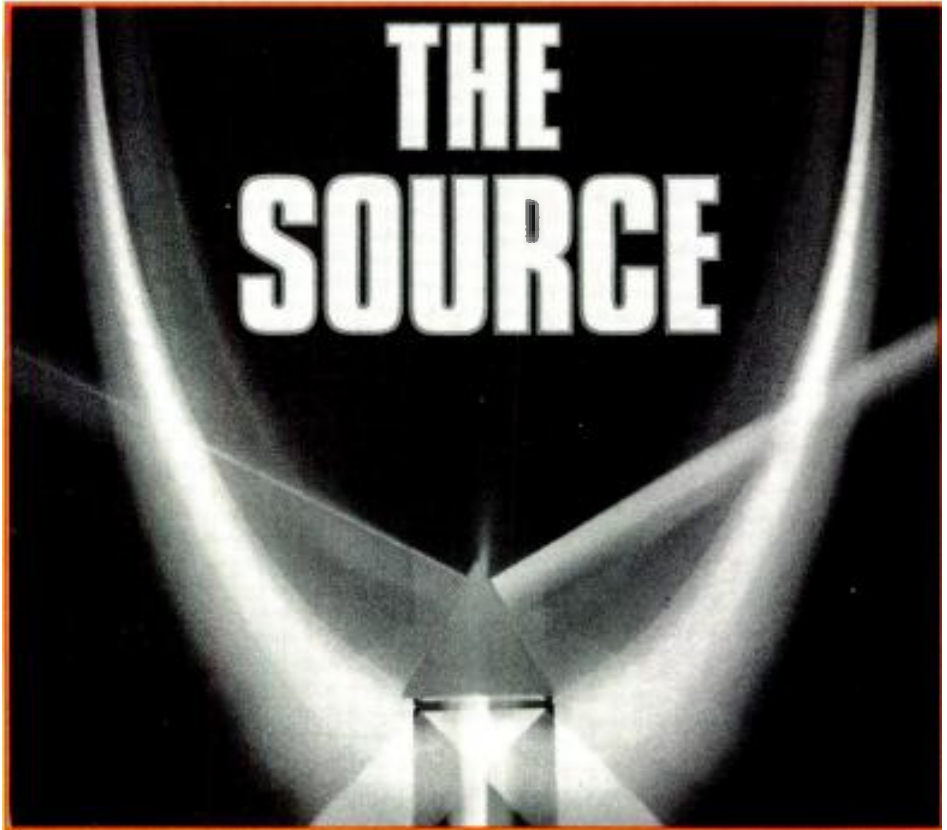
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THE SOURCE

1987 BUYERS GUIDE



AUGUST 1987

VOLUME 23/NUMBER 8

15 Instant Source Locator

To find suppliers of the product or service you want, first turn to the *Instant Source Locator Index* (p. 10) which will guide you through the *Instant Source Locator (ISL)* itself. The over 200 product types are arranged in seven major categories, and you'll find manufacturers listed alphabetically. The numbers after the company name refer to the specific types of products offered.

39 Alphabetical Listing of Manufacturers

Once you've located the names of the manufacturers in the ISL, you can learn more details from the *Alphabetical Listing of Manufacturers*. Address and phone number are followed by a complete listing of the company's product offerings, plus, in some cases, field offices. The "OK" symbol (▲) means the listing is verified. Also, be sure to note the page number of the manufacturer's advertisement for more product information.

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113 Reader Service Card

To get even more information about the products and services that are advertised in *THE SOURCE*, use the *Reader Service Card* on page 113. You can circle the reader service numbers for the information on as many manufacturers as you like. And don't forget—the card is good for an entire year!

INSTANT SOURCE LOCATOR

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- O. Video/film stock shot library
- P. Syndicated radio programming
- Q. Other services

This is what makes the new Sony editing VTR so good.



SP Technology



Plug-in Time Base Corrector



Dolby C Noise Reduction



Front-panel Presets



TBC Remote Control



Expanded Dial Operation



Plug-in Time Code



Status Display

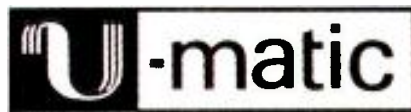


Built-In Character Generator



Self-Diagnostics

This is what makes it great.



It's rare to find an editing VTR that comes with everything you want, yet still goes with everything you have.

Enter the BVU-950.

Not only is it compatible with the entire U-matic line of players and recorders, it can be used with other broadcast equipment as well through an RS-422 interface.

Either way, the picture quality is superior. SP technology means you get 340 lines of

resolution on every original.

It also means you don't have to compromise on copies. With SP, your third generation tapes will look as good as first generation conventional U-matic.

And sound even better.

Because every word is heard through a Dolby* C Noise Reduction system.

The BVU-950 is also the first U-matic editor to offer a plug-in time base corrector and plug-in time code generator.

These easy-to-install cards conserve power as well as space. And there are no cable connections to make.

They also make the VTR simpler to operate. With a single jog dial, you can now display time codes and user bits, set preroll times, and customize operating routines.

You can even record titles using a built-in character generator.

And if there's ever a break



Introducing the BVU-950.

in the action, the BVU-950 can tell you why—using its own self-diagnostic routine.

To learn more about this remarkable addition to the U-matic line, please write to Sony, P.O. Box 6185, Department BVU-2, Union, NJ 07083.

And find out how to get what you want without giving up what you have.

SONY

Professional Video

Circle 110 on Reader Service Card

Hi-Performance Communication



In A Compact, Maneuverable System

Midwest utilizes a heavy-duty structural system to combine a 1.8M dual offset-fed antenna with an extended body one-ton van. The result is a powerful satellite communications system that can maneuver easily in city traffic or on narrow country roads.

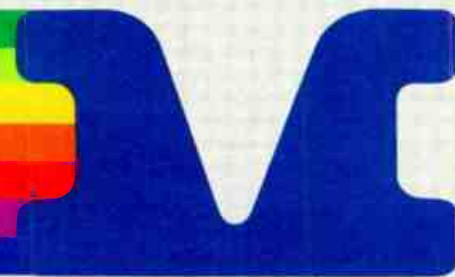
The Vertex 1.8M antenna has a transmit gain of 46.6 dbi and meets the 29-25 log θ FCC 2° spacing curves. The standard RF package includes a single thread 300 watt TWT amplifier, a Ku exciter with two agile audio subcarriers, a Ku receiver and a spectrum monitor. Modular dual 200 watt phase combined amplifiers, providing fail-safe

redundancy are optional, as are several baseband equipment packages. The S-18's spacious, acoustically treated interior provides an optimum work environment. The unit has ample storage space, and there is enough room for the addition of a VTR editing system.

The S-18 is a flexible satellite communications system, ideal for up-linking news or special events, and easily adaptable for voice and data applications.

Contact Midwest for complete information.

The Midwest S-18. Performance and Flexibility. In a compact, maneuverable package.



MIDWEST
Communications Corp.

One Sperti Drive
Edgewood, KY 41017
606-331-8990

Circle 108 on Reader Service Card

INSTANT SOURCE LOCATOR

I. RADIO/AUDIO

1.A. Consoles

TYPES:

- | | |
|----------------------------|----------------------------------|
| (1) Mic mixers (1 output) | (5) Automated consoles |
| (2) Portable consoles | (6) Audio-for-TV consoles |
| (3) Mono studio consoles | (7) Video interface for consoles |
| (4) Stereo studio consoles | |

SUPPLIERS:

ADM (4,6); Allen & Heath (1-6); Amco (2-7); Arnek (2,4,6,7); Arrakis (1-4); ATI (1-4); Audio Kinetics (5,7); Audio Processing (2-5); Audio-Technica (4); Auditronics (4,6); Autogram (3-6); Beyer (1,6); Biamp (1,2,4); Broadcast Audio (2,4,6); Broadcast Electronics (1,3,4); Calrec (2-7); Carvin (3,4); Cetec Ivie (1); Coherent (2); Comrex (2); Conectronics (2,4); Dax (4); Dorough (3,4); ESL (1,2); Fostex (1); Gotham (2); Graham-Patten (5); Hallikainen (3,6); Harris Broadcast (3,4,6); Harrison (2,4-7); HM Electronics (1); Howe Tech (3,4,6); Ikegami (2); Industrial Research (1); Integrated Sound (4); JBL (2,4); JVC (1-4,6,7); Kaitronics (1,2,6); Klark-Teknik (4); Lang (2); Logitek (2-6); LPB (3,4); McCurdy (2,4); McMartin (1); Micro-Trak (1-4,6,7); Mitsubishi (4,6); Neve (4-7); Opamp (3,6,7); Orion (4,6,7); Pacific Recorders (2-4,6); Paltex (4); Portland (2); Precision Design (1,2); Quad Eight (4,5); Quantum Labs (2-4); Radio Systems (3,4,6); Ramko (1-3); Ramsa (2-4); Richmond Sound (1,2,5); Schafer (1-5); Sescor (1); Shure (1,2); Solid State Logic (3-6); Sony Pro Audio (1,4,6); Sound Workshop (3,4,6,7); Soundcraft (4,6); Soundtracs (2,4-6); Spectra Sonics (1-4,6); Studer (2-7); Teac (3,4,6); Telfax (1,2); Temtron (1); Total Audio (2,4); Trident (4,5); TTC (3,4); Ultra Audio (1-4); Urei (2,4); Valley People (1); Ward-Beck (1-4,6); Wheatstone (1,3,4,6); Yamaha (1-4)

1.B. Cart Player/Recorders

TYPES:

- | | |
|-----------------------|-----------------------------|
| (1) Single decks | (4) Time delay decks |
| (2) Dual/triple decks | (5) Phase control matrixing |
| (3) Multi decks | |

SUPPLIERS:

3M Broadcast (1-3); Audi-chord (1,2); Auditronics (1,4); Broadcast Electronics (1-4); Continental Electronic (1); Fidelipac (1-3,5); IGM (3); Intl Tapetronics (1-3); MacKenzie (1-3); Otari (1,5); Pacific Recorders (1,4,5); Radio Systems (1); Ramko (1); Schafer (3); Tape-Athon (1-3); TTC (1,2); Ultra Audio (1-3)

1.C. Audio Cassette Player/Recorders

SUPPLIERS:

Accurate Sound; Nakamichi; SAE; Sharp; Studer; Tape-Athon; Teac; Telectro; Uher

1.D. Open-Reel Decks

TYPES:

- | | |
|-----------------------------|----------------------|
| (1) Portable ATRs | (3) Multitrack ATRs |
| (2) 2-1/4-track studio ATRs | (4) Time delay decks |

SUPPLIERS:

AEG (2,3); AEG Bayly (2,3); Fostex (3); JVC (2,3); Nagra (1); Otari (2,3); Scully (2); Sony Pro Audio (2,4); Soundcraft (3); Studer (1-3); Tape-Athon (1-3); Teac (2,3); Telectro (1); TTC (2,3); Uher (1); United Research (2)

1.E. Digital Audio Recorders

SUPPLIERS:

3M Broadcast; Compusonics; Digital Broadcast; For-A; Intl Tapetronics; JVC; Lexicon; MEI; Mitsubishi; Otari; Sony Pro Audio; Studer

1.F. Tape Duplicators

SUPPLIERS:

Accurate Sound; AEG Bayly; Otari; Teac; Telex

1.G. Magnetic Film Dubbers

SUPPLIERS:

Magna-Tech; Rank Cintel

1.H. Audio Heads/Head Accessories

TYPES:

- | | |
|-----------------------|-------------------------------|
| (1) Replacement heads | (3) Head cleaners, degaussers |
| (2) Rebuilt heads | (4) Alignment, tension gauges |

SUPPLIERS:

Allsop (3); Annis (3); Audi-chord (1); Audio Engineering (3); AVSC (1,3); Broadcast Electronics (3); Computer Graphics Labs (2,3); Fidelipac (4); Fostex (3); Garner (3); Geneva (3,4); Hudson A/V (1-4); Intl Electro-Magnetics (1,2); Marathon (3); Microtran (3); Minneapolis Magnetics (1); Nagra (1); Northern Magnetics (1,2); Nortronics (1); Otari (1); Saki (1,2); Schafer (1); Sony Pro Audio (1); Sprague (1-4); Taber (1,2); Tentel (4); Texwipe (3); Ultra Audio (4); VIF Intl (3,4)

1.I. Audio Tape/Tape Accessories

TYPES:

- | | |
|-------------------------|-------------------------------------|
| (1) Open-reel tape | (6) Empty reels, carts |
| (2) Carts | (7) Tape loaders, timers, rewinders |
| (3) Cassettes | (8) Tape cleaners, evaluators |
| (4) Sprocketed mag film | (9) Tape erasers, degaussers |
| (5) Test tapes, leaders | |

SUPPLIERS:

3M Broadcast (2); 3M Magnetic (1-4,6); Agfa (1,3); Allsop (8); Ampex MTD (1); Annis (9); Audico (7); Audio Engineering (8); Audiolab (9); AVSC (3,5,8,9); BASF (1,3,5); Broadcast Electronics (7); Capitol Magnetic (1,2); Christie (9); Comprehensive Video (9); Fidelipac (2,5,6,9); Fostex (1,3); Fuji Photo (3); Garner (9); Geneva (9); Hudson A/V (3,6); Intl Tapetronics (2,8,9); JVC (3); King Instrument (7); Magnetic Reference (5); Marathon (2); Maxell (1,3); Microtran (9); Nakamichi (3); Neumade (2,4,6); Otari (7); Peak Audio (7); Plastic Reel (6); Polyline (2-6,9); RKO Tape (3); Smith-Victor (3); Sony Pro Audio (1); Sony Pro Tape (1,3,6); Sound Tech (5); Soundscribe (7,9); Sprague (9); Steenbeck (4); Taber (3,5,9); VIF Intl (5); Western Intl (2); Wide Range (9)

1.J. Audio Editors/Synchronizers

TYPES:

- | | |
|------------------------------|-----------------------------------|
| (1) Splicing blocks, tape | (3) SMPTE time code synchronizers |
| (2) Electronic audio editors | (4) Editors for digital audio |

AGFA FORUM



welcome

Agfa is proud to announce the launching of the **AGFA FORUM AWARD** that is to be given to those individuals whose work has distinguished them in the audio and video industry. The award was conceived at the first meeting of the international **AGFA FORUM** in Cologne, West Germany, last year. The historic meeting heralded AGFA's bold move toward fostering international dialogue in the audio/video sphere. The **AGFA FORUM AWARD** is the first step in what will be a continuing series of honorariums, conferences and exchanges of professional interest. It is AGFA's philosophy that people working together in a spirit of cooperation, have made our industry and the advances of modern technology possible. And for this reason, the **AGFA FORUM** agenda includes the **\$ 15,000 FORUM AWARD**, to be presented this year for outstanding work in the audio sector, at AGFA international headquarters in West Germany. All nominations must be received no later than October 9, 1987. For nomination forms and more information, contact Agfa-Gevaert Inc. · National Secretariat AGFA FORUM, 100 Challenger Road, Ridgefield Park, N.J. 07660 or Agfa-Gevaert AG International Secretariat AGFA FORUM · Kistlerhofstr. 75 · D-8000 Munich 70 **AGFA**  West Germany. **AUDIO VIDEO PROFESSIONAL**



SUPPLIERS:

Adams-Smith (2,3); Allen & Heath (3); Audio Kinet cs (2,3); Cipher Digital (2-4); CMX (2); Compusonics (4); Editron (3); Evertz (3); Fidelipac (1); Fostex (3); JVC (2-4); Lexicon (4); Magna-Tech (3); Marathon (1); McCurdy (2); Otari (3); Quan (2,4); Sony Pro Audio (3,4); Sprague (1)

1.K. Disc Playing Equipment

TYPES:

- | | |
|--------------------|---------------------------|
| (1) CD/DAD players | (4) Phono cartridges |
| (2) Turntables | (5) Complete consoles |
| (3) Pickup arms | (6) Record cleaning, care |

SUPPLIERS:

Acoustic Research (2); AEG Bayly (2); Allied Broadcast (1); Audio-Technica (4); Broadcast Electronics (2); Gotham (2-4); Integrated Sound (2); LPB (2,3); McMartin (5); Micro-Trak (3); Russco (2,3); SAE (1); Schafer (1-3); Shure (1,4); Sony Pro Audio (1); Stanton Magnetics (4); Studer (1,2); Teac (1); Teledyne Acoustic (2); Texscan (1)

1.L. Program Automation

TYPES:

- | | |
|-----------------------------------|---|
| (1) Relay sequencers | (5) Complete program automation systems |
| (2) Time insertion sequencers | (6) Automatic time/weather announcers |
| (3) Computer controllers | |
| (4) Automatic satellite switchers | |

SUPPLIERS:

Automated Broadcast (5); Broadcast Electronics (3-5); IGM (3-5); MEI (3-5); Monroe Electronics (2,4); Richmond Sound (3); Roh (6); Schafer (1-5); Sentry (5); Systemation (5,6); Tape-Athon (5); Ultra Audio (1-3)

1.M. Radio Business/Newsroom Automation

TYPES:

- | | |
|----------------------------------|----------------------------------|
| (1) Business automation software | (2) Business automation hardware |
| (3) Radio newsroom computers | |

SUPPLIERS:

Applelog (1); Ariste (1); Automated Broadcast (1,2); Basys (3); CBSI (1); Columbine (1-3); Computer Business Systems (1,2); Computer Concepts (1,2); Cross Information (1); Data Communications Corp (1-3); Dynatech Newstar (3); Ficon (1); Generic Computer (1); Intl Microwave (2); Jefferson-Pilot (1-3); Kaman Sciences (1,2); Management (1); Media Computing (3); Nordic Software (1,2); Radio Computing (1); Register Data (1,2); RJW (1); Summit Software (1); Systemation (1,2); Terminal Systems (3); Twentier (1-3); Vidcom Intl (1,2)

1.N. Audio Processing, Noise Reduction

TYPES:

- | | |
|----------------------------|----------------------------|
| (1) ALC, AGC amps | (5) Graphic equalizers |
| (2) AM compressor/limiters | (6) Audio/video sync delay |
| (3) FM compressor/limiters | (7) Audio noise reduction |
| (4) Parametric equalizers | |

SUPPLIERS:

3M Broadcast (5); AEG Bayly (7); ANT Telecomm (7); Aphex (2-4); Applied Research (5); Ashly Audio (2-5); ATI (1-4); Audio Processing (4,5); Audio Technology (7); Beyer (4,5); Biamp (1,4,5); Bogen Comm (5); Broadcast Audio (1-3); Broadcast Electronics (1-3); Cetec Ivie (2,3,5); Circuit Research (1-3,7); Conectronics (4); Dax (5); dbx (1-4,7); Delta (1,2); Dolby (7); Dorrrough (2,3); Dynatech Newstar (1,2); Elcom Bauer (1-3); Electro-Voice (5); Eventide (6); Fostex (5); Gentner Engineering (5); Graham-Patten (5); Harris Broadcast (1,2,3,7); Industrial Research (4); Inovonics (1-3); Integrated Sound (5); JBL (2-5); Klark-Teknik (4,5); Leaming

(3); Lexicon (6); LPB (2,3); Marti (1-3); McMartin (1-3); Meyer Sound (4); Modular Audio (2,5); Monroe Electronics (1); Moseley (2,3); Orban (1-5); Pacific Recorders (7); Protech (1,2); Ramko (2); Richmond Sound (1,4,5); Roh (1); SAE (4); Schafer (1-5); SCV (3-5); Shure (2,3); Sony Pro Audio (4); Spectra Sonics (1-3,5); Symetrix (2-4); Teac (4,5); Tectan (7); Tektronix (6); Texar (1-3,7); Urei (2-5); Valley People (1-4,7); Ward-Beck (4); Wheatstone (2-5); White Instr (5); Yamaha (5)

1.O. Audio Effects

TYPES:

- | | |
|--------------------------------|------------------------|
| (1) Digital efx, reverb | (4) Analog efx, reverb |
| (2) Digital delay | (5) Music synthesizers |
| (3) Time compression/expansion | |

SUPPLIERS:

AKG (1,2,4); Applied Research (1,2); Audio/Digital (2); Barcus-Berry (1); Biamp (4); Dynatech Newstar (3); Eventide (1-3); Fairlight (5); Fostex (1-3); Gotham (1,2); IMS (2); Industrial Research (2); Integrated Sound (3); JBL (2); Klark-Teknik (1,2); Lexicon (1-3); Marshall (1-3); New England Digital (5); Orban (4); SCV (4); Sony Pro Audio (1); Spectra Sonics (4); Studio Technologies (5); Urei (2); Ward-Beck (4); Waveframe (5); Yamaha (1,2,5)

1.P. Audio Monitors

TYPES:

- | | |
|--------------|----------------|
| (1) Speakers | (2) Headphones |
|--------------|----------------|

SUPPLIERS:

3M Broadcast (1,2); Acoustic Research (1); ADM (2); AKG (2); Altec Lansing (1); Anchor (1); Atlas (1); Audio-Technica (2); Audisar (1); Auernheimer (1); Auratone (1); BES (1); Beyer (2); BGW (1); BHP (3,4); Bogen Comm (1); Carvin (1); Cetec Gauss (1); Choice Electronics (1); Circuit Development (2); Electro-Voice (1); Farrtronics (2); Fostex (1,2); Integrated Sound (1); JBL (1); Klark-Teknik (1); Koss (2); Logitek (1); Merlin (1); Meyer Sound (1); Mikrolab (1); Nakamichi (2); R-Columbia (2); Radio Systems (2); Ramsa (1); Roh (1,2); Schafer (1); Sennheiser (2); Setcom (2); Shure (2); Sony Pro Audio (1); Soundolier (1); Spectra Sonics (1); Stanton Magnetics (2); Studer (1); Tannoy (1); Telectro (1); Teledyne Acoustic (1); Television Equip/TEA (2); Urei (1); Vidaire (2); Westlake (1); Yamaha (1)

1.Q. Intercom Systems

TYPES:

- | | |
|---------------|--------|
| (1) Hardwired | (2) RF |
|---------------|--------|

SUPPLIERS:

3M Broadcast (1,2); Anchor (1); Atlas (1); Bogen Comm (1); Cetec Vega (2); Circuit Development (2); Clark (David) (1); Clear-Com (1,2); Comrex (2); Comtek (2); Farrtronics (1); Gentner Engineering (1); HM Electronics (1,2); McCurdy (1); McMartin (2); Mobile-Cam (1); Motorola C&E (2); Nady (2); Pacific Recorders (1); Pesa (1); R-Columbia (1,2); Roh (1,2); Samson (2); Setcom (1); Swintek (2); Technical Projects (1); Telectro (1); Telex (1,2); Theatre Service (1); Vidaire (2); Ward-Beck (1)

1.R. Microphones

TYPES:

- | | |
|------------------------|---------------------------------|
| (1) Dynamic | (6) Lavalier |
| (2) Electret/condenser | (7) Shotgun |
| (3) Ribbon | (8) Modular, capsule systems |
| (4) PZM | (9) Stereo mics |
| (5) RF | (10) Mic stands, booms, dollies |

SUPPLIERS:

Accurate Sound (10); ACO (2,9,10); AKG (1,2,4-9); Allied Broadcast (10); Anchor (1); Astatic (1,2,4); Atlas (10); Audio-Technica (1,2,6-8); Beyer (1-10); Bogen Comm (1); Bruel & Kjaer (1,2,9); Calrec (2,8,9); Carvin (1,2); Cetec Vega (5); Comtek (5); Crown (2,4,6); Edcor (5); Electro-Voice (1,2,6,7); Fostex (3,9); Gotham

(2,7,9); Heitz (10); HM Electronics (1,2,5,6); Lectrosonics (5); LTM (10); Micron Audio (2,5,6,10); Nady (5); R-Columbia (1,2,5,6); Ramsa (2); RF Technology (5); Sanken (2); Sennheiser (1,2,5-8); Shure (1,2,4-8); Sony Pro Audio (2,6,7); Swintek (5); Telex (1,2,6,9,10); Ultimate Support (10); Vidaire (1,2); Yamaha (1)

1.S. Audio Amplifiers

TYPES:

- | | |
|---------------|------------------------|
| (1) Preamps | (3) Monitor/power amps |
| (2) Line amps | (4) Amp power supplies |

SUPPLIERS:

ACO (1); Advanced Micro (2); Allied Broadcast (1); Ashly Audio (3); ATI (1-4); Audio Technology (2); Audisar (2,3); Auditronics (1,2); BGW (3); Biamp (3); Bogen Comm (1-3); Bonneville Media (2); Broadcast Audio (1-3); Broadcast Electronics (1-3); Bryston (1-3); Carvin (4); Cetec Ivie (3); Circuit Development (2,3); Conex (3); Crown (1,3); Datatek (1,3); Dax (3); Digimax (1); Edcor (1-3); Fostex (1,4); Gentner Engineering (1); Gotham (1); Harris Broadcast (1-4); Howe Tech (3); Industrial Research (3); Inovonics (1); International Nuclear (1,2); ITI Electronics (1-4); JBL (1,3); Jensen Transformers (1,3,4); Lectrosonics (3); Lenco (3); Logitek (1-3); Marti (3); McCurdy (1-4); McMartin (1-3); Micro-Trak (1-4); Mikrolab (2,3); Modular Audio (1-4); Monroe Electronics (2,3); Opamp (1-4); Pacific Recorders (1); Peak Audio (1); Powertronix (1,3,4); Protech (1-4); Radio Systems (1-3); Ramko (3); Ramsa (3); Richmond Sound (1-4); Roh (1-4); RTS (1); Russco (1-3); SAE (1,3); Schafer (1-3); Scientific Systems (1-3); SCV (1,2,4); Sescom (1-3); Shure (1,2); Spectra Sonics (1-4); Stanton Magnetics (1); Straight Wire (1,2,4); Studer (3); Symetrix (1,3); Tannoy (3); Tape-Athon (1-4); United Research (1,3); Urei (1,3); Valley People (2); VIF Intl (3); Ward-Beck (1-4); Yamaha (3)

1.T. Distribution/Interface Equipment

TYPES:

- | | |
|------------------------------------|----------------------------------|
| (1) Audio DAs | (4) Telco interface equipment |
| (2) Audio routing switchers | (5) Audio multi boxes, splitters |
| (3) Audio patch panels, jackfields | |

SUPPLIERS:

ADC (3); ADM (1); Advanced Micro (1); AEG Bayly (4); AF Assoc (3); Allen & Heath (1,2); Allied Broadcast (1); AMP Products (4); Arrakis (2); ATI (1,2); Audio Accessories (3); Audisar (1,5); Auditronics (1-5); BBL (4); Bonneville Media (1); Broadcast Audio (1); Broadcast Electronics (1,4); BSM (1,2); BTS (1,2); Canare (3,5); Central Dynamics (1,2); Channelmatic (1); Coastcom (4); Comrex (4); Conectronics (3); Conex (2); Datatek (1,2,4); dbx (1); Di-Tech (1,2); Dynair (1); Dynatech Data (3,4); ESE (1,4); Gentner Engineering (1-4); Gotham (5); Graham-Patten (1,4); Grass Valley (1,2); Hedco (1,2); IMS (1,2); Intergroup (1); International Nuclear (1,2); Intl Microwave (4); Intl Tapetronics (2,4); ITI Electronics (3,4); JVC (2); Leitch (1,2); Lenco (1); Logitek (1); LPB (1); McCurdy (1-3); Micro-Trak (1); Mobile-Cam (1); Modular Audio (1,2); Modulation Sciences (1); Moseley (2); Multidyne (1); Mycomp (1); Omicron (1,2); Opamp (1,2,5); Pacific Recorders (1-3); Pesa (1); Portland (1); Protech (1,2,4); Radio Systems (1,3); Ramko (1,2); Richmond Sound (1,2,5); Roh (1,2,4,5); RTS (1); Russco (1,4); Schafer (1); Scientific Systems (1); SCV (4,5); Sescom (1,3,5); Shintron (1,2); Shure (1); Sierra Video (1); Sound Tech (2); Spectra Sonics (1); Straight Wire (1); Studer (4); Symetrix (3); Systemation (4); Telemet (1); Telfax (1,2,4); Telnox (4); Utah Scientific (1,2); Vamco (1); Versatech (1,2); Video Accessory (1); Videotek (1); Vital (1); Ward-Beck (1-3); Whirlwind (3,5)

1.U. Other Radio/Audio Equipment

TYPES:

- | | |
|------------------------|---------------------------------|
| (1) Rotary attenuators | (6) Video monitor displays |
| (2) Slide attenuators | (7) Soundproofing materials |
| (3) VU meters | (8) EBS two-tone systems |
| (4) PPM meters | (9) Other radio/audio equipment |
| (5) LED displays | |

SUPPLIERS:

3M Broadcast (9); ACO (9); ADM (9); Advanced Micro (8); AEG Bayly (3); Allied Broadcast (9); Alpha Audio (9); Anchor (9); Aphex (9); Ariste (9); ATI (3-5); Audio Accessories (9); Audio Processing (3,4); Audio Technology (3-5); Audio/Digital (9); Auditronics (5); B&B (4,5); BC Engineering (9); Beyer (9); Broadcast Cartridge (9); Bryston (9); Catel (9); Circuit Development (9); Coherent (9); Columbine (9); Comrex (9); Conex (9); Cue Paging (9); Dax (9); Digimax (5); Dorough (5); Duncan Electronics (2); ECS (9); EEV (9); Emergency Alert (8); ESE (3-5); ESL (4); Eventide (9); Fidelipac (9); Gorman (8,9); Graham-Patten (3,4,9); Graphic Express (9); Hannay (9); Howe Tech (9); Hudson A/V (9); Inovonics (6); International Nuclear (8); JVC (6); Kalamusic (9); Kay Elemetrics (1); Kintek (9); Klark-Teknik (9); LTM (9); McCurdy (3-5); McMartin (8); Mikrolab (3); Mobile-Cam (9); Modular Audio (3-5); Modulation Sciences (9); Monroe Electronics (9); Motorola C&E (3,5); Multidyne (9); Omnimount (9); Penny & Giles (1,2,9); Potomac (9); Radio Systems (5); Real World Tech (3,4,6); RJW (9); Roh (9); RPG (9); Scully (9); Selco (3,4,9); Shalloco (1,2); Sims (9); Spectra Sonics (1-3); Studio Technologies (9); TFT (8); Trompeter (9); TTC (1,2); Videotek (9); Ward-Beck (3,4); White Instr (9)

II. VIDEO/IMAGING

2.A. Cameras

TYPES:

- | | |
|-------------------------------|---------------------------|
| (1) Studio (30mm tubes) | (6) CCD/MOS color cameras |
| (2) Field (25mm tubes) | (7) Recorder/cameras |
| (3) ENG (18mm tubes) | (8) HDTV cameras |
| (4) Lightweight (13mm tubes) | (9) Monochrome cameras |
| (5) Single-tube color cameras | (10) Cine cameras |

SUPPLIERS:

Ampex AVSD (3,6); Arriflex (10); BTS (1-7); Cinema Products (10); Comtrex (9); Dunn (10); EEV (9); GBC Closed Circuit (9); Hitachi (1-3,6,8,9); Ikegami (1-10); Javelin (6,9); JVC (1-7,9); Mitchell (10); MP Video (5,6); NEC America (3,6); Nisus Video (5,6); PAG (3); Panasonic Broadcast (3,6); Panavision (10); RCA New Products (6,9); Redlake (10); Sharp (1-3); Sony Broadcast (1,2,5-8); Sony Pro Video (2,3); Temtron (5); Thomson Video (1-4,6,7,9); Toshiba (1-3); Zellan (10)

2.B. Camera Components

TYPES:

- | | |
|----------------------|-------------------------|
| (1) Lenses | (4) Pickup tubes |
| (2) Periscope lenses | (5) Standalone CCUs |
| (3) Filters | (6) Lens remote control |

SUPPLIERS:

Amperex (4); Angenieux (1,6); Arriflex (1); Belden (3); Calvert (4); Canon (1); Century Precision (1-3); Cinema Products (1,6); CMC Ltd. (3,6,7); Dunn (7); EEV (4); Elicon (7); Fujinon (1,6); J-Lab (5); Panasonic Broadcast (5); RCA New Products (4); Redlake (1); Schneider (1,3,6); Schwem (1); Skyworks (7); Smith (Warren) (2); Sony Broadcast (2-4,10); Tamron (1); Telemetrics (5-7); Temtron (4); Thomson Tubes (4); Thor (4); Tiffen (3); TSM (6,7)

2.C. VTRs, VCRs

TYPES:

- | | |
|----------------|------------------------------|
| (1) One-inch B | (6) Beta |
| (2) One-inch C | (7) VHS |
| (3) ¾-inch U | (8) Quarter-inch |
| (4) Betacam | (9) MERPS multicassette deck |
| (5) M-format | |

SUPPLIERS:

AF Assoc (1,2); Alpha Video (3); Ampex AVSD (2,4,9); BTS (1,4); Channelmatic (10); Eigen (3); Hitachi (2); Hubbard (10); JVC (3,5,7); Lake (10); Merlin (2); Nagra (2); Odetics (10); Panasonic Broadcast (5,10); Sharp (7); Sony Pro Video (3,4,6); Thomson Video (2-4,8)

ONE LESS ALLIGATOR

The Broadcast Engineer works with time-line responsibilities few of us will ever experience. He knows that equipment problems can wreck production schedules.

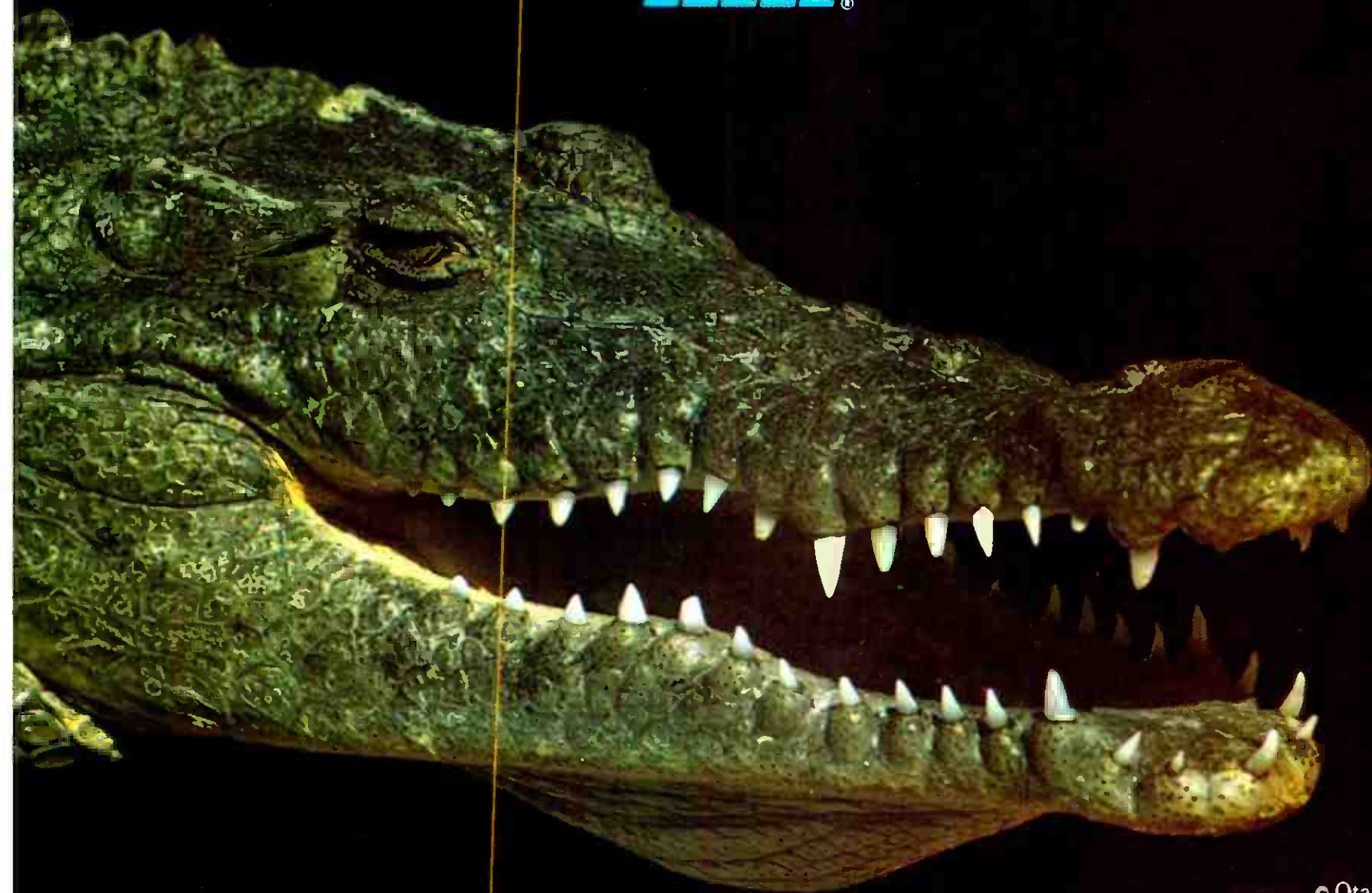
That's why the Otari BII is the most widely used audio machine for broadcast mix-down, news editing and production.



Three speed operation, front panel record calibrations, a microprocessor controlled tape counter with LED display, and variable speed control, coupled with "bulletproof" reliability and high level product support all add up to one less alligator snapping at your heels. From Otari: The Technology You Can Trust.

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OTARI®



2.D. VTR Heads/VTR Accessories

TYPES:

- | | |
|-------------------------------|----------------------------------|
| (1) Replacement heads | (4) Alignment, tension gauges |
| (2) Rebuilt heads | (5) VTR refurbishing, rebuilding |
| (3) Head cleaners, degaussers | |

SUPPLIERS:

Allsop (3); Ampex AVSD (1); AVSC (2,3); CMC Tech (1-3); Garner (3); Geneva (3,4); Hitachi (1); Merlin (5); Panasonic Broadcast (1-4); Pinzone (2); Saki (1); Spin Physics (1,2); Sprague (1-4); Tentel (4); Texwipe (3)

2.E. Videotape, Film/Tape Accessories

TYPES:

- | | |
|-------------------------|-------------------------------------|
| (1) Two-inch tape | (6) Empty reels, carts, cases |
| (2) One-inch tape | (7) Tape loaders, timers, rewinders |
| (3) ¾-inch cassettes | (8) Tape cleaners, evaluators |
| (4) Half-inch cassettes | (9) Tape erasers, degaussers |
| (5) Film stock | (10) Film cleaners |

SUPPLIERS:

3M Magnetic (1-5,7); Agfa (3,4); Allsop (9); American Magnetic (4); Ampex AVSD (1-5); Ampex MTD (1-5,7); Annis (10); Audico (8); Audiolab (10); Bal (William) (7); BASF (4); Calico (1-3,7); Christie (10); CMC Ltd. (4); Comprehensive Video (10); Eastman Kodak (2-4,6); Elcon Assoc (9); Fuji Photo (2-4); Garner (10); Geneva (10); Hudson AV (3,4); JVC (3,4); Keystone (4,7); King Instrument (8,9); Lipsner-Smith (11); Maxell (2-4); Maxima (1-4,7); Merlin (8); Microtran (10); Neumade (7,8,11); NOVA (9); Otari (8); Panasonic Broadcast (4); Plastic Reel (7); Polaroid (4); Polyline (2-4); Re-Play (8); Recortec (8-10); RTI (7-11); Smith-Victor (4); Sonar Radio (10); Sony Pro Tape (2-5,7,9); Sprague (10,11); Studio Film & Tape (2-4,6); Television Equip/TEA (9); Video Magnetics (3,4); Wide Range (10)

2.F. Still/Slow Motion Recorders, Animation

TYPES:

- | | |
|----------------------------|------------------------------------|
| (1) Digital still store | (5) Video animation controllers |
| (2) Magnetic disk recorder | (6) Animation stand motion control |
| (3) Optical disk recorder | |
| (4) VTR slo-mo systems | |

SUPPLIERS:

Abekas (1); Amherst (5); Ampex AVSD (1); Apert-Herzog (1); Dunn (5,6); Elicon (6); Forox (6); Genigraphics (1,5); Harris Video (1); Hitachi (3); Interand (1); JVC (4-6); Kavouras (1,5); Leitch (1); Oktel (1,2); Optical Disc (3); Pinnacle (1,5); Quantel (1); Rank Cintel (1); Shintron (1); Smith (Warren) (6); Sony Broadcast (4); Sony Information (1,3); Symbolics (5); Texscan (1); Thomson Video (1,5); Videomedia (5); Woolley (5)

2.G. Telecine/Film Equipment

TYPES:

- | | |
|----------------------------------|------------------------------|
| (1) Solid state telecine systems | (5) Optical multiplexer |
| (2) Telecine cameras | (6) Telecine color corrector |
| (3) 16/35mm telecine projector | (7) Telecine control systems |
| (4) 35mm slide projector | |

SUPPLIERS:

AF Assoc (1); Apert-Herzog (7); Broadcast Video Sys (6); BTS (6,7); Cavendish (1); CMC Ltd. (1,3-6); Corporate Communications (6,7); Hubbard (1,2); Ikegami (2,5); Jem-Fab (7); Kalart (3); Magnasync/Moviola (7); Magni (6); Multi-track Magnetics (1,3); Neumade (3); Nytone Electronics (5,6); Photo & Video Electronics (4); Quad Eight (3,4); Radmar (3); Rangertone (1-5,7); Rank Cintel (1,2,6,7); Sauppe (4); Sharp (2); Thomson Video (4); Zei-Mark (3-5,7)

2.H. Electronic Art/Graphics

TYPES:

- | | |
|---|--|
| (1) Titlers, subtitles | (6) Bit pad digitizers |
| (2) Character generator/graphics system | (7) Camera/VTR digitizers |
| (3) Digital art/paint system | (8) High-res screen cameras |
| (4) 3D modeling and manipulation | (9) Teletext/closed captioning terminals |
| (5) "Draw on screen" systems | (10) Film recorders |

SUPPLIERS:

3M Broadcast (1-6); Advanced Image (8,10); Alias (3,4); Amherst (4); Ampex AVSD (3,4); Aston (2); Aurora (2-5); Block River (2); BTS (2,3,4,7); Chyron (2,3); Colorgraphics (2,3); Computer Prompting (1,2); Cubicomp (3,4); Digital Techniques; Dubner (1-3,5-7); Dunn (10); Electrohome (9); Elicon (4); Evertz (1,2); Fairlight (2,3,6); For-A (2); Forox (10); Genigraphics (3,4); Grass Valley (2-4,6,7); Harris Video (2); Inovion (3); Interand (2,5); ITI Graphics (3,4); JVC (1,2); Knox Video (2); Magnasync/Moviola (10); Media Computing (2); Mindset (1,2); MPB (2); Multi-track Magnetics (10); Mycro-tek (1,2); Pinnacle (3,4); Polaroid (10); Quanta (1-4); Quantel (1,3,4); Rank Cintel (3); Smith (Warren) (1); Sony Information (6,7); Steenbeck (10); Symbolics (3,4,7); Symtec (1-3,7); Thomson Video (2,3); Vertigo (4); Video Aids (2); Video Assoc (5); Video Data (1,2); Visage (3); Wavefront (3,4); Xiphias (3)

2.I. Weather Systems

TYPES:

- | | |
|-------------------------------|-------------------------------------|
| (1) Weather graphics displays | (5) Weather-based art/paint systems |
| (2) Satellite displays | |
| (3) Weather radar displays | (6) Lightning detection and display |
| (4) Weather symbol inserters | |

SUPPLIERS:

3M Stormscope (6); Accu-Weather (1-3,5); Advanced Designs (1-3,6); Alden (1-3); Audichron (4); Aurora (1); BTS (1,5); Colorgraphics (1,5); Dubner (1); ESD (1-6); ISS (2); ITI Graphics (1,5); Kavouras (1-6); Oktel (3); R*Scan (1-4,6); Rank Cintel (1); Texas Electronics (1); Texscan (1); Video Data (4); Weather Services (1-3); Weatherbank (1,3,6)

2.J. Production Switchers

TYPES:

- | | |
|----------------------------------|-------------------------------|
| (1) Portable units | (3) Large, automated systems |
| (2) Compact, studio/mobile units | (4) Post-production switchers |
| | (5) Component switchers |

SUPPLIERS:

Abekas (1,2,4,5); ALTA (1,4); Ampex AVSD (2,4); Beaveronics (2); BTS (2,3); Central Dynamics (2-4); Crosspoint Latch (1-5); Digital Services Corp (4); Echolab (2-4); EECO (2); Grass Valley (2-5); Ikegami (2,5); Intergroup (1-4); JVC (1,2,4,5); Kaitronics (1,2,5); Lang Video (1); Listec (1); Matrix Systems (3); McCurdy (1-3); Monroe Electronics (5); Pesa (2); Quickset (5); Ross Video (1-4); Shintron (2,4,5); Sony Pro Video (1,2,4); Thomson Video (2-5); Toshiba (2); Versatech (5); Viscount (2); Vital (1,2)

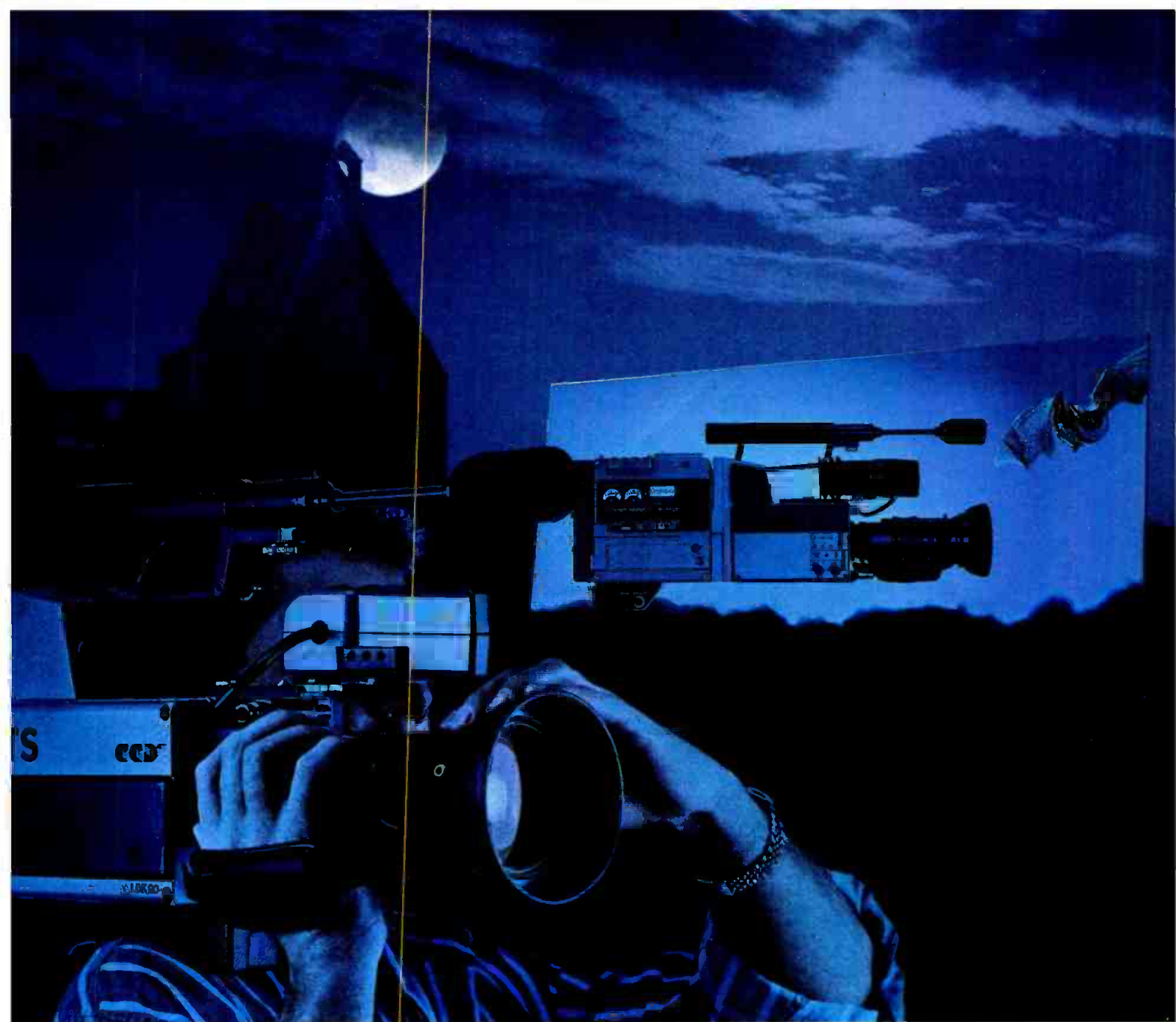
2.K. Special Effects

TYPES:

- | | |
|----------------------------|--------------------------|
| (1) Digital efx generators | (6) Encoded chromakeyers |
| (2) Compressor/positioners | (7) Title keyers |
| (3) Standalone analog efx | (8) Downstream keyers |
| (4) Colorizers | (9) Non-additive keyers |
| (5) RGB chromakeyers | |

SUPPLIERS:

Abekas (1); ALTA (1,4); Ampex AVSD (1); Beaveronics (5,7,8); Block River (7); Broadcast Video Sys (5,7-9); Central Dynamics (4-9); Colorado Video (4); Crosspoint Latch (1,5,6,8); Digital Services Corp (1); EECO (1); Fairlight (1,4-6); For-A (1,7,8); GML (1); Graham-Patten (8); Harris Video (1); Inovion (1); Intergroup



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(5,6,8); JVC (1,5-8); Listec (3,4,8); Microtime (1); NEC America (1); Pinnacle (1,2); Quantel (1,2); Shintron (1,2,4-6,8); Sierra Video (5,8); Telemet (5,6); Texscan (6); Thomson Video (1,5); Ultimatte (5); Viscount (3); Vital (1,5,6,7)

2.L. Master Control Switchers

TYPES:

- | | |
|---------------|------------------------------------|
| (1) Manual | (3) Business automation interfaced |
| (2) Automated | |

SUPPLIERS:

3M Broadcast (1,2); Alamar (2); BTS (2); CCI (1-3); Central Dynamics (1,2); Columbine (3); Crosspoint Latch (1,2); Grass Valley (1-3); Image Video (1,2); Intergroup (1,2); Kaitronics (1,2); Omicron (1); Utah Scientific (1,2); Viscount (1)

2.M. Video Routing Switchers

TYPES:

- | | |
|------------------------|----------------------|
| (1) Parallel interface | (2) Serial interface |
|------------------------|----------------------|

SUPPLIERS:

3M Broadcast (1,2); Alamar (1,2); ALTA (1); BSM (1,2); BTS (1,2); CCI (1,2); Central Dynamics (2); Channelmatic (1); Datatek (1,2); Di-Tech (1,2); Dunn (1,2); EECO (1,2); Grass Valley (1,2); Hedco (1,2); International Nuclear (1); JVC (1,2); Kaitronics (1,2); Laird (1,2); Lang (1,2); Leitch (1,2); Matrix Systems (1,2); Monroe Electronics (1); NEC America (2); Oktel (2); Omicron (1); Orion (2); Shintron (1,2); Sierra Video (2); Sigma (1,2); Telemet (1,2); Thomson Video (2); Utah Scientific (1,2); Versatech (1,2); Vital (1)

2.N. Machine Control/Technical Automation

TYPES:

- | | |
|------------------------|-------------------------------|
| (1) Parallel interface | (3) Vertical interval systems |
| (2) Serial interface | |

SUPPLIERS:

3M Broadcast (1-3); Alamar (1,2); Amherst (1,2); Auburn (1); BTS (1); CCI (1-3); Dynair (1,2); EECO (1-3); Electric Works (1-3); Evertz (1-3); Graham-Patten (2); Grass Valley (1); Grumman (1-3); Image Video (1); ISS (1,2); Jem-Fab (1-3); Merlin (2); Mycomp (1,2); NES (1,2); Paltex (1-3); Panasonic Broadcast (2); Rational Broadcast (1,2); Tech Electronics (1,2); Texscan (1,2); Thomson Video (2); Utah Scientific (1,2); Vamco (1,2); Video Data (1-3); Videomedia (1,2); Vital (1,2); Zaxcom (1,2)

2.O. TV Business/Newsroom Automation

TYPES:

- | | |
|----------------------------------|---------------------------|
| (1) Business automation software | (3) TV newsroom computers |
| (2) Business automation hardware | |

SUPPLIERS:

Alamar (1); Basys (3); CCI (2); Columbine (1-3); Computer Prompting (3); Intl Microwave (2); Jefferson-Pilot (1-3); Kaman Sciences (1,2); Listec (3); Management (1); Media Computing (3); Panasonic Broadcast (2); Rational Broadcast (1,2); Register Data (1,2); Sono-Mag (1,2); Summit Software (1); Telesource (3); Terminal Systems (3); TUI (3); Twentier (1-3); VariCom (1); Vital (1,2)

2.P. Video Post-Production

TYPES:

- | | |
|------------------------------------|---------------------------------------|
| (1) Time code synchronizers | (4) Multisource editors |
| (2) Two-machine editor/controllers | (5) SMPTE time code generator/readers |
| (3) A/B-roll editors | (6) VITC reader/generators |

SUPPLIERS:

Adams-Smith (2-6); Amherst (2,3,5); Ampex AVSD (4); Amtel (1,4-6); BHP (3,4); Calaway (2-4); Cipher Digital (1,2,5); CMX (3,4); Coherent (5); Datum (5,6); EECO (2-6); EEG (5,6); Electric Works (6); ESE (5); Evertz (1,5,6); For-A (3,5,6); Fostex (1,5); Future Video (2); Grass Valley (4,5); Gray Engineering (5,6); Horita (5); JVC (1-5); Magna-Tech (5); Multi-track Magnetics (5); Multidyne (5); Otari (1,5); Paltex (3-6); Quan (1); Quantel (2); Shintron (1,5,6); Skotel (5); Sony Broadcast (2-4,6); Sony Pro Video (2); Studer (1,2); Telcom (5,6); Thomson Video (2-6); United Media (1-6); Vid Video (1); Videolab (1); Videomedia (2-5); Vital (1,5)

2.Q. Video Sync and Signal Generators (Also see Test and Measurement section)

TYPES:

- | | |
|-----------------|---------------------------------|
| (1) Sync | (4) SID |
| (2) Black burst | (5) Safe title area |
| (3) Color bars | (6) Video slate board/countdown |

SUPPLIERS:

Adams-Smith (1); Amtel (6); Asaca (1-4); Block River (1-3); Broadcast Video Sys (5); BTS (1-4); CCI (1); Crosspoint Latch (1-3); Datatek (2); EECO (1-3); EEG (4); For-A (1-3); Grass Valley (1,3); Gray Engineering (5); International Nuclear (2); J-Lab (5); Lang Video (3,4); Leader (1-3); Leitch (1-5); Lenco (1-3,5); Magni (1-3,5); Multidyne (1-6); Omicron (1,3); Optical Electronics (1); QSI (2-4,6); Scientific-Atlanta DVS (1-3,5); Sierra Video (3); Sigma (1-6); Tektronix (1-3); Telemet (3); United Media (1); Video Accessory (1-3); Video Aids (1-3); Videotek (1-3)

2.R. Digital Video Processing

TYPES:

- | | |
|-------------------------|---|
| (1) TBCs | (8) Color correctors (also see Telecine category) |
| (2) Field synchronizers | (9) Video multiprocessors |
| (3) Frame synchronizers | (10) Standards converters |
| (4) Field/framestores | (11) Video/audio sync delay |
| (5) TBC/framestores | (12) A/D & D/A converters |
| (6) Noise reducers | |
| (7) Image enhancers | |

SUPPLIERS:

AF Assoc (10); ALTA (1,2,4,5,7); Amherst (1,6,7); Ampex AVSD (1); ANT Telecomm (6); Apert-Herzog (1,4); Applied Digital Tech (8,9); BTS (8); Broadcast Video Sys (8); Colorado Video (4); Countryman (2,4,6,9); Crosspoint Latch (1); Digivision; EECO (1); Eigen (4,7); Faroudja (6-8); For-A (1,3,8); Fortel (1,8); GML (1,3,5); Harris Video (1,3,5,6); Hotronic (1,3,5); Imaging Tech (7); Intercontinental (10); Leitch (3); Lenco (1); Merlin (10,11); Microtime (1,3,5,7); NEC America (3); Nova Systems (1,5); Oki (10); Oktel (4,6); Prime Image (1,3); Quantel (3,5,10); Scientific-Atlanta (1,3-5); Scientific-Atlanta DVS (1-5); Shintron (3,5,10); Sony Broadcast (1); Tektronix (1-5,11); Thomson Video (1,7,8); Toshiba (3); Video Accessory (6); Video Intl (1,10); Videoplex (9); Visage (7)

2.S. Other Video Processing

TYPES:

- | | |
|--------------------------|----------------------------|
| (1) NTSC encoders | (5) Video filters |
| (2) Decoders | (6) Dropout compensators |
| (3) Comb filter decoders | (7) Video/cable equalizers |
| (4) Video delay lines | |

SUPPLIERS:

AF Assoc (3); Allen Avionics (4,5,7); Anderson Labs (4); Apert-Herzog (4); Barco (2,3); Block River (1,2,4); Broadcast Video Sys (1,3-5); Crosspoint Latch (1,2); Di-Tech (7); Dynair (7); EECO (1); Faroudja (1-3); For-A (1,2); Grass Valley (1,2); JVC (1); Laird (1); Leitch (3,4,7); Lenco (1-4,7); Merlin (1-3); Microwave Filter (5); Multidyne (7); Omicron (7); Optical Electronics (1); Rank Cintel (3); Telemet (2,3,7); Television Equip/TEA (4,5); Thomson Video (1,2,7); Toshiba (4); TTE (3,5); Video Accessory (5); Video Intl (3); Visage (2)



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2.T. Video Amplifiers

TYPES:

- | | |
|---------------|---------------------|
| (1) Proc amps | (3) Pulse amps |
| (2) Video DAs | (4) Subcarrier amps |

SUPPLIERS:

3M Broadcast (1-4); ALTA (1); Amtel (2); Block River (1-4); Blonder-Tongue (3); BSM (2); BTS (2); Central Dynamics (2,3); Crosspoint Latch (2-4); Datatek (2-4); Di-Tech (2,3); Dynair (2); EECO (1); ESE (2); For-A (2); Graham-Patten (2-4); Grass Valley (1-4); Hedco (2-4); Image Video (2); Intergroup (2-4); International Nuclear (2); Javelin (2); Laird (1,2); Leitch (1-4); Lenco (1-4); McCurdy (1-4); Merlin (2); Mobile-Cam (2); Multidyne (2-4); Mycomp (2); Omicron (2-4); Opamp (2,3); QSI (1,2); Shintron (2,4); Sierra Video (2); Sigma (1-4); Telemet (2,3); Television Equip/TEA (2); Thomson Video (2,3); Versatech (2); Video Accessory (2-4); Video Aids (2); Videotek (2-4); Vital (2)

2.U. Video Monitors

TYPES:

- | | |
|---------------------|------------------------------|
| (1) Monochrome | (5) Wide aspect ratio |
| (2) NTSC | (6) Battery-powered portable |
| (3) RGB | (7) Video projectors |
| (4) High resolution | (8) Monitor calibrators |

SUPPLIERS:

Asaca (2-4,6,8); Barco (1-4); BTS (3); Conrac (1-4); Electrohome (1-4,7); GBC Closed Circuit (1); GE Projection (7); Ikegami (1-7); Image Amplification (7); Javelin (1,2); JVC (1-4); Leader (6); Lenco (1-3); Listec (4); Magni (8); Monitor (4); Norpak (3); Panasonic AV (1-4,6,7); Pesa (2,4); Proton (2); QSC Audio (2); RCA New Products (1); Sharp (2-4,7); Sony Broadcast (2-4,6); Sony Pro Video (7); Tektronix (2-4); Television Equip/TEA (8); Thomson Video (1-3); Videotek (2-4,6)

2.V. Other Video Equipment

SUPPLIERS:

Abekas; ADC; Aerial Video; Ampex AVSD (1); Artel; Audio Accessories; Broadcast Video Sys; Calico; Cavendish; Cipher Digital; Computer Labs; Computer Prompting; Connect-Air; Datatek; ECS; EECO; Electro Sound; Elicon; Eventide; Film/Video; GBC Closed Circuit; Grass Valley; Hedco; Hitachi; Hudson AV; Intercontinental; Listec; Magni; Merlin; Minolta; Monroe Electronics; MP Video; Multidyne; Mycomp; National Video Svce; NEC America; Norpak; Odetics; Opamp; Palmer Films; Penny & Giles; Pinnacle; Pioneer; Portland; Prime Image; QSI; Rank Cintel; Re-Play; Selco; Sharp; Sierra Video; Sony Information; Steenbeck; System Assoc; Technical Projects; Telex; Temtron; Thomson Video; Trompeter; Video Accessory; Visage; Zaxcom

III. LIGHTING; POWER; SUPPORT; SCENERY and SET DESIGN; RACKS, CABINETS and CONSOLES

3.A. Lighting

TYPES:

- | | |
|-----------------------|------------------------------|
| (1) Lamps | (5) Diffusion, efx material |
| (2) HMI, CSI fixtures | (6) Lighting stands, rigging |
| (3) Quartz fixtures | (7) Lighting control boards |
| (4) Cyc lighting | (8) Dimmer packs |

SUPPLIERS:

Anton/Bauer (1); Arriflex (2,3,6); Avab (1-4,7,8); Bardwell (3,4,6); Belden (5); Bogen Photo (5,6); Cine 60 (3); Cinemills (1); Comprehensive Video (8); Cool-Lux (1-3,6,8); Desisti (1-6,8); Electro Con-

trols (7); Electronics Diversified (7,8); Fantasee (1-3); Frezzolini (1,3,6); G.E. Lighting (1,3); Great American Market (1-4,6,7); GTE Electrical (1); Keylite (1-8); Kliegl (2,4,7,8); Lee Colortran (1-8); Lighting Methods (1-4,6-8); Lowel (3-6); LTM (1-3,6,8); Matthews (5,6); Mole-Richardson (1-8); North American Philips (1); Oleson (1-3,5-8); Packaged Lighting (1,3-8); PAG (1); Perrott (1); Phoebus Group (2,3); Polites (6); Pro Battery (2,5,6); Rainbo Products (7); Rosco Labs (5); SLD (3,4,7,8); Smith-Victor (1,3,5,6); Strand Lighting (1-4,6,7); Teatronics (1-4,7,8); Temtron (1); Theatre Service (1-8); Thomas Engineering (3,4,6); Ultimate Support (6); Union Connector (8); Zellan (7)

3.B. Power Supplies

TYPES:

- | | |
|-------------------------------------|---------------------------------|
| (1) Nicad batteries, chargers | (4) Power generators |
| (2) Silver-zinc batteries, chargers | (5) AC power dividers |
| (3) Lead-acid batteries, chargers | (6) HMI ballasts |
| | (7) Ac/dc converters, inverters |

SUPPLIERS:

Adcour (1-3); Alexander (1); Anton/Bauer (1,2,5); Chiles (1,3); Christie (1-3,7); Cine 60 (1); CMC Ltd. (1,2); Cool-Lux (1-3); Desisti (3,6); Digimax (1); Frezzolini (1-3,7); G&M Power (1,5,7); Great American Market (3,6); Keylite (4,6); Lee Colortran (1,2,6); LTM (4-7); Maxell (1,3); Mole-Richardson (4-7); Motorola C&E (1,4); Neumade (5-7); Norac Broadcast (4); North Wind Power (3,4,7); Onan (4,7); Paco (1); PAG (1); PEP (1); Perrott (1-3); Portable Energy Products (1,3); Pro Battery (1,3); Redlake (3); Teledyne Energy (4); Topaz (4,7); Vanner (7); Yardney (2)

3.C. Camera/Microwave Support

TYPES:

- | | |
|--------------------|--------------------------------|
| (1) Tripods, heads | (5) Cranes, jibs |
| (2) Pedestals | (6) Camera stabilizing systems |
| (3) ENG braces | (7) Helicopters, rigs |
| (4) Dollies | (8) Remote pan/tilt systems |

SUPPLIERS:

AF Assoc (8); Arriflex (1,5,6); Birns & Sawyer (1); Bogen Photo (1,4); Canon (1,2); Cine 60 (3); Cinema Products (1,6,8); CMC Ltd. (1,3,4); Davis & Sanford (1,2,4,8); Eagle Video (4); Elicon (4,5,8); ENG Helicopter (6,7); Frezzolini (1); Gentner RF (8); Heitz (1,4); ITE (1-5,8); Matthews (4,5,8); Miller Pro (1,4); Mitchell (1); Nurad (2,8); O'Connor (1,2,4); Quickset (1,2,4,8); Redlake (1); Sachtler (1-4); Telemetrics (8); TSM (2,6,8); Tyler (6,7); Ultimate Support (1); Universal USA (1-4); Vinten (1,2,4,5,8)

3.D. Teleprompters

TYPES:

- | | |
|-------------------|----------------------|
| (1) Monitor based | (3) Keyboard entry |
| (2) Scroll entry | (4) ENG/EFP portable |

SUPPLIERS:

Choice Electronics (1); Cinema Products (2,4); CMC Technology (1-3); CompuPrompt (3); Computer Prompting (1-4); Dynatech Newstar (3); Listec (1-4); Media Computing (3); Q-TV (1-4); Tekskill (1-4); Telescript (1)

3.E. Transportation Cases

TYPES:

- | | |
|------------------|---------------------------------|
| (1) Foam insert | (3) Rack configuration |
| (2) Padded nylon | (4) Editing/production consoles |

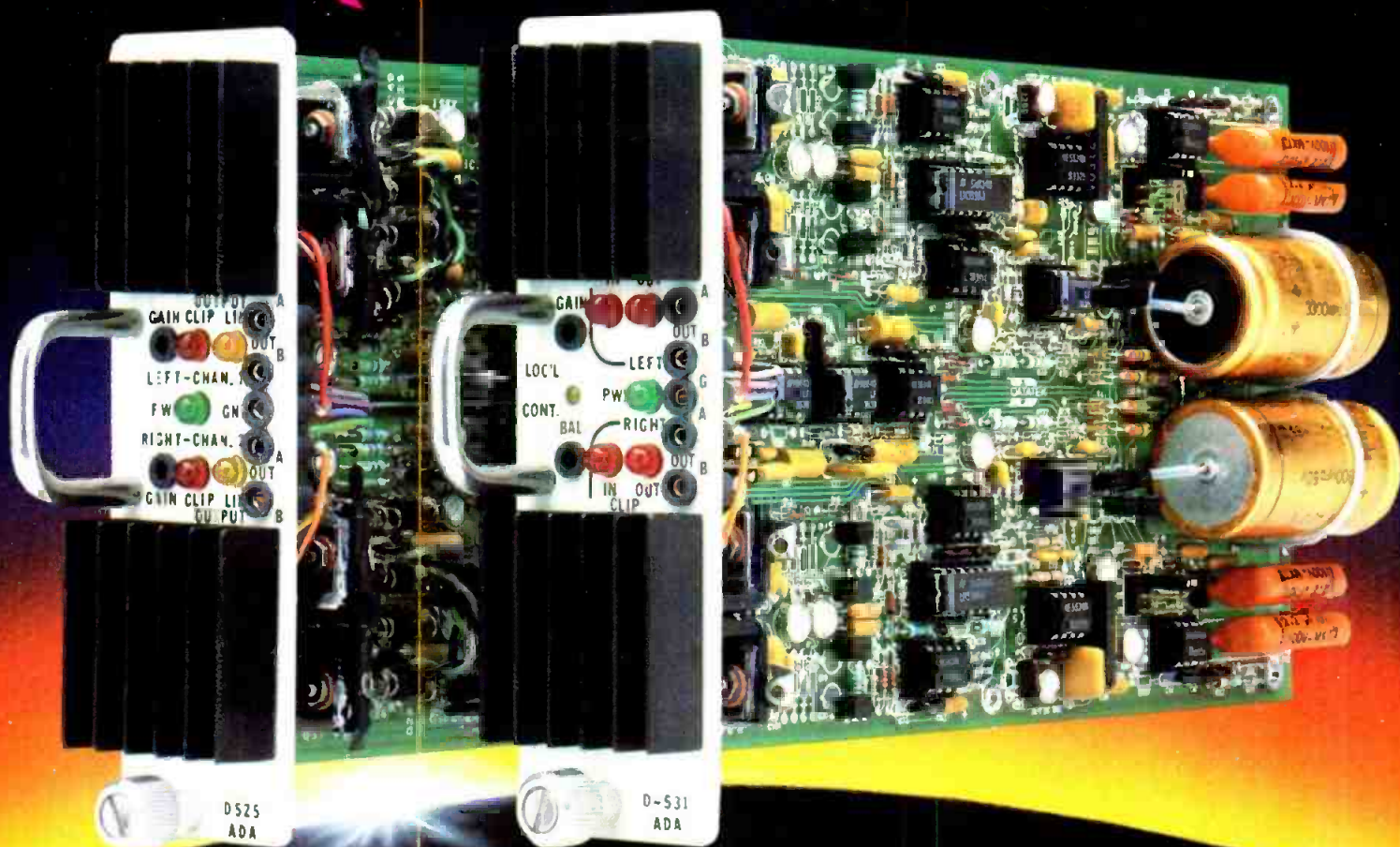
SUPPLIERS:

A&S Case (1); Anvil (1-3); Bal (William) (1); Calzone (1,3,4); Cases (1,3); Center Video (4); Cool-Lux (1); ECS (1,3); Emcor (3); Excalibur (1,2); Fiberbilt (1,2); Hardigg (1,3); ITE (1); K&H (2); Kangaroo Video (2); Merlin (2); Mole-Richardson (1); Nalpak (1,3); Stanley Case (1-4); Stantron (3,4); Star Case (1,2); Telepak (2); Teletideo (2); Thermodyne (1,3); Viking (1,3)

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3.F. Set Design

TYPES:

- (1) Modular news, studio sets (4) Props, materials
(2) Scenery construction (5) Set design service
(3) Scenery rigging

SUPPLIERS:

Acoustic Systems (1); American Laser (1,2,5); Arben (1); Fantasee (4,5); Fiorentino (5); Graphic Express (1,2,5); Grosh Scenic (2,3); Janson (2,3); Rosco Labs (2,4); RPG (1); Syracuse (3); Theatre Service (3,4); Uni-Set (5)

3.G. Studio Furniture

SUPPLIERS:

Arben; Arrakis; Audio Broadcast Group; Bretford; Centro; Graphic Express; Grinnan; Howe Tech; Jem-Fab; Micro-Trak; Omega; Pacific Recorders; Radio Systems; Ruslang Corp; Storeel; TOA; Townsend/Broadcast Systems; Ultimate Support; Wilson Co.; Winsted

3.H. Cabinets

SUPPLIERS:

Amco; Arben; Atlas; Bretford; Centro; CMC Ltd.; Emcor; Enclosure; GKM; Graphic Express; Grinnan; Jem-Fab; Micro-Trak; Mobile-Cam; Neumade; Pacific Recorders; Radio Systems; RTI; Stantron; Storeel; Townsend/Broadcast Systems; Wallach; Wilson Co.; Winsted

3.I. Studio Consoles

SUPPLIERS:

Allied Broadcast; Amco; Amek; Atlas; Calzone; Centro; CMC Ltd.; Emcor; Enclosure; GKM; Graphic Express; Howe Tech; Jem-Fab; Micro-Trak; Pacific Recorders; Radio Systems; Stantron; Total Audio; Townsend/Broadcast Systems; Winsted

3.J. Equipment Racks

SUPPLIERS:

A&S Case; Allied Broadcast; Amco; Atlas; Calzone; Centro; CMC Ltd.; Emcor; Enclosure; GKM; Graphic Express; Jem-Fab; Micro-Trak; Mobile-Cam; Neumade; Pacific Recorders; Packaged Lighting; Radio Systems; RTI; Ruslang Corp; Stantron; Storeel; Townsend/Broadcast Systems; Ultimate Support; Western Intl; Wilson Co.; Winsted

3.K. Cart/Tape Storage

SUPPLIERS:

Allied Broadcast; American Laser; Arrakis; Calzone; Fidelipac; Graphic Express; Grinnan; Jem-Fab; Marathon; Micro-Trak; Neumade; Pacific Recorders; Radio Systems; Ruslang Corp; Stantron; Storeel; Wilson Co.; Winsted

IV. TRANSMITTING/RECEIVING EQUIPMENT; SATELLITE SYSTEMS; ANTENNAS and TOWERS

4.A. Transmitters

TYPES:

- (1) AM (5) LPTV
(2) FM (6) MDS
(3) VHF (7) Translators
(4) UHF

SUPPLIERS:

Acrodyne (3-5,7); AEG Bayly (2); Allied Broadcast (1,2); Bext (2-4); Broadcast Electronics (2); Comark (3,4); Continental Electronic (5); Continental Electronics (1,2); CSI Electronics (1,2); Elcom Bauer (1,2); Emcee (3-7); Harris Broadcast (1-4); Information Transmission (4-6); International Teletronics (2); ISS (2,3); Itelco (2-5,7); ITS (4-6); Larcen (2,3,7); LPB (1); Marcom (1-5,7); MCL (5); McMartin (1-4); Nautel (1); NEC America (3,4); Pesa (5,7); Pirelli (2); QEI (2,7); Radio Systems (1); RF Specialty (1); Swintek (2); Townsend/Broadcast Systems (3-7); Triple Crown (2-5,7); TTC (1-5,7)

4.B. Exciters, Generators, Modulators

TYPES:

- (1) AM exciters (5) Stereo generators
(2) AM stereo exciters (6) Diplexers
(3) FM exciters (7) Multiplexers
(4) TV exciters (8) Modulators

SUPPLIERS:

Acrodyne (4); AEG Bayly (3,5); Asaca (5,8); Bext (3,5); Blonder-Tongue (6-8); Broadcast Electronics (2,3,5); Catel (5,8); Comark (4,6,7,8); Continental Electronics (1,3,6); Cue Paging (3); Delta (2); Dielectric (6,7); Dorrrough (5); DX (8); Elcom Bauer (3,6,7); Electronics Research (6,7); Harris Broadcast (1-5); Information Transmission (4); Inovonics (5); International Teletronics (3,5); Intl Microwave (7,8); ISS (3-5,8); Itelco (3-6,8); ITS (4,8); Kahn (2,5); Larcen (3,4,6); Learning (5); LNR (3,8); Marcom (3-6,8); McMartin (1-3,5,8); Merlin (5); Micro Controls (3); Microwave Filter (6); Modulation Assoc (6-8); Modulation Sciences (5); Moseley (5); Motorola AM (2,5,8); NEC America (4); Orban (5); Pesa (8); Pirelli (8); QEI (3,5); Rohde & Schwarz (3,8); Schafer (1-3,5); Scientific-Atlanta (5,8); Shively (6,7); Tau-tron (7); Tectan (6,7); Telemet (8); TFT (2); Townsend/Broadcast Systems (4-7); Triple Crown (3-5,8); TTC (3,6,8); Wegener (7,8)

4.C. RF Power Components

TYPES:

- (1) RF amplifiers (5) RF filters
(2) RF tubes (6) RF loads
(3) RF attenuators (7) RF switches
(4) RF converters

SUPPLIERS:

AEG Bayly (1,2,5-7); Altronic (6); Anderson Labs (5); Bext (1); Bird (3,5-7); Blonder-Tongue (1,3-5); Broadcast Electronics (1); Broadcast Microwave (1); Calvert (1,2); Coaxial Dynamics (6); Comark (1-7); Continental Electronics (1,5,6); Dielectric (5-7); Dowkey (7); Econco (2); EEV (1,2); Electro Impulse (3,6); Electronics Research (5); FL Jennings (7); Harris Broadcast (1,6,7); Itelco (1,5); ITS (1); Kay Industries (4); Keltec (1); Larcen (1,5,7); Marcom (1,5); MCL (1); McMartin (1,5); Micro Communications (5-7); Microwave Filter (5); Motorola C&E (1-3); Mu-Del (1,3-5); QEI (1); RF Specialty (2,4,6,7); Schafer (1,3-7); Shively (5-7); SWR (7); Systron Donner (6); Temtron (2); Tepco (1); Thomson Tubes (2); Thor (2); Townsend/Broadcast Systems (1,2,5-7); Trompeter (3,6); TTE (5); Vacuum Tubes (2); Varian Microwave Equip (1); Varian Microwave Tube (1); Varian/Eimac (1,2); Vector (5-7); Wavetek Indiana (3); Westinghouse (2); Wide Band (1,5,7)

4.D. Fiberoptic Systems

SUPPLIERS:

AMP Products; Anritsu; Artel; Avantek; BIW Cable; Catel; Compression Labs; Grass Valley; GTE Comm; Hirschmann; LTM; Pirelli; Quante; Selco; Siecor; Tau-tron; Telemet; Veam

4.E. Satellite Systems

TYPES:

- (1) Transmit/receive earth stations (3) Transportable earth stations
(2) Receive-only earth stations (4) Upconverters, downconverters

- (5) LNAs
(6) Encryption systems
- (7) MAC systems
(8) Satellite network controllers

SUPPLIERS:

Accu-Weather (2); Alden (1-3,8); Andrew (1-3,8); Antenna Tech (2,5,7); Arunta (2,4); AT&T Comm (1-4,8); Avantek (1,4); Avcom (2,4); Blonder-Tongue (2,4,5); Cat Systems (8); Comtech (1-3); Conifer (2,4); Cue Paging (2); Dalsat (1-4,8); Drake (2,5); DX (2,4,5); Ellis Tower (1-3); Ethernet (3); Gentner RF (8); Harris Microwave (4); Houston Intl (6); Hubbard (1-3); ISS (2,4,5); Keltec (1,3); LNR (4,5); M/A-Com Telecomm (1,2); Mark Antenna (1,2); MCL (1,3); Microdyne (1-4,6); Midwest (3); Modulation Assoc (1-4,8); Monroe Electronics (8); Mu-Del (4); Pesa (2); Pinzone (1-5); Pirelli (4); Radiation Systems (1-3); Raycom Group (8); SatCom (1-5,8); Satellite Consultants (1-3); Scientific-Atlanta (1-8); Scientific-Atlanta DVS (6,7); Soll (8); Solway (2); Sono-Mag (8); Standard Comm (2,5); Tectan (1); Triple Crown (2); Varian Microwave Tube (4); Vertex (1-3); Weather Services (2); Wegener (1,2,4,8)

4.F. Microwave Systems

TYPES:

- (1) Intercity
(2) Portable ENG
(3) Airborne
- (4) Central receivers
(5) SMATV systems
(6) Telescoping masts

SUPPLIERS:

Andrew (1,6); Artel (2); Avantek (1); Bext (1); Broadcast Microwave (1-4); Catel (5); Drake (5); ENG Corp (2); GTE Comm (1); Harris Broadcast (1-5); Harris Microwave (1,2,4); IFR (2,3); Ikegami (2); Intl Microwave (1,2,4); ISS (5); Itelco (1); M/A-Com MAC (1,4,5); Marcus (1); Marti (1); Micro Communications (2); Microdyne (5); Microlect (1,6); Microwave Network (1); Microwave Radio (2,4,6); Midwest (2); Motorola C&E (1); N-Pro (6); NES (1,2); Nurad (1-4); Osborne (6); Pinzone (4); Raycom Group (2,4); RF Technology (1-4); Scientific-Atlanta (5); Stainless (6); TFT (1); Tri-Ex (6); Triple Crown (5); Troll (3); Wavetek Indiana (1,2)

4.G. Antennas

TYPES:

- (1) AM
(2) FM
(3) TV HP
- (4) TV CP
(5) Communications
(6) Antenna tuning units

SUPPLIERS:

Alford (2,3); Andrew (2-5); Audiolab (5,6); Blonder-Tongue (3); Bogner (3,5); Cablewave (5); Celwave (5); Comad (2,3); Comark (2-4,6); Continental Electronics (2,6); Dielectric (1-4); Elcom Bauer (6); Electronics Research (1-6); Gabriel (4,5); Harris Broadcast (2-4); Jampro (2-4); Kahn (1); Larcen (3); LDL (1-4); Marcom (2); Mark Antenna (5); Marti (5); Micro Communications (2,4); Motorola C&E (5); Pinzone (1); Radiation Systems (5); RF Technology (5); Scala (2-5); Schafer (1,2); Shively (2-4,6); Simplicity (1-4); Swintek (5); SWR (2-4); Tennaplex (2,3); Tennaplex (2,3); Townsend/Broadcast Systems (3,4); Vector (6); Wavetek Indiana (5)

4.H. Transmission Line

TYPES:

- (1) Rigid
(2) Foam dielectric
(3) Coaxial
- (4) Power dividers
(5) RF connectors

SUPPLIERS:

Alpha Wire (1-3); AMP Products (5); Andrew (1-3,5); Bird (5); Cablewave (1-5); Celwave (2-5); Comark (1,3,4,5); Dielectric (1,3-5); Dowkey (3); Gabriel (1-3); LDL (1); Mark Antenna (3,5); Micro Communications (4,5); Motorola C&E (1-3); Pinzone (1-3); RF Specialty (5); Schafer (1-5); Scientific-Atlanta (4,5); Shively (1,3-5); SWR (1,4); Times Fiber (1-3); Townsend/Broadcast Systems (1-5); Trompeter (5)

4.I. Towers

TYPES:

- (1) Tower masts
(2) Tower rigging, hardware
- (3) Tower lighting

SUPPLIERS:

Allied Tower (1,2); Andrew (1-3); EG&G (3); Ellis Tower; Express Tower (1-3); Flash (3); Fort Worth (1,2); Hughey & Philips (3); Kline (1,3); LDL (1-3); L&R (1-3); Magnum Towers (1-3); Marcom (1,2); Microlect (1-3); Moore (1-3); Motorola C&E (1); North Wind Power (1,2); Nudd (1-3); Osborne (1); Rohn (1-3); Schafer (1-3); Stainless (1-3); Swager (1-3); TMD (1); Transmission Structures (1-3); Tri-Ex (1-3); Utility Tower (1-3); World Tower (1)

4.J. Transmitter Remote Control Systems

SUPPLIERS:

Advanced Micro; Cat Systems; Delta; Gentner Engineering; Gentner RF; Hallikainen; Intl Microwave; Marcom; Micro Controls; Monroe Electronics; Moseley; Nurad; Potomac; Rohde & Schwarz; Schafer; Soll; TFT; Townsend/Broadcast Systems

4.K. STLS, TSLs

SUPPLIERS:

Antenna Tech; Artel; Broadcast Microwave; dbx; GTE Comm; Intl Microwave; M/A-Com MAC; Marcom; Marti; Micro Controls; Moseley; Motorola C&E; Nurad; RF Technology; Scala; Schafer; TFT; Townsend/Broadcast Systems; TTC; Wegener

4.L. SCA Equipment

TYPES:

- (1) AM/FM
(2) TV
- (3) Terminals

SUPPLIERS:

Advanced Micro; AEG Bayly (1); Broadcast Electronics (1,3); CSI Electronics (1); Cue Paging (1); Emergency Alert (1,4); International Teletronics (1); Itelco (1); Kahn (2); Marcom (1,3); Marti; Micro Controls (1); Moseley (1); Radio Systems (1); Reach (1,4); Scala (1,3); Schafer

4.M. Slow-Scan Transmitters/Receivers

SUPPLIERS:

CMC Ltd.; Colorado Video; NEC America; Swintek

4.N. Two-Way Radio Communications

SUPPLIERS:

AEG Bayly; Circuit Development; Intl Microwave; Marti; Motorola C&E; Nady; Scala; Swintek

4.O. Remote Pickup Equipment

SUPPLIERS:

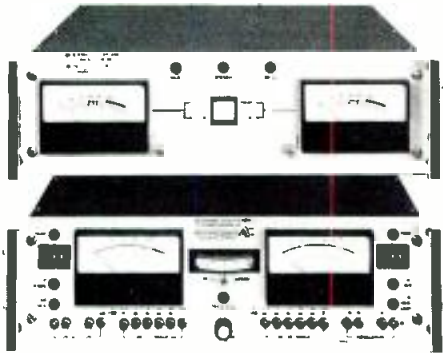
Broadcast Microwave; Gentner RF; Marti; Micro Controls; Micro-Trak; Motorola C&E; Nurad; RF Technology; Scala; Schafer; TFT

4.P. Other RF Equipment

SUPPLIERS:

AEG Bayly; Bext; Broadcast Microwave; Conifer; Datatek; ECS; EEV; Environmental Technology; Frequency Devices; Grass Valley; Lightning Eliminators; Micro Communications; Micro Controls; Microlect; Mobile-Cam; Modulation Sciences; Moseley; North Consumer; RF Technology; Shively; Solutech; Superior Electric; SWR; Tectan; Television Equip/TEA; Tepco; Triple Crown; United Ropeworks; Vector

DELTA BROADCAST PRODUCTS



ASE-1/ASM-1

AM Stereo without compromise. The AM Stereo Exciter and Modulation Monitor provides a C-QUAM™ quadrature modulated stereo signal featuring low distortion and channel separation greater than 35 dB throughout the audio spectrum. The ASE-1 generates a signal to produce a phase modulated transmitter carrier. An L + R audio signal AM's this carrier to produce the C-QUAM signal, the only signal completely compatible with all C-QUAM, multimode and envelope detector receivers.

C-QUAM is a registered trademark of Motorola, Inc.



RCS-1V

This Remote Control System calls you when it needs help! The RCS-1 combines microprocessor technology with easy operation. Features include direct interface boards for antenna monitors, patented remote modulation bargraphs, automatic logging, and synthesized speech telephone interface. Additional input and control boards to expand remote control capabilities can be added at any time.



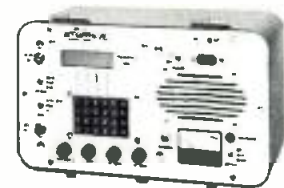
AAM-1

The Analog Antenna Monitor measures the parameters of directional antenna systems. Readings are: relative current; and current ratio and current phase to a reference antenna. The AAM-1 can monitor up to 8 antennas with ratio and phase measurements displayed on front panel meters.



AMC-1/FMC-1

The only modulation control systems which provide a completely closed loop around the transmitter. The Amplitude and Digital Modulation Controllers sample actual modulation levels after the PA output network assures precise adjustment for optimum modulation levels. Both the AMC-1 and FMC-1 keep count of over-modulation bursts for signal control through a linear attenuator.



RG-4

High output Receiver/Generator. The Receiver/Generator combines a two-watt RF output and a correlation detector circuit that virtually eliminates interference problems. The RG-4 operates in the 100 kHz to 30 MHz range. It is designed as the ideal companion instrument for Delta's OIB-1, OIB-2, and OIB-3 impedance bridges.



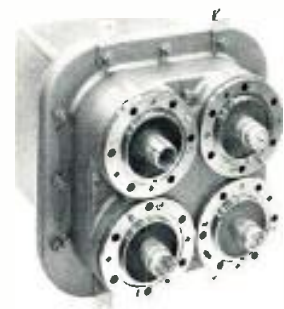
APC-1

Your insurance against over- and under-power operation. The Automatic Power Controller continuously monitors the transmitter output power, making automatic power adjustments via the transmitter loading control. The APC assures proper power levels at all times.



OIB-1/OIB-3/CPB-1

Full power impedance measuring. The Operating Impedance Bridges measure the impedance of radiators, networks and the like while operating under normal power. The OIB-1 measures VSWR and impedance up to $400 \pm j300$ ohms. The OIB-3 extends the range to $1000 \pm j900$ ohms, and has an RF amplifier for improved nulling. The Common Point Impedance Bridge is permanently installed for continuous monitoring of the common point during network adjustment. An optional TCA ammeter can be installed in its front panel.



6730E/6740B

Fast, efficient coaxial transfer switches. The coaxial transfer switches are designed to switch transmitters, transmission lines, antennas, dummy loads and auxiliary equipment quickly and easily. Either manually or remotely controlled, the switches are fully interlocked to prevent switching with RF power applied. The 6730E switch uses 1-5/8 inch connectors, the 6740B switch uses 3-1/8 inch connectors.



TCA/TCT

Simplifies antenna current and phase sampling. TCA Ammeter Systems provide accurate, modulation-free current readings on a variety of meter types. Toroidal Current Transformers provide current and phase samples, and are available with three output voltage ranges, as well as high voltage models.

DELTA ELECTRONICS

5730 General Washington Drive
P.O. Box 11268 • Alexandria, Virginia 22312
Telephone: (703) 354-3350 • Telex: 90-1963

Circle 117 on Reader Service Card

www.americanradiohistory.com



V. TEST & MEASUREMENT, LOGGING, TIMING

5.A. Audio T&M

TYPES:

- | | |
|----------------------------------|-------------------------------|
| (1) Audio test signal generators | (4) Spectrum analyzers |
| (2) Harmonic distortion meters | (5) Real-time analyzers |
| (3) IM meters | (6) Wow & flutter meters |
| | (7) Other audio T&M equipment |

SUPPLIERS:

ACO (8); Amber (1-4,7); Anritsu (4,8); Arus (8); Asaca (1,2,6,7); Audio Precision (1-8); Avcom (4); B&B (7,8); B&K (6,7); Bald Mountain (1,8); Bruel & Kjaer (4-6); Cetec Ivie (1,4,5); Crown (4,5); Dax (5); dbx (5); Eventide (4,5); Hewlett-Packard (1,2); Howe Tech (8); Jasoni (1); Kay Elemetrics (4,5); Klark-Teknik (4,8); Leader (1,2,6,7); Leitch (1); Marathon (8); Marconi Instruments (4,8); Nagra (8); Omicron (1); Panasonic Memory (4,6); Potomac (1-6); RE Instruments (1-4,6,7); Roh (8); Rohde & Schwarz (1,2,6,8); Sencore (1); Sescom (1); Sound Tech (1-8); Spectra Sonics (1,8); Techron (1,4); Tektronix (1,4,8); Telemet (4); TFT (7); Ward-Beck (8); White Instr (1,5)

5.B. Video T&M

TYPES:

- | | |
|---------------------------------------|--------------------------------|
| (1) Video test signal generators | (6) Burst phase meters |
| (2) Waveform monitors | (7) Diff. gain/phase meters |
| (3) Vectorscopes | (8) SCH phase meters |
| (4) Combination waveform/vectorscopes | (9) Video noise meters |
| (5) Blanking width meters, displays | (10) Automatic VITS analyzers |
| | (11) Other video T&M equipment |

SUPPLIERS:

Anritsu (1,2,7,9-11); Asaca (1,7,9); B&K (1); Broadcast Video Sys (2-4); Data Precision (2); Electrohome (2); Hitachi (2,3); Leader (1-3); Leitch (1,8,10); Lenco (1,8,9); Magni (1-4,6-8); Marconi Instruments (1,10); Merlin (1); Multidyne (1,11); NTL America (1); Pesa (7,8); Philips T&M (1-3,8-10); Porta-Pattern (11); Rohde & Schwarz (1,2,7,9-11); Scientific-Atlanta (1); Scientific-Atlanta DVS (1); Sencore (1); Sigma (1,8); Tektronix (1-4,8-11); Telemet (1,7); Temtron (1,2,6,11); Tentel (11); Thomson Video (1-3,11); Video Accessory (1); Videotek (2-4,8); Visual Info (1); Wavetek Indiana (1)

5.C. RF T&M

TYPES:

- | | |
|---------------------------------|-------------------------------------|
| (1) Demodulators | (8) Frequency monitors, controllers |
| (2) Modulation monitors | (9) RF test signal generators |
| (3) Antenna monitors | (10) Impedance bridges |
| (4) Field intensity meters | (11) Phase meters |
| (5) Sideband analyzers | (12) Other RF T&M equipment |
| (6) RF power meters, wattmeters | |
| (7) RF calorimeters | |

SUPPLIERS:

AEG Bayly (6); Anritsu (4,6,9,10,12); Avcom (9); B&K (4,9); Belar (1,2,8); Bird (3,6,7); Boonton (2,6,9,10); Coaxial Dynamics (6,8); Continental Electronics (1); Digimax (8); Electro Impulse (6,7,12); Fluke (8,9); Gentner RF (12); Gorman (3,11); Hewlett-Packard (1,2,9); Holaday (4); ISS (1); Itelco (12); ITS (12); Leader (4,9,11); Marcom (1,12); Marconi Instruments (2,6); McMartin (2,4); Motorola AM (2); Nurad (1,3); Panasonic Memory (9,12); Potomac (3,4,11); QEI (2); RE Instruments (9); Rohde & Schwarz (1,2,4,5-7,9-12); Sadelco (4,12); Selco (6,11); Sencore (4,10); Sennheiser (10); Tektronix (1,2); Telemet (1,5); TFT (2,8); Vector (11); Videotek (1)

5.D. General T&M

TYPES:

- | | |
|-------------------------|---------------------------------|
| (1) Oscilloscopes | (5) dB meters |
| (2) Delayed sweepscopes | (6) Logic analyzers |
| (3) Voltmeters | (7) Other general T&M equipment |
| (4) Multimeters | |

SUPPLIERS:

Amber (5); Annis (7); Audio Precision (3,5); B&K (1,4,7); Bald Mountain (5); Boonton (3); Bruel & Kjaer (3,5); Data Precision (3,4,7); Eventide (7); FL Jennings (3); Fluke (3,4); Hitachi (1,2); Kay Elemetrics (7); Leader (1-4); Marconi Instruments (3); Panasonic Memory (1,4,6,7); Philips T&M (1,6); Rohde & Schwarz (3-5); Selco (5,7); Sencore (1,4,5); Tektronix (1,2,6,7); Wavetek Indiana (1)

5.E. Logging, Monitoring

TYPES:

- | | |
|------------------------|------------------------------|
| (1) Tape-based loggers | (4) Automatic TV monitors |
| (2) Log printers | (5) Automatic radio monitors |
| (3) Chart recorders | (6) Status/alarm indicators |

Accurate Sound (1); Bruel & Kjaer (3); Cat Systems (2,6); CSI Electronics (6); Dictaphone (1,5); Gentner RF (2,6); Hallikainen (2,4-6); Minneapolis Magnetics (1,3); Odetics (1); Rohde & Schwarz (2-4,6); Soll (2,6); Soundscriber (1); Stancil (1); Telex (1)

5.F. Clocks, Timing

TYPES:

- | | |
|--------------------|-----------------------------------|
| (1) Digital clocks | (3) Complete clock/timing systems |
| (2) Timers | |

SUPPLIERS:

Audiolab (1,2); Autogram (1,2); Beaveronics (2,3); Broadcast Aids (1,2); Chrono-Log (1,3); Datum (1-3); ESE (1-3); Evertz (1-3); Kinematics/True Time (1-3); Leitch (1,3); Logitek (2); Mallory (2); Radio Systems (1,2); Torpey (1-3); Versatech (2)

5.G. Other T&M, Logging, Timing Equipment

SUPPLIERS:

Gentner RF; IGM; Nagra; Torpey

VI. COMPONENTS, HARDWARE

6.A. Wire, Cable, Connectors

TYPES:

- | | |
|-----------------------|------------------------------|
| (1) Audio cable | (4) Cable connectors |
| (2) Video cable | (5) Jackfields, patch panels |
| (3) Lighting/ac cable | |

SUPPLIERS:

ADC (4,5); AMP Products (4); Audio Accessories (5); Audio-Technica (1,2,4); Cambridge (4); Canare (1,2,4,5); Chester (1,2); Comprehensive Video (1,2); Conectronics (1,2,4,5); Daburn (1-5); Dialight (4,5); Farrtronics (5); GBC Closed Circuit (2); Gentner Engineering (5); Gotham (1); Hudson A/V (1,2); JVC (1,2); Kings Electronics (4,5); Lemo (4); LTM (3,4); Mycomp (1,2); Patch Bay (5); Shively (5); Shure (1); Sierra Video (2); Spectra Sonics (1); Switchcraft (1,4,5); Trompeter (2,4,5); Union Connector (3-5); Veam (4); Visage (1,2); Whirlwind (1,5); Wireworks (1,2,4,5)

6.B. Tools

SUPPLIERS:

Jensen

The decade that has changed the face of television

1976: DFS 3000 – the story begins with the inseting of live quarterframes at the Montreal Olympics.

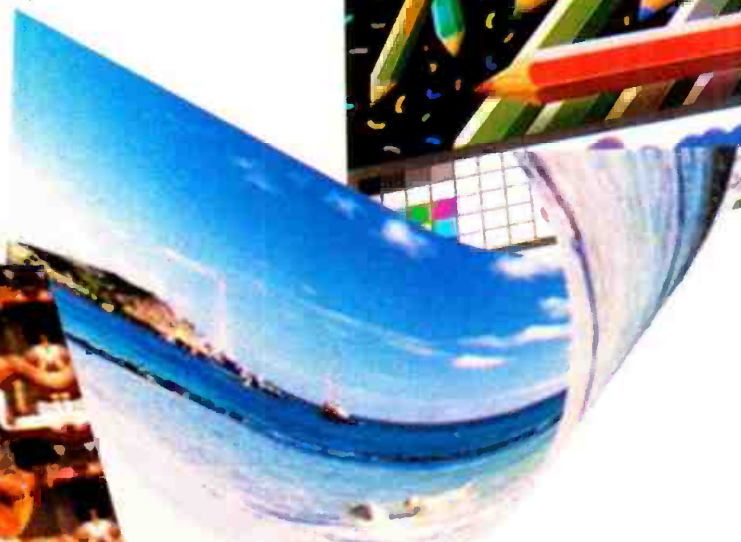


1978: DPE 5000 – the effects dream becomes reality with the world's first comprehensive digital production effects machine.

1981: Paintbox – new creative horizons appear with the birth of designer quality electronic graphics.



1983: Mirage – the world is stunned by the ultimate effects machine.



1984: Encore – a new era of uncompromised quality arrives with the first all-digital effects machine.

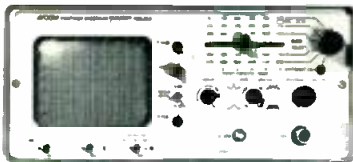
1986: Harry – the Digital Production Centre revolutionizes the editing and production of video.

1987... Step into the digital studio

31, Turnpike Road, Newbury, Berkshire RG13 2NE. Tel: (0635) 32222.

QUANTEL

Circle 118 on Reader Service Card



NEW!! SATELLITE EQUIPMENT

The PSA-35A Portable Spectrum Analyzer accurately measures wideband signals commonly used in the United States and European satellite communications industry. The PSA-35A frequency coverage is from less than 10 to over 1750 MHz, and from 3.7 to 4.2 GHz. The PSA-35A features switch selectable sensitivity of either 2 dB/div or 10 dB/div. The portable, battery or line operated PSA-35A Spectrum Analyzer is the perfect instrument for the critical dish alignment and tracking requirements necessary for maximum signal reception. **\$1965**



AVCOM's Single Channel Per Carrier Receiver, model SCPC-2000E, has been developed for the reception of FM SCPC signals from satellites operating in the 3.7 to 4.2 GHz band. The SCPC-2000E is a complete receiver that can tune up to 4 specific crystal controlled audio or data channels from a given transponder and is available in either wide or narrow band models. Optional circuitry is available to allow up to 8 crystals for channel selection. The SCPC-2000E may be used with the SS-1000 Slave for simultaneous reception of additional channels. **\$1875**



The AVCOM COM-96 Professional Receiver is compatible with all C and Ku band LNB's and BDC's that operate in the 950 to 1450 MHz range. The COM-96T provides complete 4 and 12 GHz performance in one system.

The COM-96T is a high performance, fully agile, dual conversion satellite receiving system for demanding commercial applications. Modular circuit packaging results in a compact and highly reliable Ku and C band receiver in a standard 19" rack mount configuration. Highly stable oscillators eliminate frequency drift and allow operation over wide temperature ranges. Special threshold extension circuitry offers superior video quality. The COM-96T may be ordered with optional threshold peaking and dual IF filters for receiving international type transponders. **\$939**

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7.F. Equipment Rental Services

SUPPLIERS:

A/T Scharff; Action Video; Aerial Video; Audio Video; Audio Video Corp; AVC Systems; Bradley Broadcast; Camera Mart; Carleton; Ceco Comm; Center City; Center Video; Channel One; Columbia AV; Creative Video; Digital Video Corp; Duncan (Victor); Elector USA; Elicon; ENG Helicopter; Eventide; Film & Video; Film/Video; Fisher Berkeley; Fitzco; General Television; Green (David); Houston Intl; Hudson AV; Image Devices; JRF; JSL; Keylite; Laumic; Leasametric; Lines Video; LTM; Leasing Concepts; Lee Lighting; Manhattan Transfer/Edit; McManus; Media Concepts; Microwave Filter; Midwest; Miller Assoc; MPCS; MZB & Assoc; Old Dominion; Performance Group; Polycom; Ram Broadcast; Roscor; Sullivan; Technisphere; Telemation; Television Assoc; Townsend/Broadcast Systems; TVI; Tyler; Vidcom; Video Hi-Tech; Windsor

7.G. Facilities Design and Engineering Services

SUPPLIERS:

Acoustic Systems; AF Assoc; Audio Video; Audio Video Corp; Austin; B&B; Bally Engineering; BC Engineering; Beemish; Bonneville Satellite; Cat Systems; CBX Intl; Center Video; Centro; Chips; Choice Electronics; Dalsat; Dyma; East Coast Video; Ellis Tower; Emcee; Fiorentino; Gee; General Television; Gray Communications; Grinnan; Houston Intl; Hubbard; Hudson AV; Image Devices; Jamieson; Jem-Fab; Lake; Landy; Lerro; Lines Video; LPB; McManus; Midwest; Milam; Miller Assoc; MPCS; Multi-track Magnetics; Mycomp; N-Z Video; Nissen Group; Old Dominion; Omega; Peirce-Phelps; Performance Group; Radio Systems; Radiotechniques; Ram Broadcast; Real World Tech; Roscor; Rosner (c); RPM; RSA; Satellite Consultants; Shoreline; Soll; Spectrum Planning; Spencer Broadcast; Technisphere; Tele-Measurements; Teletech; Television Assoc; Thomson Video; Townsend/Broadcast Systems; TVI; VCA/Teletronics; Wilke

7.H. Set/Studio Design Services

SUPPLIERS:

Acoustic Systems; Arben; Austin; Carleton; Centro; Chips; East Coast Video; Fiorentino; General Television; Graphic Express; Grinnan; Jamieson; MZB & Assoc; Old Dominion; Polycom; Satellite Consultants; Spencer Broadcast; Tele-Measurements; Ultimate Support; Windsor

7.I. Engineering Consultants

SUPPLIERS:

Acoustic Systems; AF Assoc; Audio Broadcast Group; Austin; BC Engineering; Beemish; Bonneville Satellite; Centro; Chips; Comsearch; Conus; Dalsat; Dyma; East Coast Video; Electronics Research; Emcee; Fiorentino; Gee; General Television; Gray Communications; Grinnan; Group W Satellite; Hubbard; Jamieson; Jem-Fab; Kleinknecht; Lake; LEA; Lines Video; McManus; Micro Communications; Miller Assoc; MPCS; MZB & Assoc; Nudd; Old Dominion; Peirce-Phelps; Radiotechniques; Ram Broadcast; Roscor; Rosner (c); RPM; RSA; Satellite Consultants; Soll; Sound Genesis; Spectrum Planning; Spencer Broadcast; SWR; Technisphere; Tele-Measurements; Teletech; Television Engineering Corp; Vamco; VCA/Teletronics; Versatech; Video Hi-Tech; Wilke; Windsor

7.J. Financial Consultants

SUPPLIERS:

Beemish; Chips; Lake; Leasing Concepts; MPCS; MZB & Assoc; Rosner (c); RPM; Sussex; Technisphere; Townsend/Broadcast Systems

7.K. Earth Station Site Selection

SUPPLIERS:

AT&T Comm; Beemish; Bonneville Satellite; Comsearch; Conus;

Dalsat; Dyma; Ethereum; Houston Intl; Jem-Fab; Marcus; Microwave Filter; New England Satellite; Rosner, (c); Satellite Consultants; Spectrum Planning; Townsend/Broadcast Systems; Videostar

7.L. Mobile Vehicle Construction

SUPPLIERS:

Aerospatiale; AF Assoc; Alpha Video; BAF Communications; Bell Helicopter; CBX Intl; Centro; Dalsat; ENG Corp; Ethereum; General Television; Gray Communications; Grinnan; Houston Intl; Hubbard; Hughes Helicopters; Jem-Fab; Lake; Lerro; Midwest; Mobile-Cam; MZB & Assoc; N-Z Video; Peirce-Phelps; Pesa; Real World Tech; Roscor; Rosner; Satellite Consultants; Shook; Specialty Vehicles; Tele-Measurements; Television Engineering Corp; Thomson Video; Townsend/Broadcast Systems; Wolf

7.M. Satellite Time Brokers/Services

SUPPLIERS:

American Network; AT&T Comm; Comsat General; Comsat Intl; Ethereum; Houston Intl; Hubbard; Netcom; RCA Americom; Satallease; Video Tape Co.; Videostar; Wold Comm

7.N. Music Libraries

SUPPLIERS:

Action Video; American Image; Associated Production; Carleton; Century III; Channel One; Conner; DeWolfe; Digital Programming; Firstcom; Happi; Jam Creative; Kalamusic; Kluge; Manhattan Production; Media General; Music Director; Network Production Music; Omnimusic; Palmer Films; Polycom; Production Masters; Radio Program; RPM; Soper Sound; Systemation; Tanner; Transcom; Valentino; Windsor

7.O. Video/Film Stock Shot Library

SUPPLIERS:

Action Video; Carleton; Channel One; MPCs; Photo Store; Picture Management; Polycom; Rosebush; Tri Video

7.P. Syndicated Radio Programming

SUPPLIERS:

Accu-Weather; BPI; Broadcast Music; Century 21; Concept Productions; Conner; Digital Programming; Firstcom; Happi; Houston Intl; Media General; Music Director; Musicworks; Peters; Radio Arts; Radio Program; Real Radio; RPM; Satellite Music

7.Q. Other Services

SUPPLIERS:

A&S Case; Accu-Weather; Agfa; Alliance; Allied Film; American Image; Arben; Associated Press; Audio Plus Video; Austin; Barrett; Beemish; Bonneville Satellite; Bush & Millimaki; Carleton; Carob; Cascom; Center Video; Century III; Channel One; Cross Information; Dataworld; Drake-Chenault; Econco; Editel; Electro & Optical; Fiorentino; Graphic Express; Grinnan; Group W Satellite; Howe Tech; Hudson AV; Intercontinental; Jem-Fab; JRF; Larcen; Lerro; Lontas; Marathon; Mead Data; Micro-Trak; Midwest; Miller Assoc; National Video Svce; Northern Magnetics; Peters; Pioneer; Pittard; Production Masters; PTS; Radio Systems; Re-Play; Rosebush; Satellite Music; Spencer Broadcast; Starfax; Tele-Measurements; Telemation; TVC; United Press Intl; United Research; Valentino; Video Tape Co; Weather Services

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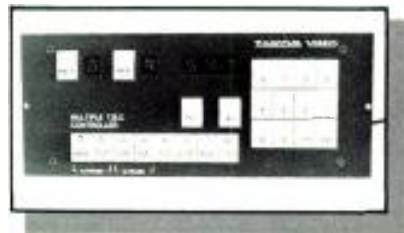
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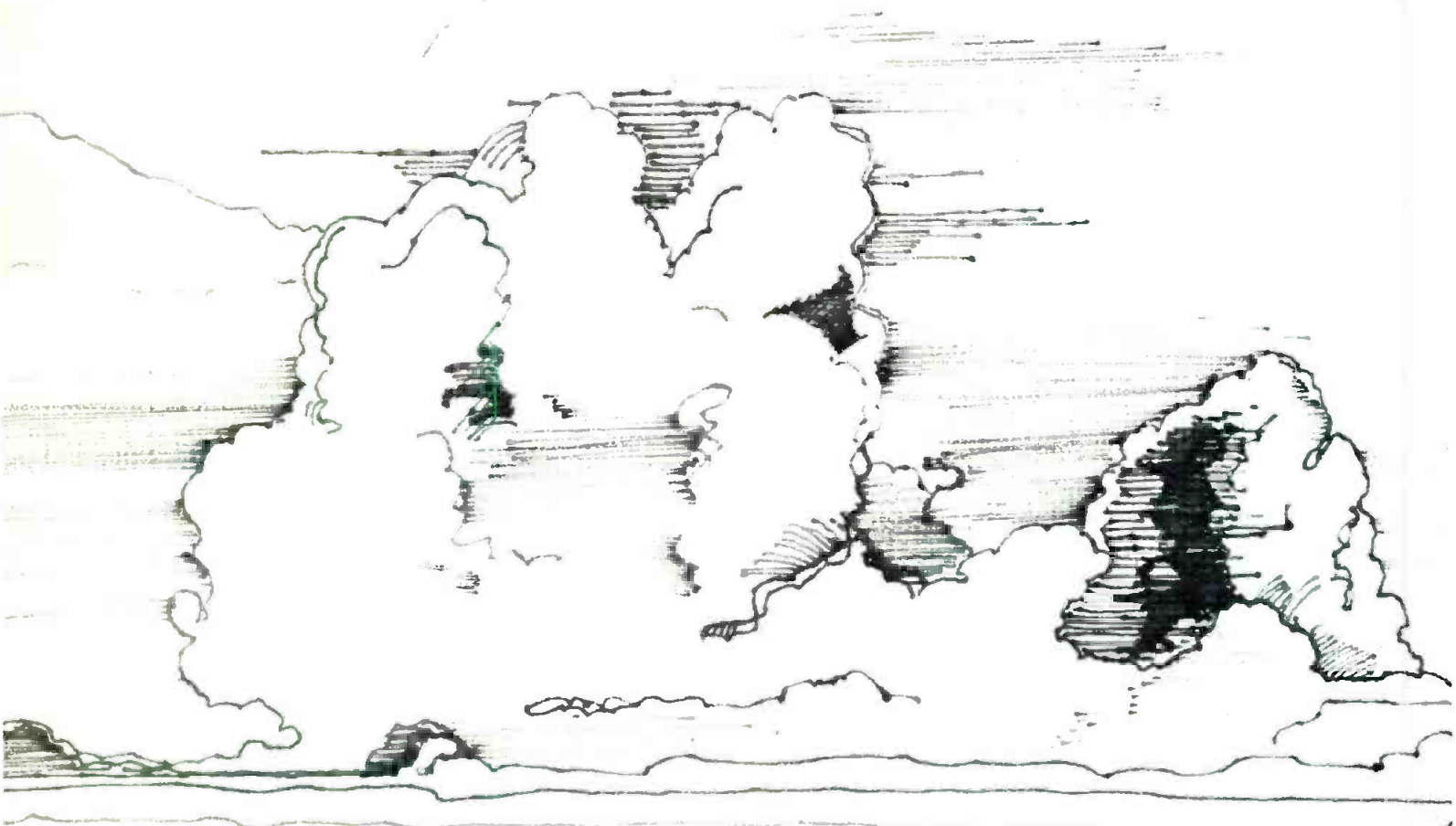


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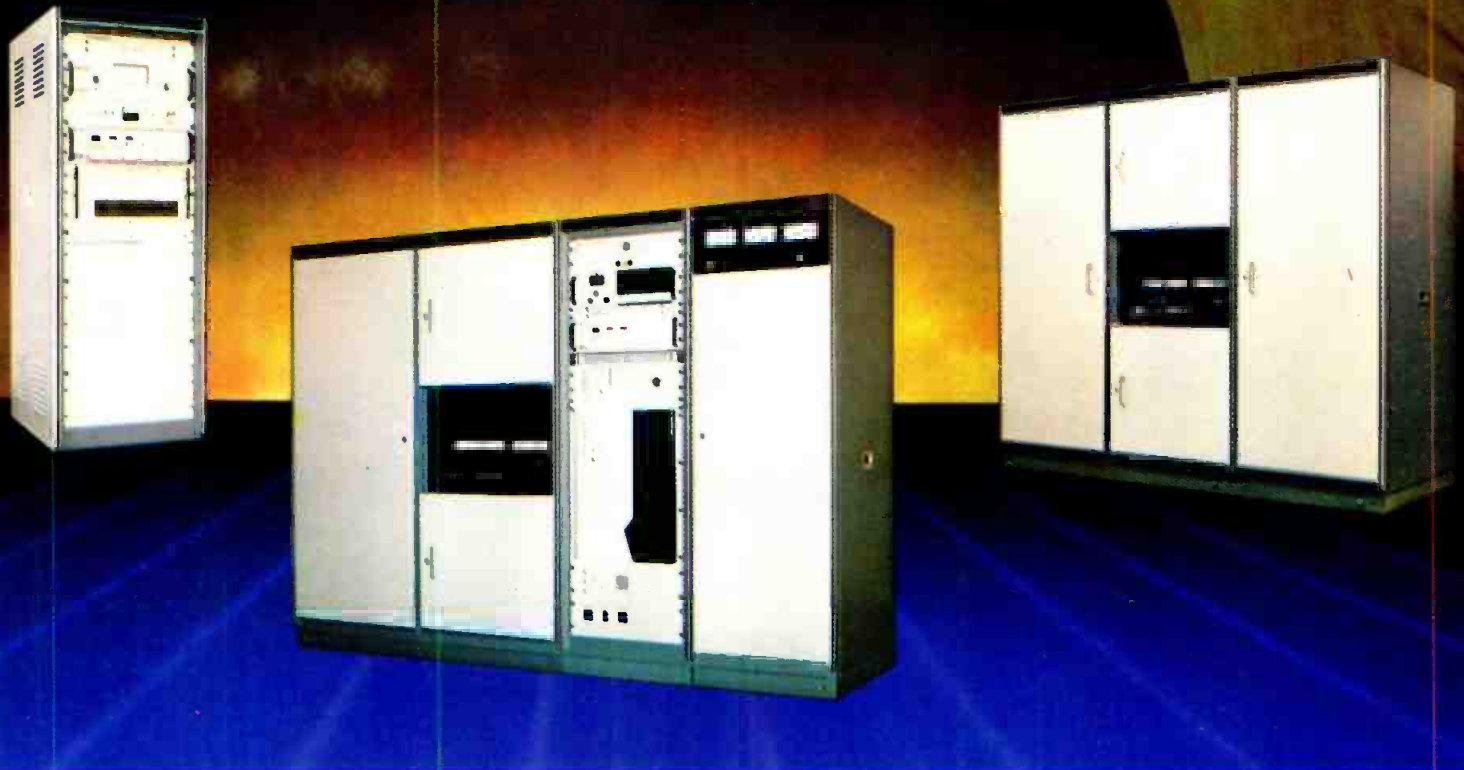


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NY Art Shifrin, 1010 Northern Blvd., Great Neck 11021 516 829-0820
TX Tom Hooper, 16309 Dalfmalley Ln., Dallas 75248 214 385-4544

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See ad on page 41 *Circle No. 126*

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See ad on page 38 *Circle No. 125*

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Multitrack & 2-/4-track studio ATRs; tape duplicators; turntables; audio noise reduction system. Telco interface equipment; VU meters. FM transmitters; FM excitors; RF amplifiers, tubes, filters, loads & switches. FM SCA equipment; two-way radio communications systems; high-power short wave transmitters. RF power meters & wattmeters; vacuum tubes.

AEG CORP. ▲
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615 883-0491
Multitrack & 2-/4-track studio ATRs.

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GA 380 Interstate North #200, Atlanta 30339 404 955-4326
IL 2803 Butterfield Rd. #200, Oak Brook 60521 312 242-1951
TX 4251 W. Highway 114, Irving 75063 214 258-1441

See ad on page 16 Circle No. 111

AIRFAX VIDEO
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312 944-5577

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See ad on page 45

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SC-Master automated master control switcher. SC-Router parallel & serial interface video routing switchers; parallel & serial interface machine control/ technical automation. Media Manager & Schedule Manager business automation software.

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Field Offices:

CA Tony Mezzi, 3808 Riverside Dr. #303, Burbank 91505 818 843-5052
GA Mark Drummond, Shannon Towers #314, 4405 Mall Blvd., Union City 30291 404 964-1464
IL Tom Harle, 5097 N. Elston Ave. #303, Chicago 60630 312 794-0224
TX Pat Hurley, Chaddick Ctr. #309, 1201 E. 15, Plano 75074 214 423-8667
WA Cal Vandergrift, 112 S. 344 St. #312, Federal Way 98003 206 941-5453

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DC Deborah Farrell/Jeff Jefferis, 717 Second St. N.E., Washington 20002 202 546-2228
FL Jim Caron/Jim Kelly, 45 N. Texas Ave., Orlando 32805 305 298-0012
IL Grant Ireland/Keith Pokorny, 1322 W. Belmont, Chicago 60657 312 298-0012
TN Michael Devany, Modine Rd., Clinton 37716 615 457-7772
TX Charles Floyd/Jack Dean, 6305 N. O'Connor Rd. #111, Irving 75039 214 869-0100

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See ad on page 4 Circle No. 103

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Alphatized modified Sony 3/4-inch VCRs. Custom vans.

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800 251-2058

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AMERICAN MAGNETIC MEDIA
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AMERICAN NETWORK GROUP
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614 742-6105

Satellite time brokers (Westar IV, SCPC).

AMERICAN VIDEO FACTORY
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213 823-8622

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AMHERST ELECTRONIC INSTRUMENTS
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Video animation controllers; 3D modeling & manipulation. Parallel & serial interface machine control/technical automation. Two-machine editor/controllers, A/B-roll editors; SMPTE time code generators/readers. TBCs, noise reducers, image enhancers.

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215 647-1000

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CA Tom Laury, 3760 Cahuenga Blvd., N. Hollywood 91604 818 980-4212
GA Lee Nowell, 6251 Smithpointe Dr. #410, Norcross 30092 404 242-2624
IL Greg Smith, 360 Beinoris Dr., Wood Dale 60191 312 860-7373
NY Ed Cirri, 230 Duffy Ave., Hicksville 11802 516 931-6200
TX Bill Smithson, 13773 N. Central Expwy. #1228, Dallas 75243 214 231-3481

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ENG cameras; one-inch C & Betacam VTRs; composite digital multicassette decks. Replacement video heads. Half-inch, 3/4-inch, one-inch, two-inch & digital videocassettes. Digital still stores, digital art/paint systems, PictureMaker 3D modeling & manipulation systems. Compact, studio/mobile & post-production switchers. Digital efx generators. Multisource video editors. TBCs. Video cart systems.

Field Offices:

CA Frank Rush, 340 Parkside Dr., San Fernando 91340-3098 818 365-8627
GA Paul Hansil, 1872 Montrea Rd., Tucker 30084-5709 404 491-7112
IL Dick Coomes, 719 W. Algonquin Rd., Arlington Heights 60005-4448 312 593-6000
MD Mike Wolschon, 10215 Fernwood Rd., Bethesda 20817-1198 301 530-8800
NJ Robert Natwick, 5 Pearl Ct., Allendale 07401-1678 201 825-9600
TX Mike Richardson, 3353 Earhart Dr., Carrollton 75006-5026 214 960-1162

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415 367-3809

Open-reel audio tape, audio cassettes, empty reels & carts. Videotape: two-inch, one-inch, 3/4-inch cassettes, half-inch cassettes, empty reels, carts & cassettes.

See ad on page 46-47 Circle No. 130

AMTEL SYSTEMS
33 Main St. #303, Nashua, NH 03060

603 880-9011

Time code synchronizers, multisource editors, SMPTE time code generators/readers & VITC reader/generators.

AMTRON CORP. ▲
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408 688-4445

Ultra high-resolution RGB color monitors.

ANCHOR AUDIO ▲
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213 533-5984

Monitor speakers; Porta-Com hardwired intercoms. Dynamic mic. Amplified monitor speaker.

ANDERSEN LABORATORIES
1280 Blue Hills Ave., Bloomfield, CT 06002

203 242-0761

Video delay lines. RF filters.

ANDREW CORP. ▲
10500 W. 153 St., Orland Park, IL 60462
312 349-3300

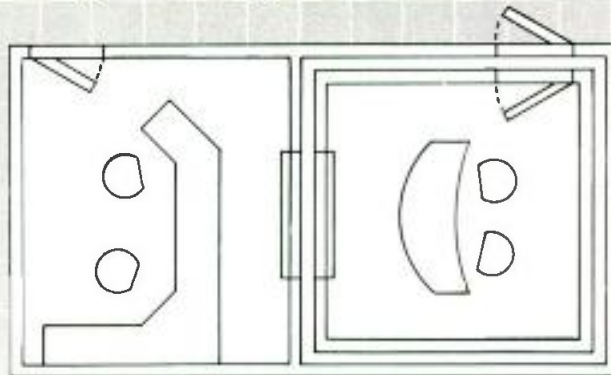
Transmit/receive, receive-only & transportable satellite earth stations; satellite network controllers. Intercity microwave systems & masts. Trasar TV HP & CP antennas; FM & communications antennas. Rigid transmission line; Helix foam dielectric & coaxial transmission line, RF connectors. Grasis tower masts, rigging, hardware & lighting.

Field Offices:

CA 1037 W. 9 St., Upland 91786

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Acoustic Systems acoustically engineers prefabricated, modular designed enclosures for broadcast, recording, and production requirements. Our effective system for sound isolation is designed to meet any space requirement or configuration. The modular enclosures are capable of expansion or can be disassembled, moved, and reassembled without loss of acoustic integrity, which is guaranteed within ± 3 dB. Our systems approach includes client consultation, design, fabrication, installation, and final inspection to provide a complete customized enclosure. For consultation on broadcast, recording, or production enclosures call toll free (800) 531-5412.

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Circle 126 on Reader Service Card

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 CO 451 E. 58 Ave. #2585, Denver 80216 303 295-1042
 GA 6205 Barfield Rd. N.E. #245, Atlanta 30328 404 256-0881
 IL 10500 W. 153 St., Orland 60462 312 349-5950
 MA 393 Totten Pond Rd., Waltham 02154 617 890-0888
 MO 301 Duck Rd., Grandview 64030 816 966-6400
 NJ 550 N. Maple Ave., Box 5127, Ridgewood 07451 201 652-1310
 TX 2701 Mayhill Rd., Denton 76205 817 565-1553
 TX 1850 N. Greenville Ave., Richardson 75081 214 699-0672
 VA 1481 Chain Bridge Rd. #102, Box 1277, McLean 22101 703 442-8771

ANGENIEUX ▲
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 305 595-1144
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Field Office:
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 516 735-2454

R.B. ANNIS CO.
 1101 N. Delaware St., Indianapolis, IN 46202
 317 637-9282
 Audio head cleaners & degaussers; audio & videotape erasers & degaussers. Magnetic field indicators.

ANRITSU AMERICA ▲
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 201 337-1111/800 255-7234
 Fiberoptic systems. Audio signal analyzers, spectrum analyzers. Video test signal generators, waveform monitors, diff. phase/gain meters, video noise meters, automatic VITS analyzers, automatic video analyzers. Field intensity meters, RF power meters, watt meters, RF test signal generator, impedance bridges, MSA microwave system analyzers. Microwave & millimeter power meters. Signal generators, frequency counters.
Field Office:
 CA 2370 Qume Dr., San Jose 95131
 408 434-6666

ANT TELECOMMUNICATIONS ▲
 205 Perry Pkwy., Gaithersburg, MD 20877
 301 670-9777
 Telcom audio noise reduction.

ANTENNA TECHNOLOGY CORP.
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 602 264-7275/800 264-7275
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ANTON/BAUER ▲
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 203 929-1100
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 4128 Temple City Blvd., Rosemead, CA 91770

800 423-4297/in CA 800 242-4466
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APERT-HERZOG CORP.
 7007 Realm Dr., San Jose, CA 95119
 408 225-1425
 Digital still stores, scene change verification for cine transfer. Telecine control systems. TBCs, field/framestores. Digital video delay lines.

APHEX SYSTEMS ▲
 13340 Saticoy St., N. Hollywood, CA 91605
 818 765-2212
 Aural Exciter psychoacoustic enhancer. Compellor & Dominator AM & FM compressor/leveler/peak limiter; EQF-2 parametric equalizer. Security covers.

APPLELOG
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 412 283-1500
 Radio business automation software.

APPLIED DIGITAL TECHNOLOGY
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 212 929-2360
 Telecon color correcting & video processing computer system.

APPLIED RESEARCH & TECHNOLOGY/ART
 See ART

ARBEN DESIGN ▲
 600 W. Roosevelt, West Chicago, IL 60185
 312 231-5077
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ARISTE SOFTWARE ▲
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 415 459-1519
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ARISTOCART, DIV. WESTERN INTL. ▲
 17-825 McBride Blvd., New Westminster, BC, Canada V3L 5B5
 604 826-3214
 Open-reel audio tape, carts, test tapes & leaders.

ARRAKIS ▲
 2619 Midpoint Dr., Fort Collins, CO 80525
 303 224-2248
 Mic mixers; portable, mono & stereo studio consoles. Audio routing switchers. Studio furniture; cart/tape storage.

ARRIFLEX CORP. ▲
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 914 353-1400
 Cine cameras. Zeiss motion picture lenses. HMI fixtures; Arriflex quartz fixtures; lighting stands, rigging. Tripods, heads. CineJib crane; camera stabilizing systems.

ART/APPLIED RESEARCH & TECHNOLOGY ▲
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 716 436-2720
 Graphic equalizers; digital audio efx & reverb, digital delay.

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Field Offices:
 CA Ron Pretelac, Box 6956, Westlake Village 91359 805 495-4883
 PA Bob Rosenbaum, 137 N. 22 St., Philadelphia 19103 215 557-7993

ARTRONICS
 See GENIGRAPHICS

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 315 793-8500
 Hardwired teleconferencing system. Tie Line audio test equipment.

ASACA/SHIBASOKU CORP. ▲
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 Sync, black burst, color bar & SID generators. NTSC encoders. Video monitors: NTSC, RGB, high-resolution battery-powered portable monitors; monitor calibrators. Stereo generators, modulators. Audio test signal generators, harmonic distortion meters, wow & flutter meters.

A&S CASE CO.
 1111 N. Gordon St., Hollywood, CA 90038
 213 466-6181
 Cabinets, equipment racks, cart/tape storage.

ASHLY AUDIO
 100 Fernwood Ave, Rochester, NY 14621
 716 544-5191
 AM & FM compressor/limiters, parametric & graphic equalizers; monitor/power amps.

ASSOCIATED PRESS BROADCAST SERVICES
 1825 K St. NW #615, Washington, DC 20006
 202 955-7243
 TV and radio wire services; video news wire; AP Network News. Wire service printers.

ASSOCIATED PRODUCTION MUSIC
 888 Seventh Ave., New York, NY 10106
 212 977-5680
 Production music libraries on CD; audio post-production; custom music.
Field Office:
 CA Kassie Goraieb, 6255 Sunset Blvd. #724, Hollywood 90028 213 461-3211
 See ad on page 44 Circle No. 128

ASTON ELECTRONICS ▲
 346 N. Lindenwood Dr., Olathe, KS 66062
 913 782-4007
 Aston 3, Aston 4 & A3B character generator/graphics systems.

“Auditronics’ 310 does everything we need to do, and didn’t kill my budget,”

says Orlando’s Jim Doyas.*

“Our new WOFL-TV 35 production facility at Lake Mary, Florida requires the use of 10 mike channels and between 12 and 15 VTR inputs in stereo on a regular basis to handle eight 1” machines plus our quads and other line-level sources.

To get this kind of flexibility, I bought the largest 310 mainframe Auditronics makes, which gives me several blank positions for future expansion and still fits within our audio control room. The 310 is versatile enough that we were able to get all the functions we needed just by picking standard modules. No custom or engineering-built items were needed, which kept our cost down.

In fact, we looked at several other boards that cost \$80,000 and up, but I found the Auditronics 310 would do all that they would do, and for less money.

One reason I leaned toward Auditronics on this purchase was that I had one of their old 110 production boards 10 years ago when I was with the ABC affiliate in Phoenix. Since that was a great board and very reliable, it was natural to go back to Auditronics a second time.

Another factor was the assistance of their dealer, Control Technology, in Fort Lauderdale. Mike Quinn really came through for us with good service, and they treated us right as well.

Our 310 has required no maintenance at all thus far, and I don’t expect it will require any. We depreciate our equipment over seven years, but I expect to get at least twice that number of years of useful life out of our Auditronics 310”.

If you’d like to know more about why Meredith Broadcasting’s Jim Doyas chose the 310 for his WOFL-TV showcase production facility, call Auditronics toll-free at 800-638-0977 for complete information and a demonstration near you.



 **auditronics, inc.**

3750 Old Getwell Road, Memphis, TN 38118
901 362-1350

*Jim Doyas, Director of Engineering
WOFL Channel 35 Orlando

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ASTATIC

Harbor & Jackson Sts., Conneaut. OH 44030

216 593-1111

Dynamic, electret condenser & PZM mics.

ATI-AUDIO TECHNOLOGIES ▲

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MicroAmp mic mixers; Vanguard Series portable, mono studio & stereo studio audio consoles. EmphaSizer ALC & AGC amps, AM & FM compressor/limiters, parametric equalizers. Encore, MicroAmp preamps, audio DAs; MicroAmp Series line amps, monitor/power amps, amp power supplies. MicroMeter audio routing switchers, VU meters, PPM meters & LED audio level displays. IHF-PRO interface box.
See ad on page 51 Circle No. 134

ATLANTIC RESEARCH CORP.

5390 Cherokee Ave., Alexandria, VA 22312-2302

703 642-4000

Facilities design & engineering services; engineering consultants.

ATLANTIC VIDEO

150 S. Gordon St., Alexandria, VA 22304

703 823-2800

Video production & post-production facilities; mobile production facilities rental; set/studio design services.

ATLAS/SOUNDOLIER

1859 Intertech Dr., Fenton, MO 63026

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212 582-2345

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201 234-7546

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AUBURN INSTRUMENTS ▲

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617 923-4747

Parallel interface machine control.

AUDICHRON CO.

3620 Clearview Pkwy., Atlanta, GA 30340

404 455-4890

Automatic time/weather announcement systems.

AUDICO ▲

219 Crossen Ave., Elk Grove, IL 60007

312 640-1030

Audio & videotape loaders, timers, rewinders. Videotape cleaners, evaluators.

AUDIO ACCESSORIES, INC. ▲

Mill St., Marlow, NH 03456

603 446-3335

Audioline audio patch panels; prewired jack panels. Miniature & full-size patch cords.
See ad on page 48 Circle No. 131

AUDIOARTS ENGINEERING, DIV. WHEATSTONE ▲

5 Collins Rd., Bethany, CT 06525

203 393-0887

AM & FM compressor/limiters; parametric & graphic equalizers; audio crossovers.

AUDIO BROADCAST GROUP

2342 S. Division, Grand Rapids, MI 49507

616 452-1596

Studio furniture. Audio turnkey facility installations; distributor of audio equipment.

AUDIO & DESIGN CALREC ▲

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206 275-5009

Portable audio consoles, stereo studio consoles, audio-for-TV consoles, console automation. Digital audio recorders. ALC & AGC amps, AM & FM compressor/limiters, parametric & graphic equalizers, audio noise reduction. Analog efx & reverb. Electret condenser mics. Preamps, line amps, monitor/power amps. Audio DAs. SMPTE time code generator/readers.

AUDIO DEVELOPMENTS

See PORTLAND INSTRUMENTS

AUDIO/DIGITAL ▲

1000 S. Bertelsen Rd. #4, Eugene, OR 97402

800 423-1082/503 687-8412

Digital audio delay; broadcast profanity delay & digital processor.

AUDIO KINETICS

1650 Hwy 35 #5, Middletown, NJ 07748

201 671-8668

MasterMix audio console automation; Q.Lock SMPTE time code synchronizers; audio/video sync delay; Pace low-cost synchronizer; Eclipse 32-machine editing system.

AUDIOLAB ELECTRONICS ▲

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916 348-0200

Audio & video tape erasers, degaussers; communications antennas; antenna tuning units. Digital clocks, timers.

AUDIO METRICS

See RADIO SYSTEMS

AUDIO PLUS VIDEO INTL.

1438 N. Gower St., Hollywood, CA 90028

213 856-0152

Digital standards conversion service.

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216 686-2600

Mic mixers, portable and stereo studio audio consoles. Phono cartridges; headphones. Mics: dynamic, electret condenser, shotgun, lavalier & modular capsule systems. Audio & video cable; cable connectors.

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Box 94487, Schaumburg, IL 60195

312 882-6481

Audio noise reduction. Audio line amps. VU, PPM, LED level meters, dB meters.

AUDIO VIDEO CORP. ▲

213 Broadway, Albany, NY 12204

518 449-7213

Video production & post-production facilities; equipment rental service; facilities design & engineering services.

Field Offices:

NY 6493 Ridings Rd., Syracuse 13206
315 463-9736

NY 8050 Wehrle Dr., Buffalo 14221 716 634-8621

VT 3-1/2 Elliot St., St. Johnsbury 05819 802 748-5600

AUDIO-VIDEO ENGINEERING CO.

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516 546-4239

Hum-bucking coils.

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Monitor speakers. Line amps, monitor/power amps. Audio DAs; audio multi boxes, splitters. Transformers.

Circle 128 on Reader Service Card



GET IT IN

In the field or on the run, the **AKG C 522 ENG**, mics it just like you hear it — in stereo. Wherever you are, whatever you're recording, from courthouse interview, press conference, rock concert, to forest fire, the C 522's clarity, rugged performance, and convenience are exactly what you need to add a true-life dimension.

Inside its sturdy housing are two matched cardioid condenser

STEREO.

capsules, elastic-mounted for low noise and pre-configured to give you a smooth, one-handed XY-stereo field. It's a workhorse mic, with the little extras a working pro needs, like a built-in rechargeable battery, low-power warning LED, integrated on/off switch and boom mount shock suspension.

Get it live in stereo with the **AKG C 522**.

Reporter: Denise O'Brien.
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Stamford, CT 06902

The News



The News Tape

Capturing the news is a tough job, and you need a video tape that gets the whole story. From harsh location environment to air, the choice is Ampex 197, 198 and 199 videocassettes. Built to provide the consistent, reliable performance you need to deliver the news.

With a rugged, high-impact cassette mechanism made from the toughest ABS materials. So it stands up to the toughest handling. And a cassette shell molded from antistatic plastics to reduce static charge. So dust and debris stay in the field. Not on your video tape.

Plus you get a unique new labeling system that helps you find material fast. Because you don't have time for delays.

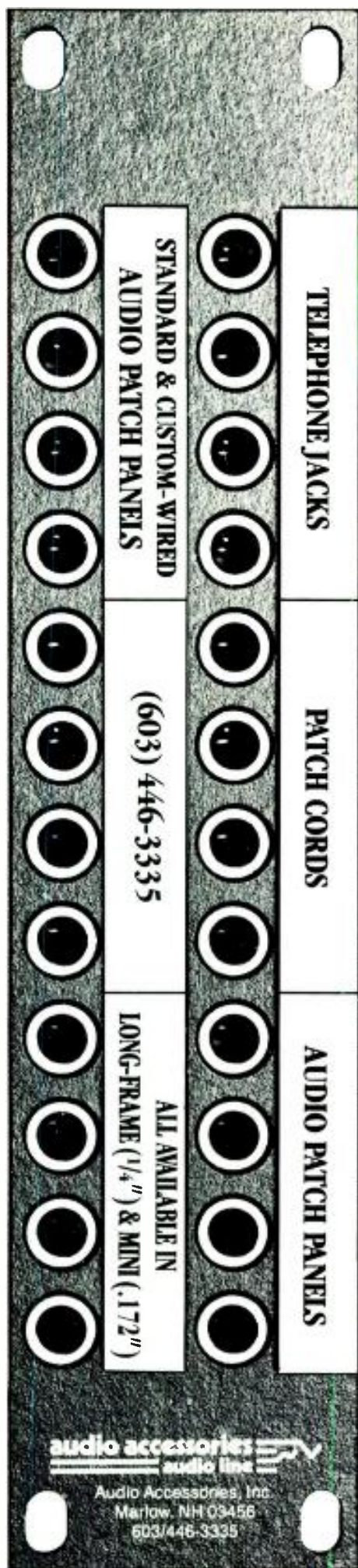
So when you choose Ampex 197, 198 and 199 videocassettes, you don't just get video tape. You get the news tape.

AMPEX

Ampex Corporation, Magnetic Tape Division
401 Broadway, Redwood City, CA 94063, 415/367-3809

Circle 130 on Reader Service Card





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AUDITRONICS ▲

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901 362-1350

Stereo studio & audio-for-TV consoles. Preamps, line amps. Audio DAs, routing switchers, patch panels, jackfields, telco interface equipment, audio multi boxes, splitters. LED displays.

See ad on page 43 Circle No. 127

AUERNEIMER LABS & CO. ▲
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209 442-1048

Monitor speakers.

AURATONE CORP. ▲
Box 698, Coronado, CA 92118
619 297-2820

Monitor speakers.

AURORA SYSTEMS ▲
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415 777-2288

Character generator/graphics systems, digital art/paint systems, 3D modeling & manipulation systems, "draw-on-screen" systems. Weather graphics display.

THE AUSTIN CO.
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214 424-8585

Mono & stereo studio consoles, console automation, audio-for-TV consoles. Digital clocks, timers.

AUTOMATED BROADCAST CONTROLS
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Complete program automation systems. Radio business automation hardware.

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MD 10005 Old Columbia Rd. #N165, Columbia 21046 301 381-2600
TX 101 W. Renner Rd., Richardson 75080 214 437-5694

AVCOM OF VIRGINIA ▲
500 Southlake Blvd., Richmond, VA 23236
804 794-2500

Receive-only satellite systems,

downconverters. Spectrum analyzers. RF test signal generators.

See ad on page 34 Circle No. 120

AVC SYSTEMS
2709 E. 25 St., Minneapolis, MN 55406
612 729-8305

Equipment rental services; distributor of audio & RF equipment.

Field Office:
IL 747 Church Rd. #A6, Elmhurst 60126
312 279-6580

AVSC ▲
1880 Embarcadero Rd., Palo Alto, CA 94303
415 493-3814

Replacement audio heads; head cleaners, degaussers. Audio cassettes, test tapes & leaders, tape erasers & degaussers. Video head cleaners & degaussers; VTR refurbishing & rebuilding; videotape erasers & degaussers.

BAF COMMUNICATIONS CORP. ▲
17 Everberg Rd., Woburn, MA 01801
617 932-3232

SNV mobile satellite vehicles, conventional & hub-mounted.

WILLIAM BAL CORP.
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201 354-9625

Foam insert transportation cases. Videotape cases. Custom case design.

BALD MOUNTAIN LAB ▲
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518 279-9753

BML Audio step generator; digital dB meters; dB meters.

BALLY ENGINEERED STRUCTURES ▲
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215 845-2311

Remote equipment shelters.

BARBIZON
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212 586-1620

Lighting equipment rentals including lamps, HMI & quartz fixtures, lighting stands, connectors, dimmers; rentals of nicad power equipment, generators, HMI ballasts; lighting/ac cable. Foam insert, padded nylon & rack configuration cases; editing production consoles.

BARCO INDUSTRIES ▲
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408 370-3721

NTSC decoders, comb filter decoders. Video monitors: monochrome, NTSC, RGB, high resolution.

Field Offices:
NC 4420 Taggart Creek Rd. #101, Charlotte 28208 704 392-9371
NH 472 Amherst St. #10, Nashua 03063 603 880-1430

See ad on page 50 Circle No. 133

BARCUS-BERRY ELECTRONICS ▲
5500 Bolsa Ave. #245, Huntington Beach, CA 92649
714 897-6766

Audio signal processor.

- All new electronics and audio transformers, for superb audio quality — ideal for compact disks. New *plug-in* audio inputs.
- Transformer mic and active balanced line inputs on every mixer position. Optional transformer-less mic input.
- Optional 5-frequency EQ and Pan Pot on any mixer position.
- Optional Aux Send module for reverb and effects.

- New and improved slide fader with external cue detent switch.
- Prefader patchpoints and phantom power supply inputs on each mixer.
- Optional peak flashing indicator behind red area of VU meters.
- New control room monitor module with 3-frequency headphone EQ.
- Front panel digital up-timer.

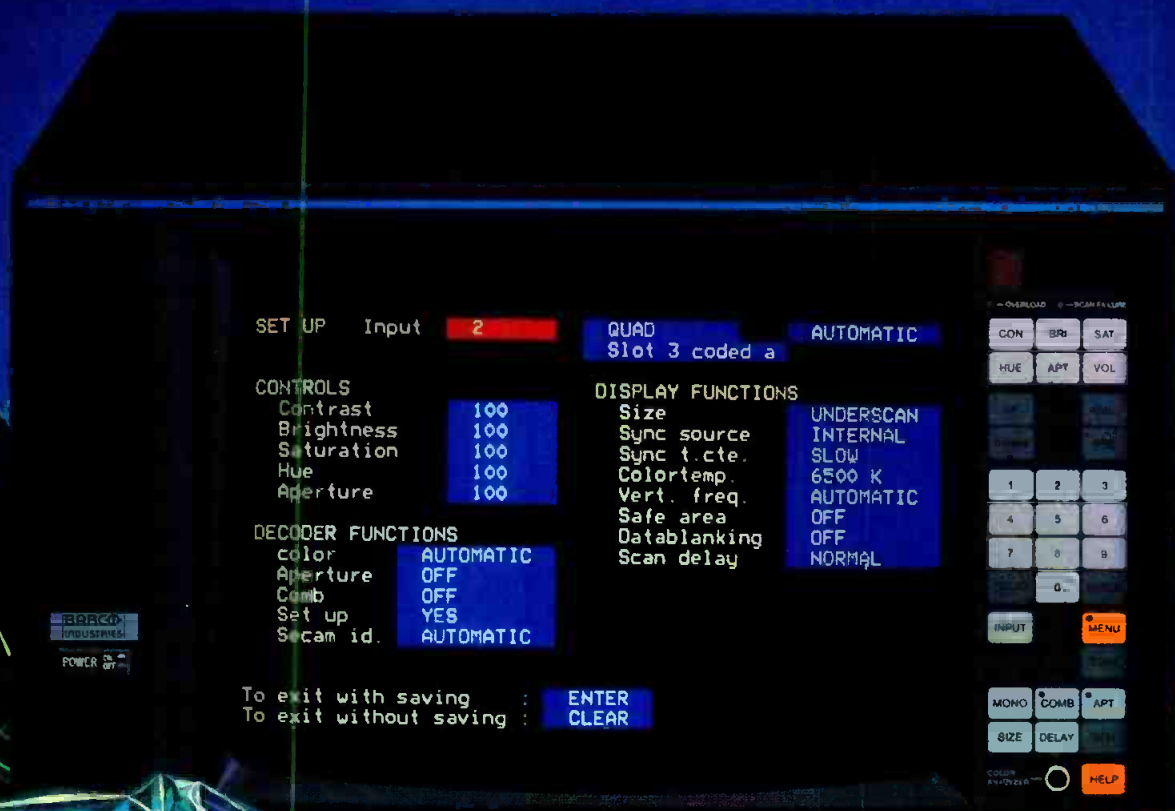
Five models available with 6-16 mixers — call for brochure.

11306 SUNCO DRIVE, RANCHO CORDOVA, CA 95670 • (916) 635-1048

Circle 132 on Reader Service Card



THE FIRST INTELLIGENT BROADCAST COLOR MONITOR



BARCO INDUSTRIES' new CVS professional broadcast monitor is microprocessor-based to make it intelligent in operation and easy to use.

It has both a digital and an analog bus for maximum flexibility. Plus four "open" slots that let you plug in today's options and those yet to come. As new features do come along, you'll be able to add them through software - no hardware changes!

All CVS functions are controlled from the front of the monitor or from a remote keyboard. An optional master remote permits control of a series of monitors.

WE PUT THE FUTURE IN THE PICTURE.

**BARCO
INDUSTRIES**

You can also store, and automatically call up, either calibrated presets or your own preferred presets.

Like our best master control monitors, the CVS has Automatic Kinescope Biasing (AKB) to maintain color and black level stability.

The CVS also generates more internal test patterns than any other monitor. They include white field, cross hatch and color bars.

The CVS is available in both 14 inch and 20 inch versions, and provides outstanding picture quality in any TV standard.

For complete specifications, contact your local BARCO INDUSTRIES Dealer or BARCO INDUSTRIES, 170 Knowles Drive, Suite 212, Los Gatos, CA 95030. Phone: (408) 370-3721.

BARCO INDUSTRIES is a member of the ACEC-group

www.americanradiohistory.com

BARDWELL & McALLISTER
2621 Empire Ave., Burbank, CA 91504
213 849-5533

Quartz lighting fixtures, cyc lighting, lighting stands & rigging.

BARRETT ASSOCIATES
3205 Production Ave., Oceanside, CA 92054
619 433-5600
Used & reconditioned audio & RF equipment.

BASF SYSTEMS CORP.
19 Crosby Dr., Bedford, MA 01730
617 271-4000
Open-reel & cassette audio tape, test tapes. Videocassettes.

BASYS ▲
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415 969-9810
Radio & TV newsroom computer systems.

BAY AREA MOBILETAPE
1019 E. San Carlos Ave., San Carlos, CA 94070
415 593-7124
Mobile production facilities rental.

BAYLY ENGINEERING
See AEG BAYLY

B&B SYSTEMS ▲
28111 N. Ave. Stanford, Valencia, CA 91355
805 257-4853
PPM meters, LED displays. Audio processing.

BBL INDUSTRIES
2935 N.E. Pkwy., Atlanta, GA 30360
404 449-7740
Telephone systems.

BC ENGINEERING ▲
3790 Mohawk St., Pasadena, CA 91107
818 792-9604
Automated event controller. Facilities design & engineering; engineering consultants.

BEAVERONICS ▲
8 Haven Ave., Port Washington, NY 11050
516 883-4414
Compact studio/mobile production switchers. RGB chromakeyers, title keyers, downstream keyers. Favag master clock systems & timing devices.

FRANKLIN R. BEEMISH & CO.
400 Roosevelt Ave., Freeport, NY 11520
516 868-1428
Facilities design & engineering services; engineering consultants; earth station site selection; architectural & interior design.

BELAR ELECTRONICS LABORATORY ▲
119 Lancaster Ave. Box 76, Devon, PA 19333
215 687-5550
Demodulators, modulation monitors, frequency monitors & controllers.
See ad on page 53 Circle No. 135

BELDEN COMMUNICATIONS ▲
534 W. 25 St., New York, NY 10001
212 691-1910

Lee resin & photographic camera filters; Fee diffusion diffusion & etx material.

BELDEN ELECTRONIC WIRE & CABLE
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317 983-5200
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BELL HELICOPTER/TEXTRON
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817 280-8200
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800 592-4644
Monitor speakers.

BEXT, INC. ▲
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FM, VHF & UHF transmitters. FM exciters; stereo generators. RF amplifiers. Intercity STL systems; 2, 10 & 20W composite STLs.

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See ad on page 49

Circle No. 132

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 GA 1281 Kennestone Cir. #600, Marietta 30066 404 422-5200
 IL 555 W. Central Rd., Hoffman Estates, 60195 312 358-7582
 MA 185 Forest St., Marlborough 01752 617 481-7737
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See ad on page 54 Circle No. 136

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509 838-0110

Audio & video DAs, audio routing switchers. Parallel & serial interface video routing switchers.

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 CA Michael Hart, 3760 Cahuenga Blvd. W., Studio City 91604 818 766-8184
 FL Martin McGreevy, 5778 Grande Lagoon Blvd., Pensacola 32507 904 492-1600

IL Jim Skupien, 3436 N. Kennicott Dr. #110, Arlington Heights 60004

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 ME Stephen P. Sedoff, 537 Ferry Rd., Saco 04072 207 283-0777
 MN Jeff Clarine, 21644 Evans Trail, Fairbault 55021 507 334-1891
 NJ Alan Schoenberg, 900 Corporate Dr., Mahwah 07430 201 529-1550
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 91506 818 843-6644
 NY 304 First St., Liverpool 13088
 315 457-3703
 See ad on page 56 Circle No. 137

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 832 N. Victory Blvd., Burbank CA 91502
 818 840-0993
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 IL Dick Dunlavy/Harriet Friefeld, 3105-A N.
 Frontage Rd., Arlington Hgts. 60004
 312 577-6773
 PA Dennis Schleich/Holly Homka, 2980
 Ave. B, Lehigh Valley Ind. Pk #1, Bethlehem
 18017 215 868-1401
 See ad on page 57 Circle No. 138

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 ties; mobile production facilities rental.

CARLETON PRODUCTIONS ▲
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K2C 3G6
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 cording studios; equipment rental services;
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IL 941 N. Plum Grove Rd., Ste. B, Schaumburg 60195 312 843-7511

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IL Box 5108, Evanston 60204 312 864-6045
NY 19 William St. #3A, Mt Vernon 10552 914 668-4928
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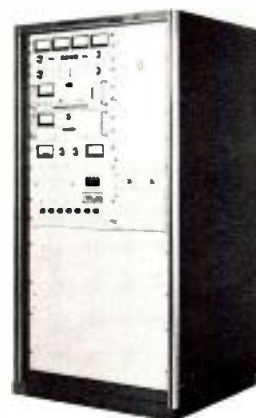
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CO Dick White, 6885 Xavier Cir. #3, Westminster 80030 303 650-5950
GA Wes Hanemayer, 6 Clarendon Pl., Avondale Estates 30002 404 289-4834
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CINEMILLS CORP.

3500 W. Magnolia Blvd., Burbank, CA 91505

818 843-4560

Daymax high-intensity bulbs for Strand Century HMIs; DeSisti lighting products; Sunburst HMI fixtures; Lee filters.

CINE 60 ▲

630 Ninth Ave., New York, NY 10036
212 586-8782

Sun-Gun quartz lighting fixtures. Nicad batteries, chargers. ENG shoulder braces.

Field Office:

CA 1050 Cahuenga Blvd., Hollywood 90038
213 641-3046

CIPHER DIGITAL ▲

Box 170, Frederick, MD 21701

301 695-0200/800 331-9066

Electronic audio editors; SMPTE time code synchronizers; digital audio editors. Two-machine editor/controllers, SMPTE time code generator/readers.

CIRCUIT DEVELOPMENT CO.

50 20 St., Brooklyn, NY 11232
718 768-4555

Headphones; RF intercom systems. IFB transmitters; cassette-to-mobile-radio interface. Two-way radio communications.

CIRCUIT RESEARCH LABS ▲

2522 W. Geneva Dr., Tempe, AZ 85282
602 438-0888

ALC & AGC amps; FM compressor/limiters; audio noise reduction. Stereo generators.

DAVID CLARK CO. ▲

360 Franklin St. Box 155, Worcester, MA 01613-0155

617 756-6216

Headphones. Hardwired intercom systems.

CLEAR-COM ▲

1111 17 St., San Francisco, CA 94107
415 861-6666

Hardwired & RF intercom systems.

CMC LTD.

601 Chestnut Ridge Rd, Chestnut Ridge, NY 10977

914-356-5300

Camera filters, lens remote control & automated camera control. Slow-scan transmitters/receivers

CMC TECHNOLOGY, DIV. OF DATATAPE

2650 Lafayette St., Santa Clara, CA 95050
408 980-9800

Replacement & rebuilt heads for quad & one inch VTRs; audio & videotape erasers, degaussers.

Field Offices:

CA Bill Zimborski, Encino 818 985-1324
GA Tommy Thompson, Atlanta 404 449-1166

IL John Lassandrello

Chicago, 312 334-0505

NY Fred Koehler, New York 212 486-1966

CN 1450 O'Conner Dr., Toronto, Ont. M4B 2T8 416 759-1306

CMX CORP. ▲

2230 Martin Ave., Santa Clara, CA 95050
408 988-2000

Electronic audio editors. A/B-roll editors, multisource video editors.

COASTCOM ▲

2312 Stanwell Dr., Box 27068, Concord, CA 94527

415 825-7500

Telco interface equipment.

COAXIAL DYNAMICS ▲

15210 Industrial Pky., Cleveland, OH 44135

216 267-2233/800 COAXIAL

RF loads. RF couplers & connectors. RF wattmeters, digital wattmeters, frequency monitors & controllers.

COHERENT COMMUNICATIONS ▲

13756 Glenoaks Blvd., Sylmar, CA 91342
818 362-9393

Portable audio consoles. Wireless mics
SMPTE time code generator/readers.

COLORADO VIDEO

Box 928, Boulder, CO 80306
303 530-9580

Colorizers; Field/framestores, video noise
reducers. Slow-scan transmitters/receivers

COLOR FILM CORP., VIDEO DIV.

98 Commerce Rd., Stamford, CT 06904
203 327-7270

Video post-production facilities. Video-
cassette duplication, film-to-tape transfers
TV standards conversion.

COLORGRAPHICS SYSTEMS

6400 Enterprise Ln., Madison, WI 53719
608 274-5786

ArtStar Plus/ArtStar 3D Plus character gen-
erator/ graphics systems & digital art/paint
systems; ArtStar 3D Plus 3D modeling & ani-
mation. LiveLine weather graphics displays,
weather-based art/paint systems.

COLORTRAN

1015 Chestnut St., Burbank, CA 91506
818 843-1200

Studio, TV, and theater lamps & quartz fix-
tures; HMI PAR Sunlites; Far Cyc & Cyc Strip
cyc lighting; Lee Color Media diffusion & efx
material; lighting stands & rigging, Patch-
man, Scene Master 60, Packmaster & Pres-
tige Series lighting control boards; dimmer
packs.

Field Offices:

CA John Fuller, 478 47 Ave., San Fran-

cisco 94121 415 668-4600
FL Jack Gallagher, 7406 Spring Ct.,
Tampa 33614 813 866-1377
NJ Alan Kibbe/Jane Head, Meadows Of-
fice Complex, 301 Rte. 17 N., Rutherford
07070 201 438-4009
TX Steve Surratt, 1603 Babcock #130, Of-
fice K, San Antonio 78229 512 344-5533

COLUMBIA AUDIO/VIDEO

1741 Second St., Highland Park, IL 60035
312 433-6010

Equipment rental service; video post-pro-
duction facilities.

COLUMBINE SYSTEMS

7 Jackson Bldg., Level 3, Golden, CO
80401

303 279-4000

Radio & TV business automation software &
hardware; music inventory & rotation sys-
tem; radio & TV newsroom computers. A/I
software for business automation-interfaced
switchers.

COMAD COMMUNICATIONS

1435 Bonhill Rd., Unit 34, Mississauga,
Ont., Canada L5T 1M1

416 676-9171

Audio routing switchers, patch panels &
jackfields. Audio Sentry & Video/Audio Sen-
try. Component switchers; parallel & serial
interface video routing switchers. Sira FM &
TV HP antennas.

COMARK COMMUNICATIONS,
DIV. OF THOMPSON-CSF

Box 506, Colmar, PA 18915

215 822-0777

Comark VHF/UHF transmitters; TV exciters,
diplexers, multiplexers, modulators. RF
amps, tubes, attenuators, converters, filters,
loads, switches. FM antennas; antenna tun-
ing units. Bogner, Dielectric/RCA, SWR, An-
drew, LeBlanc & Dick TV HP & CP antennas.
Coaxial and waveguide transmission line,
power dividers, RF connectors. EEV &
Amperex klystrons.

See ad on page 5

Circle No. 105

COMMUNICATIONS ALTATEC

5205 Airport Blvd. #200, Austin, TX 78751
512 453-4225

Video production & post-production facili-
ties; mobile production facilities rental;
equipment rental services.

COMPACT VIDEO SERVICES

2813 W. Alameda, Burbank, CA 91505
818 840-7000

Mobile teleproduction facilities rental; video
post-production facilities; satellite uplink &
downlink services; film-to-tape transfers;
tape duplication services; video & film
sound services.

COMPREHENSIVE VIDEO SUPPLY **CORP.**

148 Veterans Dr., Northvale, NJ 07647
201 767-7990

Audio & video cable. Tape erasers, de-
gaussers. Dimmer packs. Production com-
puter software. Distributor of microphones
(Shure), videotape (Maxell), lighting (laniro,



audiotape
BY CAPITOL

Duplicator Cassette and 8-Track Tape

apollo
BY CAPITOL

Master Lacquer Discs

audiopak
BY CAPITOL

Broadcast Cartridges

audiotape
BY CAPITOL

APOLO
BY CAPITOL

audiopak
BY CAPITOL

Capitol Magnetic Products

CORPORATE AND INTERNATIONAL SALES OFFICES: 6902 Sunset Boulevard Hollywood CA 90028 (213) 461 2701 Telex 4720854 Facsimile 12134676550

EASTERN SALES OFFICE: 2980 Avenue B Lehigh Valley Industrial Park #1 Bethlehem PA 18017 (1.15) 868 1401

CENTRAL SALES OFFICE: 1400 Renaissance Drive Suite 309 Park Ridge IL 60068 (312) 298 1806

WESTERN SALES OFFICE: 3116 West Avenue 32 Los Angeles CA 90065 (213) 254 9111 Facsimile 2132553392

UNITED KINGDOM: 13 U-bridge Road Hayes Middlesex UB4 0TG Unred Kingdom 561 0922 Telex 917029 Facsimile 15739623

© 1986 Capitol Records, Inc.

Circle 138 on Reader Service Card

Cobold), lamps (GE/Sylvania), diffusion & efx material (Rosco), batteries (Anton/Bauer), tripods & heads (Lisand, Bilora), dollies (Bilora), transportation cases (Calzone), cabinets & consoles (Bretford), test equipment (Leader), cable connectors (Hiros), & tools (Xcelite).

Field Office:

CA 2082 Michelson Dr. #212, Irvine 92715
714 851-8344

COMPRESSION LABS

2860 Junction Ave., San Jose, CA 95131
408 435-3000

Rebrandt high-bandwidth and Rebrandt 65 low-bandwidth audio & video codex compression gear.

COMPU = PROMPT

746 N. Cahuenga Blvd., Los Angeles, CA 90038

213 461-3113

Monitor-based, scroll entry, keyboard entry (Atari) & ENG/EFP portable teleprompters.

COMPUSONICS

2345 Yale St., Palo Alto, CA 94306
415 494-1184

Digital audio disk-based recording & editing systems; optical disk recorder; digital disk cartridge recorder.

COMPUTER CONCEPTS CORP.

8375 Melrose Ave., Lenexa, KS 66214
800 255-6350/913 541-0900

Complete program automation systems; radio business automation hardware.

COMPUTER GRAPHICS LABS

405 Lexington Ave., New York, NY 10174
212 557-5130

IMAGES II+ character generator/graphics systems & digital art/paint systems.

COMPUTER LABS, DIV. ANALOG DEVICES

7910 Triad Ctr. Dr., Greensboro, NC 27409
919 668-9511

Video A/D converters for TBCs.

COMPUTER PROMPTING CORP.

#831, 1511 K St. N.W., Washington, DC 20005

202 783-2051

Monitor-based, scroll & keyboard entry, ENG/EFP portable & computerized teleprompters; closed captioning software. Titlers, subtitles; character generator/graphics systems.

COMREX CORP.

65 Nonset Path, Acton, MA 01720
617 263-1800

Portable audio consoles. RF intercom systems. Telco interface equipment. Frequency extenders.

COMSAT GENERAL CORP.

950 L'Enfant Plaza SW, Washington, DC 20024

202 863-6000

Satellite communications service.

COMSAT INT'L COMMUNICATIONS

950 L'Enfant Plaza SW, Washington, DC 20024

800 392-9992/202 863-6000

International audio & video transmission services via satellite.

COMSEARCH

11720 Sunrise Valley Dr., Reston, VA 22091

703 620-6300

Engineering consultants; earth station site selection; terrestrial microwave frequency planning; CARS band microwave services; STL engineering; radiation hazard testing.

COMTECH ANTENNA CORP.

3100 Communications Rd., St. Cloud, FL 32769

305 892-6111

Offsat transmit/receive satellite earth stations; receive-only & transportable satellite earth stations.

COMTEK

357 W. 2700 S., Salt Lake City, UT 84115
801 466-3463

RF intercoms; RF mics.

COMTREC LTD.

POB 5500, Newport Beach, CA 92662
800 443-2751

MacVideo Cam monochrome cameras. Title keys. MacPrompter business automation software. MacMonitor video interface standards converter.

CONCEPT PRODUCTIONS

1224 Coloma Way, Roseville, CA 95678
916 782-7754/800 348-4800

Syndicated radio programming.

CONEX ELECTRO-SYSTEMS

Box 1342, Bellingham, WA 98227
206 734-4323

Cue-Amp monitor/power amps; audio routing switchers; 25 Hz tone generators & sensors.

CONIFER CORP.

Box 1025, 1400 N. Roosevelt, Burlington, IA 52601

319 752-3607

Receive-only satellite earth stations; downconverters; LNAs. MMDS/ITFS downconverters & antennas.

CONNECT-AIR INTL.

50 37 St. N.E., Auburn, WA 98002
206 939-4880

Video cable; cable connectors.

CONNECTRONICS CORP.

652 Glenbrook Rd., Stamford, CT 06906
203 324-2889

Seck portable & stereo studio audio consoles. Accessit parametric equalizers, audio patch panels & jackfields. Audio & video cable; Utilux cable connectors

OTIS CONNER PRODUCTIONS

4801 Spring Valley Rd. # 105, Dallas, TX 75234

214 358-5500

Music library; TV & radio musical ID production packages; special feature programming for radio; original & syndicated commercial music packages.

CONRAC CORP., DISPLAY PROD. GROUP

600 N. Rimsdale Ave., Covina, CA 91722
818 966-3511

Monochrome, NTSC, RGB & high-resolution video monitors.

Field Offices:

CA Richard J. Ryan, 1400 Coleman Ave. #F18, Santa Clara 95050 408 727-1474
CN 345 Kingston Rd. #210, Pickering, Ont., L1V 1A1 416 286-2294

GA Craig Sloss, 4289 Memorial Dr. #D, Decatur 30032 404 294-1004

IL Dick Scarle, 381 N. York Rd., Elmhurst 60126 312 833-3310

MA Edward P. Colby/Joe Campbell 155 Boston Rd. Rte. 30, Southborough 01772 617 485-3843

CONTINENTAL

ELECTRONIC/CONTEL

1620 W. 32 Pl, Hialeah, FL 33012

305 822-1421

Cart player/recorders; LPTV transmitters.

CONTINENTAL ELECTRONICS, DIV. VARIAN

4212 S. Buckner Blvd. Box 270879, Dallas, TX 75227

214 381-7161

AM & FM transmitters. AM & FM exciters; diplexers. RF amps, loads & filters. FM antennas & antenna tuning units. Demodulators

Field Offices:

AL Dave Hultsman, Box 26509, Birmingham 35226 205 822-1078

CA Marvin Steelman, 913 Palmilla Dr., Modesto 95356 209 523-7505

CO Ken Perkins, 7846 S. Centaur Dr., Evergreen 80439 303 670-1049

IL John D. Abdour, Box 575, Streator 61364 815 672-8585

MN Jim Littlejohn, 670 N. Branch Rd., Maple Plain 55359 612 479-2633

NC John Hutson, 28 Park Ave., Asheville 28803 704 274-5298

NY R. Clifford Rogers, Box 157, Schroom Lake 12870 518 532-7488

OR Tom T. Cauthers, 13333 S.E. Marsh Rd., Sandy 97055 503 668-9312

TN Barry Ariaz, Box 2117, Hendersonville 37077-2117 615 822-0256

TX Steve H. Schott, Box 2008, Plano 75074 214 423-3644

See ad on page 55

Circle No 178

CONTINENTAL RECORDINGS

102 South St., Boston, MA 02111
617 426-3131

Audio post-production facilities; recording studio; station ID & commercial jingles.

CONTROL CONCEPTS CORP.

328 Water St., Box 1380, Binghamton, NY 13902-1380

607 724-2484

Islatron surge protectors.

CONTROL TECHNOLOGY

2950 S.W. 2 Ave., Ft. Lauderdale, FL 33315

305 761-1106/800 327-4121

Distributor of full line audio & RF equipment.

CONUS COMMUNICATIONS

3415 University Ave., Minneapolis, MN 55414

612 642-4645

Hubcom transportable satellite earth stations. Satellite time brokers. Satellite news-gathering services.

CONVERGENCE CORP.

See EECO/CONVERGENCE

▲ MEANS IT'S VERIFIED

COOL-LUX LIGHTING IND.

5723 Auckland Ave., N. Hollywood, CA 91601

818 761-6116

Lamps, HMI & CSI fixtures, quartz fixtures, lighting stands & rigging, dimmer packs. Nicad, silver-zinc & lead-acid batteries & chargers. Foam insert transportation cases

CORPORATE COMMUNICATIONS CONSULTANTS ▲

64 Clinton Rd., Fairfield, NJ 07006
201 226-5938

Telecine color correctors, telecine control systems.

COUNTRYMAN ASSOCIATES ▲

417 Stanford Ave., Redwood City, CA 94063

415 364-9988

Mics: electret/condenser, PZM, RF, TVH lavalier, stereo. Isomax sound reinforcement & podium mics. Conference table mics.

CREATIVE TECHNOLOGY

853 Copley Rd., Akron, OH 44320
216 535-5778

Video production & post-production facilities; mobile production facilities rental; audio post-production facilities; set/studio design services; computer animation; film-to-tape transfers.

CREATIVE VIDEO SVCS.

816 W. St. Germain #500, St. Cloud, MN 56301

612 255-0033

4167 Lyndale Ave. N. #201, Minneapolis, MN 55412

612 521-5870

Video post-production facilities; mobile production facilities rental; equipment rental services.

THE CROMWELL GROUP

Box 150846, Nashville, TN 37215

615 383-7560

Recording studios; financial consultants; marketing/advertising services.

CROSS INFORMATION CO.

1881 9 St. #311, Boulder, CO 80302 303 444-7799

Radio business automation software. Teleconferencing services.

CROSSPOINT LATCH CORP. ▲

95 Progress St., Union, NJ 07083
201 688-1510

Portable, compact studio/mobile, large automated & computer-controlled production switchers; post-production switchers; component switchers; Digital efx generators; RGB & encoded chromakeyers; downstream & nonadditive keyers. Manual & automated master control switchers. Videc sync, black burst, color bar generators. TBCs. NTSC encoders & decoders.

JOHN CROWE PRODUCTIONS ▲

6311 N. O'Connor Rd. #102, LB 48, Irving, TX 75039

214 556-1816

Mobile production facilities rental.

CROWN INTERNATIONAL ▲

1718 W. Mishawaka Rd., Elkhart, IN 46517
219 294-8000

Electret/condenser, PZM & lavalier mics. Preamps, monitor/power amps. Real-time analyzers; Tecron spectrum analyzers.

CSI ELECTRONICS

Box 965, Highland City, FL 33846
813 644-3573

AM & FM transmitters. Stereo generators. Antenna tuning units. SCA equipment. Status/alarm indicators.

CUBICOMP CORP. ▲

21325 Cabot Blvd., Hayward, CA 94545
415 887-1300

PictureMaker digital art/paint systems, 3D modeling & animation. ModelMaker 3D modeling & picture manipulation.

CUE NATIONWIDE PAGING

2737 Compus Dr., Irvine, CA 92715
800 824-9755

Cue FM SCA paging service.

CURRENT TECHNOLOGY ▲

1400 S. Sherman #202,
Richardson, TX 75081
214 238-5300

Surge protection devices.

See ad on page 59

Circle No 139

You can stake your reputation on the Power Siftor.[®]

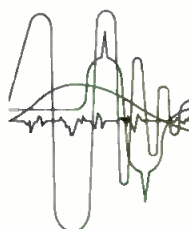
Gerald Dalton did. "We have four Power Siftors on line here at KKDA AM/FM," says Dalton, Director of Engineering for the Dallas radio station. "Since we installed one in our production room two years ago, we've had no more damage from line glitches or surges. But the real life saver has been the one on the studio mains. It's prevented damage at least twice — in a direct lightning hit to electric lines within 900 feet of the studio, and

when a downed utility pole 200 yards from the studio caused arcing between severed lines.....I recommend Power Siftor highly..... Every radio and television station should have at least one, protecting its microprocessor-based audio and video machines."

We couldn't have said it better. Write or call today for complete details on the Power Siftor — the system solution to dirty power.



Power Systems for Today's Technology



CURRENT
Technology

1400 South Sherman 202 • Richardson, Texas 75081

Phone (214) 238-5300

Power Siftor is a registered trademark of Current Technology, Inc.

Circle 139 on Reader Service Card

LOG AROUND THE CLOCK!



One, two, three o'clock, four o'clock log. The Dictaphone 5600 Veritrac® logger lets you log . . . log . . . log around the clock.

It's a complete broadcast recording retrieval system that lets your radio station keep its entire broadcast day on the record. In one dependable unit you get around-the-clock verification that you're running your advertisers' spots on schedule and meeting all your FCC requirements. Should you require proof, just play back your log around the clock. And it's all there on tape.

The 5600 Veritrac logger. A classic from Dictaphone.

For more information, fill in the coupon, or call toll-free: Q BME-87

1-800-342-8439

Mail to: Dictaphone Corporation,
120 Old Post Road, Rye, NY 10580-0648

Name _____

Title _____ Phone _____

Company _____

Address _____

City _____ State _____ Zip _____

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Dictaphone

Circle 140 on Reader Service Card
A Pitney Bowes Company

CYBERNETIC DATA PRODUCTS

20732 Lassen St., Chatsworth, CA 91311
818 998-0900

Silent Radio broadcast system for distribution of news & advertising to LED display boards; vertical interval inserter.

DABURN ELECTRONICS & CABLE CORP.

70 Oak St., Norwood, NJ 07648
201 768-5400

Audio, video & lighting/ac cable; cable connectors; jackfields & patch panels.

PETER W. DAHL CO.

5869 Waycross Ave., El Paso, TX 79924
915 751-2300

Rectifiers; transformers; surge protectors.

DALSAT SATELLITE COMMUNICATIONS

1205 Summit Ave., Plano, TX 75042
214 578-7561

Transmit/receive, receive-only & transportable satellite earth stations; upconverters, downconverters; satellite network controllers. Facilities design & engineering services; engineering consultants; earth station site selection; mobile vehicle construction.

DATA COMMUNICATIONS CORP.

3000 Directors Row, Memphis, TN 38131
901 348-3544

BIAS PC radio & TV business automation software & hardware. BIAS Newsroom radio & TV newsroom computers. Computer business services.

DATA PRECISION CORP.

Electronics Ave., Danvers, MA 01923
617 246-1600

Waveform analyzers; waveform synthesizers; dc voltage standards. Voltmeters, multimeters, capacitance meters, ohm meters.

DATA TEK CORP.

1121 Bristol Rd., Mountainside, NJ 07092
201 654-8100/ 800 882-9100

Audio preamps & power amps; audio DAs, audio routing switchers; telco interface equipment. Parallel & serial interface video routing switchers. Black burst generator; video DAs, pulse amps, subcarrier amps. Transmitter color phase equalizer/waveform corrector; identification of source system (IDS).

See ad on page 25

Circle No. 115

DATAWORLD

Box 30730, 4827 Rugby Ave. #200, Bethesda, MD 20814

301 652-8822/ 800 368-5754

Computer database of FCC engineering information.

DATUM

1363 S. State College Blvd., Anaheim, CA 92806

714 533-6333

SMPTTE time code generator/readers; VITC reader/generators; digital clocks, timers, complete clock/timing systems.

DAVIS & SANFORD

24 Pleasant St., New Rochelle, NY 10802

914 632-1636

Camera tripods, heads, pedestals, dollies, remote pan/tilt systems.

DAX AUDIO GROUP

1231 S.E. Gideon, Portland, OR 97202
503 232-4445

Stereo studio consoles; graphic equalizers; monitor/power amps. Real-time analyzers.

dbx

71 Chapel St., Newton, MA 02195
617 964-3210

Audio noise reduction; ALC & AGC amps, AM & FM compressor/limiters, parametric equalizers. Audio noise gate; de-esser. MTS noise reduction cards. Mixer/distribution amplifier module. Digital STL for audio & EFP. Satellite compander. Horizontal rack. Broadcast real-time analyzer.

DELCOM CORP.

6019 S. 66 E. Ave., Tulsa, OK 74145
918 494-9500/ 800 331-5461

Video/audio system construction; facilities design & engineering services; set/studio design services; engineering consultants; mobile vehicle construction. Studio furniture; cabinets; studio consoles; equipment racks.

DELMARK CORP.

1092 N. Tustin Ave., Anaheim, CA 92807
714 666-2790

Import/export consulting for broadcast manufacturers.

DELTA ELECTRONICS

5730 Gen. Washington Dr., Alexandria, VA 22312

703 354-3350

AM stereo exciters; audio processors. Transmitter remote control systems. Modulation monitors, antenna monitors, RF power meters & wattmeters, RF test signal generators, impedance bridges, toroidal current transformers.

See ad on page 29

Circle No. 117

DESISTI LIGHTING/DESMAR CORP.

328 Adams St., Hoboken, NJ 07030
201 792-4980

Lamps, HMI & CSI fixtures, quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging, dimmer packs. Lead-acid batteries & chargers, HMI ballasts. Calzone foam insert transportation cases.

DEVLIN PRODUCTIONS

150 W. 55 St., New York, NY 10019
212 582-5572

Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production facilities; set/studio design services; standards conversions; videodisc premastering services; single field/frame recording services.

DE WOLFE MUSIC LIBRARY

25 W. 45 St., New York, NY 10036
212 382-0220

Production music library & sound effects; recording services.

DIALIGHT CORP.

1913 Atlantic Ave., Manasquan, NJ 08736
201 223-9400

Neutrik audio cable connectors, jackfields, patch panels; transformers.

Great things come in small packages.



MODEL 5861 64 x 32 VIDEO SWITCHER



MODEL 5862 64 x 32 AUDIO SWITCHER

Model 5860 Routing Switcher **COMPACT CAPABILITY**

Everyone knows the only way to build a compact routing matrix is by including more and more switcher buses on a single board. Right? And of course, proprietary hybrid circuits remain the best (or only) way to maintain high performance specifications in a dense package. Maybe you've heard that too. Well, television engineers who have questioned the "wisdom" of these design philosophies are not alone. Di-Tech didn't buy it either.

The Model 5860 series routing switchers are designed with the latest low-power monolithic ICs. A 64 x 32 video and 2 channel audio matrix – a total of 6,144 crosspoints – occupies only 24½" of rack space including redundant power supplies. Our 2 output bus architecture allows great flexibility when specifying your initial matrix, and minimizes service disruption to system users if maintenance is required. This serial controlled switcher supports 4 levels of breakaway (10 level opt.) and may be *field expanded* up to a 256 x 256 matrix.

Small in size but enormous in capability...The Model 5860 is today's best engineered buy in routing switchers. Call or write for additional information today.

 **di-tech inc.**

48 Jefryn Boulevard, Deer Park, New York 11729
Telephone (516) 667-6300, Telex No. 971806

Circle 141 on Reader Service Card

www.americanradiohistory.com

DICTAPHONE CORP.

120 Old Post Rd., Rye, NY 10580
914 967-7300

Multichannel tape-based loggers; time signal recording for determination, search & recall; CallCheck digital message repeater.
See ad on page 60 *Circle No. 140*

DIELECTRIC COMMUNICATIONS

Tower Hill Rd., Raymond, ME 04071
207 655-4555

Diplexers, multiplexers. RF filters, loads & switches. AM, FM, TV HP & TV CP antennas. Rigid & coaxial transmission line, power dividers, RF connectors.
See ad on page 63 *Circle No. 143*

DIGIMAX INSTRUMENTS

8560 Production Ave., San Diego, CA 92121

619 578-7171
Audio preamps. LED displays. Nicad batteries & chargers. Frequency counters.

DIGITAL BROADCAST SYSTEMS

184 Mechanic St., Southbridge, MA 01550
617 764-4386

Astre digital audio storage & retrieval system.

DIGITAL ENTERTAINMENT CORP.
See **MITSUBISHI PRO AUDIO****DIGITAL PROGRAMMING**

Box 8008, Van Nuys, CA 91409
818 780-9780

Radio programming on CD; CD software libraries & database.

DIGITAL SERVICES CORP.

3622 N.E. 4 St., Gainesville, FL 32609
904 377-8013

Post-production switchers. Illusion & Eclipse digital video efx generators.

Field Offices:

CA Hugh Gillogly, 17206 Pinot Pl., Poway 92064 619 485-1156
GA Thomas Sabiston, Jr., Box 4042, Albany 31706 912 888-2142
IN Morrell Beavers, Rt. 1, Box 47B, Trafalgar 46181 317 738-3219
MN Mike Barsness, 245500 Cedar Point Rd., New Prague 56071 612 758-3036
NY John Barker, 325 Central Ave. #219, White Plains 10606 914 761-7928

DIGITAL TECHNIQUES

10 B St., Burlington, MA 01803
617 273-3495

TouchCom interactive, IBM-compatible graphics & video system.

DIGITAL VIDEO CORP.

369 N. Orange Ave., Orlando, FL 32801
305 425-1999

Video field production & post-production facilities; equipment rental services; interactive disc preparation.

DIGITAL VIDEO PRODUCTIONS

62 S. Franklin St., Wilkes-Barre, PA 18773
717 824-1161

Video production & post-production facilities; mobile production facilities rental.

DIGITAL VIDEO SYSTEMS
See **SCIENTIFIC-ATLANTA**

See ad on page 62 *Circle No. 142*

DIGIVISION

5626 Oberlin Dr., San Diego, CA 92121
619 458-1111

High-resolution digital video converter for display devices; contrast enhancer.

DI-TECH

48 Jefryn Blvd., Deer Park, NY 11729
516 667-6300

Audio DAs, audio routing switchers. Parallel & serial interface video routing switchers. Video/cable equalizers. Video DAs, pulse amps.
See ad on page 61 *Circle No. 141*

DOLBY LABORATORIES

100 Potrero Ave., San Francisco, CA 94103

415 558-0200

Audio noise reduction systems.

DORROUGH ELECTRONICS

5221 Collier Pl., Woodland Hills, CA 91364
818 999-1132

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DOWKEY MICROWAVE CORP.

1110 Mark Ave., Carpinteria, CA 93013
805 684-0427

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R.L. DRAKE

9111 Springboro Pike, Box 112, Miamisburg, OH 45342

513 866-2421

Receive-only satellite earth stations, LNAs & LNBs. SMATV systems.

DRAKE-CHENAULT RADIO CONSULTANTS

8399 Topanga Canyon Blvd., Canoga Park, CA 91304

213 883-7400

Radio consultants.

DUART VIDEO/DUART FILM LABS

245 W. 55 St., New York, NY 10019
212 757-3681

Video post-production facility; audio-for-film post-production facilities; film laboratory.

DUBNER COMPUTER SYSTEMS

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Canada M1S 4M6 (416) 299-6888 Telex 065-25344

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- Auto memory diagnostic
- Frame hysteresis
- Digital Dropout Compensator
- Synchronous switching of tape source
- Dynamic TrackingSM capability

Scientific Atlanta

Digital Video Systems Division

Circle 142 on Reader Service Card

* Trade mark of Sony Corp.

DUNCAN ELECTRONICS
2865 Fairview Rd., Costa Mesa, CA 92626
714 545-8261
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145 3rd St., San Rafael, CA 94901
415 457-7872
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914 347-4040
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DYNAIR ELECTRONICS ▲
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619 263-7711
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7644 Dynatech Ct., Springfield, VA 22153
703 569-9000/ 800 368-2210
Audio patch panels & jackfields; telco interface equipment.

Field offices:
OH Gilbert Herlet, Box 16293, Rocky River 44116 216 331-1995
GA Tom Keel, 2470 Windy Hill Rd., #312, Atlanta 30067 404 984-2544
CA Richard McBride & Tom Gardner (regional sales mgr.), 307 South B St., #7, San Mateo 94401 415 342-2895
TX Ken Leck, 14505 Torrey Chase Blvd., #108-1, Houston 77014 713 580-2633

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Newstar & Newstar Discovery radio & TV newsroom computer systems. ADP off-line archive. Teleprompter; Betacart interface.

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815 394-0800
Video post-production facilities.

EAST COAST VIDEO SYSTEMS
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212 431-7453
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VA 1555 Wilson Blvd., Arlington 22209 703 558-9250
IL 1901 W. 22nd St., Oak Brook 60522-9004 312 218-5174
GA 4 Concourse Pkwy., #300, Atlanta 30328 404 668-0500
TX Williams Square #600, 5221 N. O'Conner Blvd., Irving 75039 214 506-9700
CA Box 38939, Hollywood 90038 213 464-6131
HI Box 17007, Honolulu 96817 808 833-1661
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16782 Hale Ave., Irvine, CA 92714
714 863-1529

RF mics; audio preamps, line amps, monitor/power amps. Delta Magnetics transformers, hum bucking coils.

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301 E. Erie, Chicago, IL 60611
312 440-2360

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EDITEL/LA ▲
729 N. Highland, Hollywood, CA 90038
213 931-1821

Video post-production facilities.

EDITEL/NEW YORK ▲
222 E. 44 St., New York, NY 10017
212 867-4600

Video production & post-production facilities; mobile production facilities rental.

EDITRON AUSTRALIA ▲
1900 S. Sepulveda Blvd. #354, W. Los Angeles, CA 92025
213 477-4882

Electronic audio editors, SMPTE time code synchronizers, editors for digital audio. Audio routing switchers. Telecine control systems. Multisource videotape editors.

EDITRON USA
748 N. Seward St., Hollywood, CA 90038
213 464-8723

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714 835-6000

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516 293-7472
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213 427-2861

GA Harry Kozicki, 15 Dunwoody Pk. #100E, Atlanta 30338 404 394-9201
IL Jim Comella, 890 Deerpath, Hoffman Estates 60194 312 843-8417
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201 882-0584

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Field Offices:
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716 694-3332

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116 Chestnut St., Box 870, Red Bank, NJ 07701

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MI Jesse Walsh 600 Cecil St., Buchanan 49107 616 695-6831
CN Mark Simmons, 345 Herbert St., Box 520, Gananoqui, Ont. K7G 2V1
613 382-2141

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Mic mixers, portable audio consoles, mono & stereo studio consoles, audio-for-TV consoles. Single-deck & dual/triple-deck cart players. Portable ATRs, 2-/4-track studio ATRs. Open-reel audio tape, carts, cassettes, empty reels & carts, tape erasers & degaussers. Program automation systems. Hardwired intercoms. Line amps, monitor/power amps, amp power supplies. Audio DAs, audio routing switchers, audio patch panels & jackfields. Turnkey studios and radio & TV centers.

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Field Offices
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NC Robert Millice, POB 221972, Charlotte 28222 704 542-3380

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918 479-6484

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3373 Oak Knoll Dr., Brighton, MI 48116
313 227-6122

Audio processing exciter, projector.

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See ad on page 1 *Circle No. 101*

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205 322-6348

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IL 666 N. Lake Shore Dr. #1524, Chicago 60611 312 266-9262

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214 934-2222

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Field Offices:

CA 11060-E Artesia Blvd., Cerritos 90701 213 402-5391
IL 7250 S. Millard St., Chicago 60629 312 582-2233

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393 West Ave., Stamford, CT 06902
203 324-7400

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404 449-4343

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KS David Rangel, 10778 Hauser Dr., Lenexa 66210 316 469-9430

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Camera lenses, lens remote control.

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IL Dick Corrigan, 1000 Pratt Blvd., Elk
Grove Village 60007 312 569-3500

NJ Tony Amato, 800 Central Blvd., Carl-
stadt 07072 201 935-6022

TX Stan Risetter, 1628 W. Crosby Rd.,
Carrollton 75006 214 242-0662

See ad on page 23 Circle No. 114

FUTUREVIDEO PRODUCTS

29901 Weatherwood Ave., Laguna Niguel,
CA 92677

714 495-2621

Two-machine editor/controllers for video post-production.

GABRIEL ELECTRONICS

Box 70, Libby Rd., Scarborough, ME
04074

207 883-5161

TV HP/CP antennas. Rigid, foam dielectric & coaxial transmission line.

GARNER INDUSTRIES ▲

4200 N. 48 St., Lincoln, NE 68504
402 464-5911

Audio & video head cleaners & degaussers; audio & video tape erasers, degaussers.

GBC CLOSED CIRCUIT TV CORP.

315 Hudson St., New York, NY 10013
212 989-4433/ 800 221-2240

Monochrome cameras, monochrome video monitors, CCTV equipment and low-light cameras for Starlight usage. Video cable.

GBH PRODUCTIONS ▲

125 Western Ave., Boston, MA 02134
617 492-9273

Video production & post-production facilities; mobile teleproduction facilities rental; audio post-production facilities; set/studio design services; teleconferencing services.

GEE BROADCAST SYSTEMS LTD.

Penney Cottage, Heather Ln., Upper
Nately, Nr. Basing, Hants, UK RG279PL
256 72 3859

Facilities design and engineering services; engineering consultants.

GENERAL ELECTRIC CO., LIGHTING BUSINESS GROUP

Nela Pk., Cleveland, OH 44112

216 266-2121

Quartzline tungsten-halogen lamps.

GENERAL ELECTRIC CO., PROJECTION DISPLAY OPERATION ▲

Electronics Park 6-205, Syracuse, NY
13221

315 456-2152

Video projectors.

GENERAL TELEVISION NETWORK

13201 Capital Ave., Oak Park, MI 48237
313 399-2000

Equipment rental services; facilities design & engineering services; engineering consultants; set/studio design services; mobile vehicle construction.

GENERIC COMPUTER SYSTEMS ▲

357 N. Main St., Butler, PA 16001
412 283-1500

Radio business automation software.

GENEVA GROUP OF COMPANIES

7255 Flying Cloud Dr., Eden Prairie, MN
55344

612 829-1724

Audio head cleaners & degaussers; alignment & tension gauges; tape erasers & degaussers. VTR head cleaners & degaussers; alignment & tension gauges; videotape erasers & degaussers.

GENIGRAPHICS

4806 W. Taft Rd., Liverpool, NY 13088
315 452-6600

Video Paint Library digital still store; video animation controllers. Digital art/paint systems; 3D modeling & manipulation.

GENTNER ENGINEERING CO. ▲

540 W. 3560 South, Salt Lake City, UT
84115

801 268-1117

Hardwired intercoms; Audiometrics audio DAs, preamps; audio routing switchers, audio patch panels & jackfields; telco interface equipment. Teleprocessor graphic equalizers. Transmitter remote control systems.

GENTNER RF PRODS. DIV. ▲

Box 32550, San Jose, CA 95152
408 926-3400

Transmitter remote control systems & satellite network controllers; log printers; status/alarm indicators; auto record timing equipment; remote monitoring equipment; remote control accessories.

GKM MANUFACTURING CORP.

47 Bridgewater St., Brooklyn, NY 11222
718 388-4114

Cabinets, studio consoles, equipment racks.

See ad on page 70

Circle No. 147

G & M POWER PRODUCTS

943 N. Orange Dr., Los Angeles, CA 90038
213 850-6800

Nicad batteries, chargers; ac power dividers; inverters, converters. Monitoring devices, analyzers, condition monitors.

GML AMERICA ▲

8150 Leesburg Pike #910, Vienna, VA
22180

703 790-0101

Digital video efx generators; TBCs; frame synchronizers; TBC/framestores.

See ad on page 69

Circle No. 146

GOLDEN GATE PRODUCTIONS ▲

500 Eighth St., San Francisco, CA 94103
415 533-2277

Video production & post-production facilities; facilities design & engineering services; video/film stock shot library.

ALAN GORDON ENTERPRISES ▲

1430 Cahuenga Blvd., Hollywood, CA
90078

213 466-3561

Switek Hitchhiker RF mics; dynamic, electret/condenser, ribbon, PZM, lavalier, shotgun, modular & stereo mics. Mic booms & dollies. Filmo & Image 300 cine cameras; Trinitar 16 mm lenses. EOS & Lynx Robomation video animation controllers; animation stand motion control; 16/35mm telecine projectors. Lighting, lighting fixtures & accessories. Nicad batteries, chargers; HMI ballasts. Pearson camera heads, Colortran & Elemack dollies, Elemack cranes & jibs.

GORMAN-REDLICH MFG. ▲

257 W. Union St., Athens, OH 45701
614 593-3150

EBS two-tone systems; weather radio receivers. Antenna monitors, phase meters.

GOTHAM AUDIO ▲

1790 Broadway, New York, NY 10019
212 765-3410

Audio Developments portable & Neumann stereo studio audio consoles. Studer CD/DAD players; EMT turntables, pickup arms, phono cartridges. EMT AM & FM compressor/limiters, audio noise reduction. EMT digital audio efx & reverb, digital delay. K & H monitor speakers. Neumann electret/condenser, shotgun & stereo mics. Neumann audio preamps, audio DAs. NTP audio routing switchers; Audio Developments audio multi boxes, splitters. NTP PPM meters & video monitor displays. EMT wow & flutter meters. Gotham audio cable.

Field Offices:

CA Juergen Wahl, 7445 Orion Ave., Van
Nuys 91406 818 785-2211

MA Peter Engel, 12 Broad St., Salem
01970 617 745-8522

GRACE & WILD STUDIOS ▲

23689 Industrial Pk. Dr., Farmington Hills,
MI 48024

313 471-6010

Video production & post-production facilities; mobile production facilities rental.

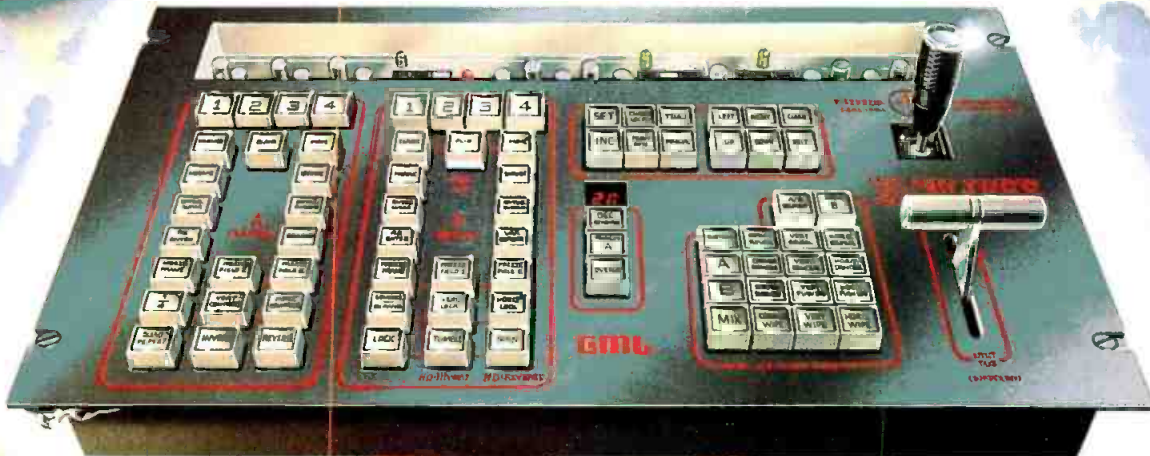
GRAHAM-PATTEN SYSTEMS ▲

Box 1960, Grass Valley, CA 95945
916 273-8412

Automated audio-for-TV mixing systems. Graphic equalizers, audio DAs, telco interface equipment. VU & PPM meters. Video/audio multiplex systems; downstream keyers; video DAs, pulse amps, subcarrier amps. Serial interface machine control/technical automation.

X-CALIBRE

ZOOM AND TRAJECTORY DVE



Even more dramatically cost effective than appears on the surface.

X-Calibre from GML

The new dual channel, multi input digital video effects unit that gives you a highly versatile zoom and trajectory capability. Plus vertical inversion, horizontal and vertical

compression, segmented reveals and conceals between channels, full re-entrant capability, flip, tumble, spin, mosaic, posterize ... a vast repertoire of other brilliant effects in one superbly designed complete package.

Circle 146 on Reader Service Card

With two TBC's, full frame and field capability and ease of operation among its many features, there's nothing to touch X-Calibre for anything like the price. Have a demonstration now. You'll find it an uplifting experience.

GML America Inc, 8150 Leesburg Pike, Suite 910, Vienna, Virginia 22180 Tel: (703) 7900101 RCA Telex: 277682 GMLA-UR

www.americanradiohistory.com

THE GRASS VALLEY GROUP ▲
Box 1114, 13024 Bitney Springs Rd.,
Grass Valley, CA 95945
916 478-3000

Audio DAs, audio routing switchers. Dubner & Texta character generator/graphics systems, digital art/paint systems, 3D modeling & manipulation, bit pad digitizers, camera/VTR digitizers. Compact studio/mobile & large automated production switchers; post-production switchers, component switchers. Kaleidoscope digital efx generators. Manual, automated & business automation interfaced master control switchers. Parallel & serial interface video routing switchers. Parallel machine control interface. Multisource video editing systems; SMPTE time code generators/readers. Sync and color bar

video sync and signal generators. NTSC encoders, decoders; video proc amps, DAs, pulse amps & subcarrier amps. Borderline generators & component video equipment. Wavelink & EZ-Link fiberoptic systems. Infrared atmospheric transmission systems.

Field Offices:

CA Doug Buterbaugh, 21243 Ventura Blvd. #206, Woodland Hills 91364 213 999-2303
 CA Rick LeFarge, 1032 Elwell Ct. #244, Palo Alto 94303 415 968-6680
 GA Bill Powers, 3554 Habersham at Northlake, Tucker 30084 404 493-1255
 IN Louie Swift, Box 4609, Elkhart 46514 219 264-0931
 MD Frank Shufelt, 12520 Prosperity Dr. #110, Silver Spring 20904 301 622-6313

MN Larry Ehnstrom, 3585 N. Lexington Ave. #339, Arden Hills 55126 612 483-2594
 NJ Tom O'Connor, 6 Forest Ave., Paramus 07652 201 845-7988
 TX Roger Hale, 5628 Poly Webb Rd., Arlington 76017 817 483-7447
 UK John Parker, 7 St. Thomas St., Winchester, Hampshire S023-9HE 0962 53292
See ad on page 8 *Circle No. 107*

GRAY COMMUNICATIONS ▲
Box 3229, Albany, GA 31708
912 883-2121

Custom mobile vehicle construction; mobile satellite broadcast systems from fly-away to full production trucks; turnkey broadcast systems; engineering consultants; facilities design & engineering services.

Field Offices:

AL Richard Brown, 2866 Dauphin St. #F&G, Mobile 36606 205 476-2051
 FL Box 24336, Tampa 33623 813 885-1411
 FL 7819 N.W. 15 St., Miami 33126 305 591-3637
 FL 1605 S. Bumby Ave., Orlando 32806 305 896-7414
 LA 5441 Pepsi St., New Orleans 70123 504 733-7265
 GA Dick Schmidt, 2254 Northwest Pky. #C, Marietta 30067 404 925-7725

GRAY ENGINEERING LABS ▲
504 W. Chapman Ave. #P, Orange, CA 92668
714 997-4151

SMPTE time code generator/readers, VITC reader/generators; safe title area generators.

DAVID GREEN BROADCAST CONSULTANTS ▲
Box 8782, BWI Airport, Baltimore, MD 21240
301 796-1500/ 800 547-2346

Test equipment rentals; distributor of audio & RF equipment.

GRINNAN FIXTURE CO. ▲
16041 Georgetown St. NE, Minerva, OH 44657
216 862-2799

Facilities design & engineering services; engineering consultants; mobile vehicle construction; studio cabinets & furniture; set/studio design services. Prefab radio station design services. Disc, cart & tape storage.

GROSH SCENIC STUDIOS ▲
4114 Sunset Blvd., Hollywood, CA 90029
213 662-1134

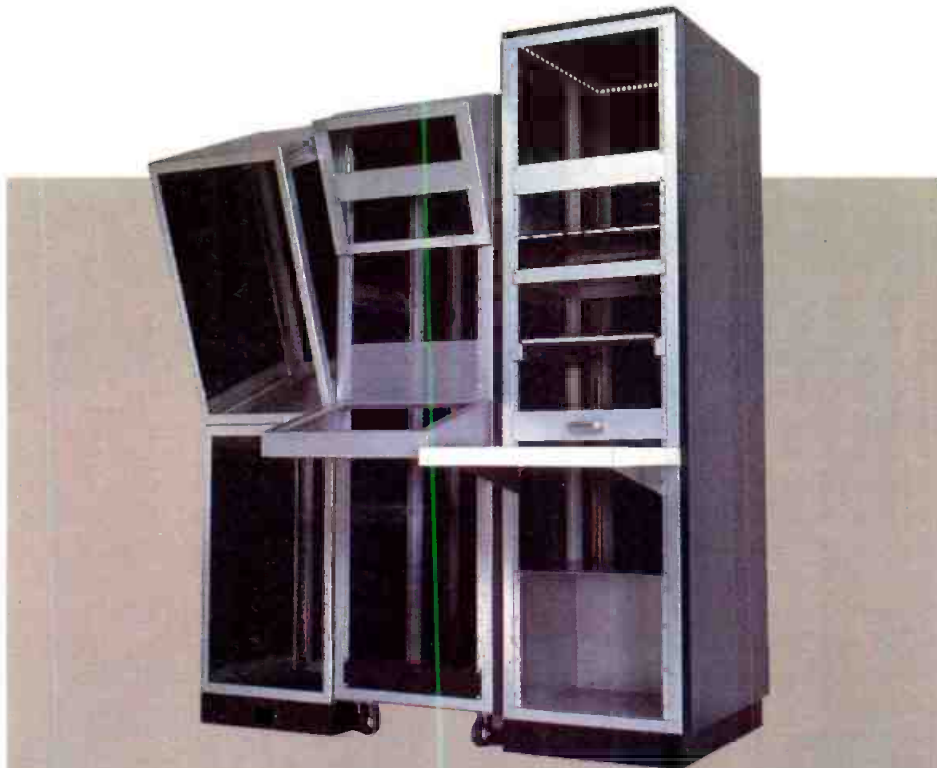
Scenery construction & rigging.

GROUP W SATELLITE COMMUNICATIONS ▲
250 Harbor Dr. #10210, Stamford, CT 06904
203 965-6000

Programming distribution; video production facilities; engineering consultants.

GRUMMAN ELECTRONICS SYSTEMS ▲
Sunrise Hwy., Great River, NY 11741
516 435-6001

Parallel & serial interface machine control/technical automation; ad insertion systems.



30 YEARS

MANUFACTURING THE INDUSTRY STANDARD

22" Wide Broadcast Rack
20" Wide Monitor Rack
20 1/4" Wide Narrow Rack

45 Heights 4 Depths 47 Colors



Manufacturing Corporation

47 Bridgewater Street
 Brooklyn, NY 11222-3890 (718) 388-4114
 Call or write for catalog

Circle 147 on Reader Service Card

JAMES GRUNDER & ASSOC.
5925 Beverly, Mission, KS 66202
913 831-0188

CEL Ltd. digital video efx generators, serial interface video routing switchers, A/B-roll editors, SMPTE time code generators/readers, TBCs, frame synchronizers, TBC/framestores, standards converters, YEM sync generators, NTSC encoders. Computer sync converters. EMBRS camera stabilizing systems. Hitachi waveform monitors & vectorscopes.

GTE COMMUNICATIONS SYSTEMS CORP.

2500 W. Utopia Rd., Phoenix, AZ 85027
602 582-7000

Fiber optic systems. Intercity microwave equipment. Microwave & telco STLs. CATV transmission equipment.

See ad on page 67 Circle No. 145

HALLIKAINEN & FRIENDS

141 Suburban Rd. Bldg. E4, San Luis Obispo, CA 93401

805 541-0200

Audio-for-TV & mono studio consoles. Log printers, automatic TV & radio monitors, status/alarm indicators. Telemetry adapters to digitize & automate Moseley TRC 15A remote control.

HAPPI ASSOCIATES

Box 110892, Nashville, TN 37211
615 331-8570

Music libraries; syndicated radio programming.

HARDIGG INDUSTRIES

393 N. Main St., S. Deerfield, MA 01373
413 665-2163

Foam insert & rack configuration transportation cases.

HARRIS CORP., BROADCAST DIV.

Box 4290, 3200 Wisman Ln., Quincy, IL 62305

217 222-8200

Mono & stereo studio audio consoles, audio-for-TV consoles; ALC & AGC amps, AM & FM compressor/limiters, audio noise reduction; audio preamps, line amps, monitor/power amps, amp power supplies. AM, FM, VHF & UHF transmitters; AM, AM stereo, FM & TV exciters, stereo generators; RF amps, loads & switches; intercity, portable ENG & airborne microwave systems, central receivers, SMATV systems; FM, TV HP & TV CP antennas.

HARRIS CORP., BROADCAST MICROWAVE

967 Stierlin Rd., Mountain View, CA 94043
415 969-9100

KU-band uplinks. Microstar intercity microwave systems; Globalix & Challenger portable ENG microwave; Mini-Link airborne microwave; CR central receivers. STLs & TSLs for radio & TV. Portable video microwave test unit.

HARRIS CORP., BUSINESS COMMUNICATIONS DIV.

Box 1700, Melbourne, FL 32901
305 727-3910

C- and Ku-band uplink satellite earth stations.

HARRIS CORP., VIDEO SYSTEMS

Box 4290, Quincy, IL 62305
217 222-8200

Iris digital still store. Aurora videographics system. Digital efx generators. TBCs, frame synchronizers, TBC/framestores, video noise reducers.

Field Offices:

CA Gary Johnston, Box 710, Blue Jay 92317 714 336-3046

CT Jim Burger, 17 Tally Ho Rd., Ridgefield 06877 203 431-9386

FL John Borger, 1451 Owen Dr., Clearwater 33519 813 797-4191

KS Shawn Underwood, 8663 W. 108th Pl., Overland Park 66210 913 451-1388

HARRISON SYSTEMS

Box 22964, Nashville, TN 37202
615 834-1184

Portable, stereo studio & audio-for-TV audio consoles; console automation, VSI video interface for consoles.

HEDCO

Box 1985, Grass Valley, CA 95945
916 273-9524

Audio DAs, audio routing switchers. Parallel & serial interface video routing switchers. Video DAs, pulse amps, subcarrier amps. BNC terminators.

KARL HEITZ, INC.

Box 427, Woodside, NY 11377
718 565-0004

Gitzo camera tripods, heads & dollies, mic booms & dollies.

HEWLETT-PACKARD CO.

1620 Signal Dr., Spokane, WA 99220
509 927-3893

Audio test signal generators, harmonic distortion meters. Demodulators, modulation monitors. RF test signal generators.

HIPOTRONICS, POWER PRODUCTS DIV.

Rte. 22 & 199, Drawer W, Millerton, NY 12546

518 789-6464

Peschel automatic voltage regulators.

RICHARD HIRSCHMANN OF AMERICA

POB 229, Riverdale, NJ 07457
201 835-5002

Fiber optic audio & video transmission systems.

HITACHI DENSHI AMERICA

175 Crossways Park W., Woodbury, NY 11797

516 921-7200

Studio, ENG, field, monochrome, HDTV, & CCD color video cameras. Replacement VTR heads. Optical disc recorder. One-inch C VTRs. Monochrome video monitors. Video printer. Waveform monitors, vectorscopes, oscilloscopes, delayed sweepsopes.

Field offices:

IL Robert Russin, 250 E. Devon Ave., #115, Itasca 60143 312 250-8050

GA Gino Nappo, 3610 Clearview Pkwy., Doraville 30340 404 451-9453

TX Dick Thrall, 14169 Proton Rd., Dallas 75234 214 233-7623

CA Jerry Kraus, 18005 S. Adria Maru Ln., Los Angeles 90746 213 538-4880

HM ELECTRONICS

Box 261669, San Diego, CA 92131
619 578-8300

Hardwired & RF intercom systems. Dynamic, electret/condenser, RF & lavalier mics. Disco mixers. Specialty cable mics. Wireless precision audio link for audio testing.

HOLADAY INDUSTRIES

14825 Martin Dr., Eden Prairie, MN 55344
612 934-4920

RF field strength meters, RF exposure measurement system.

HOTRONIC

1875 S. Winchester Blvd., Campbell, CA 95008

408 378-3883

TBCs, frame synchronizers, TBC/framestores.

HOUSTON INTL. TELEPORT/ S.T.A.R.S.

3003 Moffett Ln., Houston, TX 77489
713 438-3600

Prostar encryption system leasing. Video production facilities; equipment rental services; facilities design & engineering services; earth station site selection; mobile vehicle construction; satellite time brokers; syndicated radio programming.

HOWE TECHNOLOGIES

2300 Central Ave., #E, Boulder, CO 80301
303 444-4693

Mono studio, stereo studio & audio-for-TV consoles. Audio monitor/power amps. Telco interface equipment. Audio time base correctors; Phase Chasers. Studio furniture. Video production facilities; radio turnkey services.

HUBBARD COMMUNICATIONS CORP./HUBCOM

12495 34 St. N., St. Petersburg, FL 33702
813 577-7759

MERPS multicassette decks. Solid-state telecine systems; telecine cameras. Transmit/receive, receive-only C- & Ku-band satellite communications systems for portable, mobile and fixed applications. TV signal time delay system. Facilities design & engineering services; engineering consultants; mobile vehicle construction.

HUGHES HELICOPTERS

Centennial & Teal Sts., Culver City, CA 90230

213 305-3226

Broadcast-equipped helicopters.

HUGHEY & PHILLIPS

8511 Lankershim Blvd., Sun Valley, CA 91352-3127

213 849-1104

Tower lighting.

IGM COMMUNICATIONS

282 W. Kellogg Rd., Bellingham, WA 98226

206 733-4567

Go-Cart, Instacart multideck cart players. IGM EC/SC computer automation controllers; IGM EC/SC automatic satellite switchers; complete program automation systems. PC (FSK) logging systems. Custom system design service.

IKEGAMI ELECTRONICS ▲

37 Brook Ave., Maywood, NJ 07607
201 368-9171

Portable audio console. Cameras: studio, field, ENG, recorder/cameras, HDTV, monochrome, single-tube, CCD color, cine. Telecine cameras; optical multiplexers. Compact studio/mobile production switchers, component switchers. Video monitors: monochrome, NTSC, RGB, high-resolution, wide aspect ratio, battery-powered portable, video projectors. Portable ENG microwave systems.

Field Offices:

CA Les Sechtler, 23105 Kashiwa Ct., Torrance 90506 213 534-0050

FL Bud Mills, 6201 Johns Rd. #5, Tampa 33634 813 884-2046

IL Bob Johnston, 747 Church Rd., Units C4 & C5, Elmhurst 60126 312 834-9774

TX Glen Smith, 3 Dallas Commun. Complex, 6311 North O'Connor Rd. #100, Las Colinas, Irving 75039 214 233-2844

HI Kuniko Yamashiro, Ward Ind'l. Ctr., 1020 Auahi St., Bldg. 7, Bay 3A, Honolulu 96814 808 946-5955

See ad on page 6-7 Circle No 106
See ad on page 73 Circle No 148

IMAGE DEVICES INTERNATIONAL

1825 N.E. 149 St., Miami, FL 33181
305 945-1111

Video production & post-production facilities; mobile production facilities rental; equipment rental services; facilities design & engineering services.

Field Office:

GA 3311 Empire Blvd., Atlanta 30354
404 766-1111

IMAGE VIDEO LTD. ▲

705 Progress Ave. #46, Scarborough, Ont., Canada M1H 2X1
416 438-3940

Audio DAs. Manual & automated master control switchers. Serial interface machine control/technical automation. Video DAs.

Field Office:

NY 1051 Clinton St., Buffalo 14206
716 855-2693

IMS/INTEGRATED MEDIA SYSTEMS ▲

1552 Laurel St., San Carlos, CA 94070
415 592-8055

Audio routing switchers. Digital audio A/D & D/A converters.

INDUSTRIAL RESEARCH PRODUCTS ▲

321 Bond St., Elk Grove Village, IL 60007
312 439-3600

Mic mixers. Parametric equalizers. Digital delays. Power amps; automatic gain control.

INDUSTRIAL ACOUSTICS

1160 Commerce Ave., Bronx, NY 10462
212 931-8000

Video post-production facilities, recording studios, audio post-production facilities.

INMARK CORP. ▲

147 W. Cedar St., Norwalk, CT 06854
203 866-8474

Comet Vacuum variable & fixed capacitors.

INNOVATIVE TELEVISION EQUIPMENT See ITE**INOVION** ▲

250 E. Gentile St., Layton, UT 84041
801 546-2850

Digital art/paint systems; digital efx generators.

INOVONICS ▲

1305 Fair Ave., Santa Cruz, CA 95060
408 458-0552

ALC & AGC amps, AM & FM compressor/limiters. Audio preamps; TVU video monitor level displays. Stereo generators.

INTEGRATED SOUND SYSTEMS

1227 Walt Whitman Rd., Melville, NY 11747

516 351-2100

Stereo audio consoles. Turntables, complete disc consoles. Graphic equalizers. Audio time compression/expansion. Monitor speakers. Dynamic, electret/condenser & shotgun mics. Monitor/power amps.

INTEGRATED TECHNOLOGIES

See ITI GRAPHICS

INTERAND CORP. ▲

3200 W. Peterson Ave., Chicago, IL 60659
312 478-1700

ImageFile still store. Telestrator character generator/graphics systems, "draw-on-screen" systems. NTSC decoders, Discon teleconferencing systems.

INTERCONTINENTAL TELEVIDEO

29 W. 38 St., New York, NY 10018
212 719-0202

Video standards converters; multistandard VCRs. Vide standards conversion & duplication services.

INTERGROUP VIDEO SYSTEMS ▲

2040 N.W. 67 Pl., Gainesville, FL 32606
904 335-0901

Audio DAs. Portable, compact studio/mobile & large automated production switchers; post-production switchers. RGB & encoded chromakeyers, downstream keyers. Manual & automated master control switchers; parallel & serial interface routing switchers; video DAs, pulse amps, sub-carrier amps.

INTERNATIONAL ELECTRO-MAGNETICS ▲

350 N. Eric Dr., Palatine, IL 60067
312 358-4622

Replacement & rebuilt audio and video heads.

INTERNATIONAL MICROWAVE CORP.

65 Commerce Rd., Stamford, CT 06902
203 323-5599

Radio & TV business animation hardware; telco interface equipment. AM & FM transmitters; multiplexers; modulators. Transmitter remote control systems. STLs, TSLs. Microwave systems: intercity, portable ENG, central receivers. Two-way radio communications. Solid-state microwave amplifiers & oscillators.

INTERNATIONAL NUCLEAR CORP.

608 Norris Ave., Nashville, TN 37204
615 254-3365

Preamps, line amps. Audio DAs, audio routing switchers. EBS two-tone systems. Downstream keyers. Manual master control switchers. Parallel interface video routing switchers. Black burst generators. Video DAs, pulse amps.

INTERNATIONAL TAPETRONICS CORP./3M ▲

2425 S. Main St., Box 241, Bloomington, IL 61702

309 828-1381/ 800 447-0414

Delta, Omega single-deck cart player/recorders; Delta dual/triple/multi-deck cart player/recorders. 3M HCDA 3000 digital cart system. ScotchCart II audio cartridges; cartridge monitor, eraser splice locator. Audio routing switcher; telco interface equipment.

INTERNATIONAL TELETRONICS ▲

Box 738, 1 Airport Dr., Williamstown, NJ 08094

609 728-5152

FM transmitters. FM exciters, stereo generators. Transmitter remote control systems. FM SCA equipment.

ISS ENGINEERING

104 Constitution #4, Menlo Park, CA 94025

415 853-0833

Satellite weather displays; weather satellite receivers. Parallel & serial machine control/technical automation interfaces. FM & VHF transmitters. FM & TV exciters; stereo generators; modulators. Receive-only earth stations; upconverters, downconverters, LNAs. SMATV systems. Demodulators.

Field Office:

AL John Coiro, 434 Westchester Dr., Birmingham 35215 205 853-6919/ 800 351-4477

ITE ▲

Box 681, Woodland Hills, CA 91365
818 888-9421

Tripods, heads, pedestals, ENG braces, dollies, cranes, jibs, remote pan/tilt systems. Foam-insert transportation cases.

ITELCO ▲

1620 W. 32 Pl., Hialeah, FL 33012
305 822-1421

FM, VHF, UHF, LPTV transmitters; translators. FM & TV exciters, stereo generators, diplexers, modulators. RF amps & filters. Intercity microwave systems. FM SCA equipment. TV three-tone generator.

ITI GRAPHICS SYSTEMS ▲

500 Laurelwood Rd. #1, Santa Clara, CA 95054

408 748-9080

Digital art/paint systems; Image-Maker & Ani-Maker Plus 3D modeling & manipulation. Weather-Maker weather graphics displays & weather-based art/paint systems.

ITI ELECTRONICS ▲

12 Kulick Rd., Fairfield, NJ 07006
201 882-6405

Audio preamps, line amps, monitor/power amps, amp power supplies. Audio patch panels, jackfields; telco interface equipment.

Limitless!

IKEGAMI'S NEW HK-323P IS THE IDEAL PORTABLE COMPANION FOR YOUR HK-323 FIELD/STUDIO CAMERA.



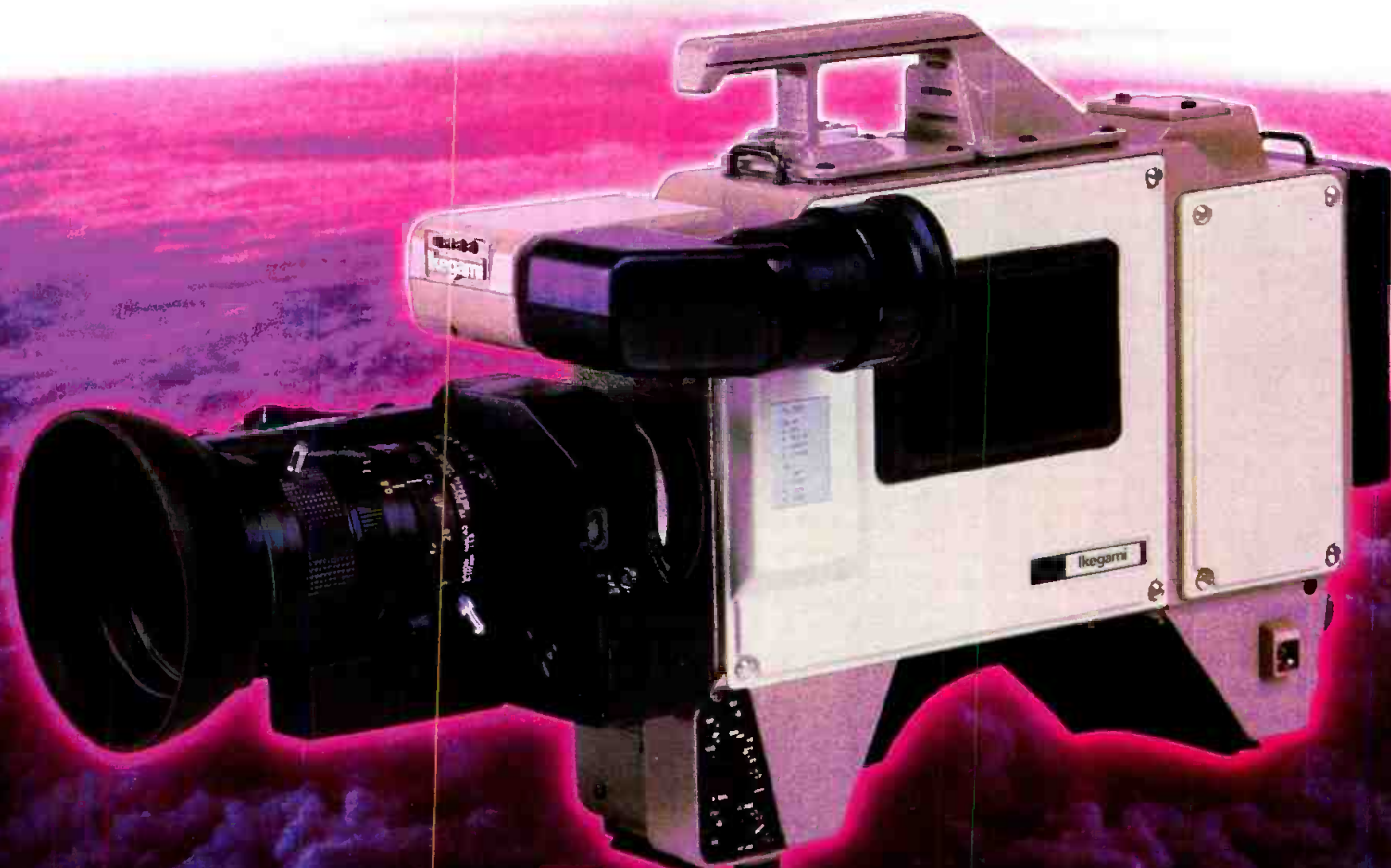
The HK-323 Field/Studio Camera

Ikegami's HK-323 1" and 2/3" field/studio cameras are big news... so is the smaller HK-323P companion camera. This lightweight hand-held model provides the user with limitless potential, flexibility and performance that meets and exceeds industry standards for excellence.

Featuring a built-in micro-processor for various software based control functions and fully automatic setup, the HK-323P operates from the same base station as the HK-323 and offers high performance prism optics, auto-knee circuitry to handle high contrast, scene files with extensive memory, for the sharpest picture quality regardless of scene color content or special color lighting. This, plus selectable gamma values; 0.45, 0.4, 0.35, two motorized servo filter wheels each with four positions, a back-up memory system and various adaptors for total system flexibility.

Go the limit with the HK-323 and HK-323P companion camera system.

For a complete demonstration of the Ikegami HK-323 and HK-323P, contact us or visit your local Ikegami dealer.



Ikegami

Ikegami Electronics (U.S.A.), Inc. 37 Brook Avenue, Maywood, NJ 07607

East Coast: (201) 368-9171; West Coast: (213) 534-0050; Southeast: (813) 884-2046 Southwest: (214) 233-2844;

Midwest: (312) 834-9774; Hawaii: (808) 946-5955

www.americanradiohistory.com

LEITCH DOES



Leitch equipment is found in most of the major studios around the world. Our reputation is for never compromising on quality yet staying competitive on price. Leitch also offers you outstanding reliability and a worldwide sales and service network for our equipment: 1. PAL and NTSC SCH Monitors 2. Video Test Signal Generators 3. PAL and NTSC Video Processing Equipment 4. PAL and NTSC Sync Pulse Generators 5. Frame

Synchronizers 6. State-of-the-art clock systems 7. Audio and Video Distribution Amplifiers.

When you get our literature, you'll discover that the specifications are impressive. But if they err anywhere, it's on the side of modesty.

At Leitch, we'd rather understate than overstate.

For more information on Leitch products call, write or telex.

LEITCH

Leitch Video of America, Inc., 825K Greenbrier Circle, Chesapeake, VA, U.S.A. 23320. Tel.: (804) 424-7920 or 1-800-231-9673. Telex: 710 882 4342
Leitch Video International Inc., 10 Dyas Road, Don Mills, Ontario, Canada M3B 1V5. Tel.: (416) 445-9640 or 1-800-387-0233. Telex: 06 986 241

Circle 154 on Reader Service Card

ITS CORP.

375 Valley Brook Rd., McMurray, PA 15317

412 941-1500

UHF, LPTV & MDS transmitters. TV exciters, modulators. RF amps. ICPM monitor.

ITT JENNINGS ▲

970 McLaughlin Ave., San Jose, CA 95122

408 292-4025

RF switches; capacitors.

JAM CREATIVE PRODUCTIONS

4631 Insurance Ln., Dallas, TX 75205

214 526-7080

Music libraries; station ID jingle packages.

JAMISON & ASSOC.

5200 Willson Rd. #300, Minneapolis, MN

612 920-3770

Facilities design & engineering services; set/studio design; engineering consultants.

JAMPRO ANTENNAS ▲

6939 Power Inn Rd., Sacramento, CA 95828

916 383-1177

FM, TV HP & TV CP antennas.

THE JANSON INDUSTRIES ▲

1200 Garfield Ave. S.W., Box 6090, Canton, OH 44706

216 455-7029

Scenery construction & rigging.

JASONI ELECTRONICS ▲

2900 E. Charleston Blvd. #197, Las Vegas, NV 89104

702 384-0081

Audio test signal generators; audio tape analyzers.

JBL PROFESSIONAL ▲

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818 893-8411

Portable & stereo studio audio consoles. AM & FM compressor/limiters, parametric & graphic equalizers. Digital delay devices, preamps, monitor/power amps.

JEFFERSON PILOT DATA SYSTEMS ▲

501 Archdale Dr., Charlotte, NC 28217

704 529-3901

Radio & TV business automation software & hardware; radio & TV newsroom computers.

JEM-FAB CORP. ▲

574 Sunrise Hwy., Baldwin, NY 11510

516 867-3510

Telecine control systems. Parallel & serial interface machine control/technical automation; vertical interval systems; facilities design & engineering services; engineering consultants; mobile vehicle construction; earth station site selection; construction & wiring services. Studio furniture: cabinets; custom studio consoles; equipment racks; cart/tape storage.

See ad on page 75

Circle No. 149

JENSEN TOOLS ▲

7815 S. 46 St., Phoenix, AZ 85044

602 968-6241

Tools.

JENSEN TRANSFORMERS ▲

10735 Burbank Blvd., N. Hollywood, CA 91601

213 876-0059

Twin servo mic preamps, opamps, power amps; audio transformers.

THE J-LAB CO.

Box 6530, Malibu, CA 90264

213 457-4090

Standalone CCUs. Safe title area generators. Line-operated & camera-mounted transcoders. Beta playback modification.

JRF MAGNETIC SCIENCES

Kennedy Rd., Box 121, Greendell, NJ 07839

201 579-5773

Replacement & rebuilt audio heads. Recording studios & equipment rental services.

JVC CO. OF AMERICA, PROFESSIONAL VIDEO COMM. DIV. ▲

41 Slater Dr., Elmwood Park, NJ 07407

201 794-3900/ 800 582-5825

Mic mixers, portable consoles, video interface for consoles. Digital audio recorder/editor. Electronic audio editors; SMPTE time code synchronizers. Audio routing switchers. Video monitor displays. Cameras: studio, field, ENG, lightweight, single-tube color, CCD color, monochrome, recorder/cameras. ¼-inch U, M-II & VHS VCRs. Half-inch VHS & ⅜-inch mastering videocassettes. VTR slow-mo systems; video animation controllers; animation stand motion control.

Titlers, subtitlers, character generators/graphics systems. Portable, compact studio/mobile production switchers; post-production switchers; component switchers. Digital video efx generators; RGB chromakeyers; encoded chromakeyers; title keyers; downstream keyers. Parallel & serial interface routing switchers. Time code synchronizers; two-machine editor controllers; A/B-roll editors; multisource editors; SMPTE time code generators/readers. Monochrome, NTSC, RGB & high resolution video monitors. Audio and video cable.

Field Offices:

CA 1011 W. Artesia Blvd., Compton 90220

213 537-6020

GA 3040 Northwoods Pky., Norcross 30071

404 447-0811

IL 2250 Lively Blvd., Elk Grove Village 60007

312 364-9300

TX 407 Garden Oaks Blvd., Houston 77018

713 694-0666

KAHN COMMUNICATIONS

425 Merrick Ave., Westbury, NY 11590

516 222-2221

AM stereo exciters. AM SCA equipment. Powerside sideband processor; Good & Loud positive peak modulation audio processor; Flatterer broadbanding system for AM antennas.

KAITRONICS CORP. ▲

890 Cowan Rd., Burlingame, CA 94010

415 697-9102

Mic mixers, portable & audio-for-TV consoles. Portable, component & compact studio/mobile production switchers. Manual & automated master control switchers. Parallel & serial interface routing switchers.

The Two Sides Of The Jem-Fab Group:

ENGINEERING

The Franklyn R. Beemish & Co.'s staff is experienced in consultation, design and engineering for the foremost companies in the video post & production, broadcasting and motion picture and recording industries. Our staff is uniquely qualified to create a facility that will meet your demanding requirements. We analyze all phases of your business—budget, client needs, operational requirements, space considerations, growth potential—and design a suite or entire facility for you.

CONSTRUCTION

The Jem-Fab Corporation has the necessary in-house facilities and personnel to build, install and test your turn-key facility. Our custom manufactured equipment enables your company to operate to its maximum potential and realize its greatest profits.

Whether the Jem-Fab Group designs, constructs or retrofits your studio, there are two things you can count on: A) our uncompromising commitment to quality, and B) our dedication to service for our clients in every aspect of our business.

The Jem-Fab Group

Franklyn R. Beemish & Co.

"Engineering for the Video, Motion Picture and Recording Industries"

Jem-Fab Corporation

"The Electronics Construction Company"

574 Sunrise Hwy. • Baldwin, N.Y. 11510
(516) 867-8510 • (516) 867-8511

Circle 149 on Reader Service Card

KALART VICTOR CORP. ▲
Hultenius St., Plainville, CT 06062
203 747-1663
16 mm telecine projectors.

KAMAN SCIENCES ▲
1500 Garden of the Gods Rd., Colorado Springs, CO 80933
303 599-1470
Radio & TV business automation hardware & software.

KANGAROO VIDEO PRODUCTS ▲
10845 Wheatlands Ave. Ste. C, Santee, CA 92071
619 562-9696
Padded nylon transportation cases.

MEANS IT'S VERIFIED

KAVOURAS ▲
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612 726-9515
TritonX & WeatherLink weather graphics & satellite displays; TritonX weather symbol inserters & weather-based art/paint systems, Radac weather radar displays. L-DATS lightning detection interface to TritonX. Digital still store & video animation controllers.

KAY ELEMETRICS CORP. ▲

12 Maple Ave., Pine Brook, NJ 07058
201 227-2000
Rotary attenuators. Spectrum analyzers, real-time analyzers.

KELTEC FLORIDA ▲
50 Second St., Box 862, Shalimar, FL 32579
904 651-9749
RF amplifiers. Transmit/receive earth stations; transportable earth stations.

KEYLITE PSI ▲
333 S. Front St., Burbank, CA 91502
818 841-5483
Equipment rentals; mobile production facilities rental.

KEYSTONE VIDEO CORP. ▲
468 Getty Ave., Clifton, NJ 07015
201 546-2800
Le Clic 1/2-inch videocassettes & empty VHS videocassettes.

K&H PRODUCTS/PORTRABRACE ▲
Box 246, N. Bennington, VT 05257
802 442-8171
Padded nylon video production cases.

KINEMATRICS/TRUE TIME DIV. *
2343 Santa Rosa Ave., Santa Rosa, CA 95407
707 528-1230
Digital clocks, complete clock/timing systems.

KING INSTRUMENT CORP.
80 Turnpike Rd., Westboro, MA 01581
617 366-9141
Audio & video cassette loaders; videotape evaluators.

KINTEK ▲
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617 894-6111
Stereo synthesizers, polarity correctors; phase & correlation meter.

GEORGE KLEINKNECHT, INC.
940 Eighth Ave., New York, NY 10019
212 246-2133
Electrical contractor specializing in transmitter, microwave & broadcast studio installations.

KLIEGL BROS. ▲
32-32 48 Ave., Long Island City, NY 11101
212 786-7474
HMI & CSI lighting fixtures, cyc lighting, lighting control boards, dimmer packs.

KLINE IRON & STEEL CO. ▲
1225 Huger St., Box 1013, Columbia, SC 29202
803 779-7080
Tower masts, lighting.

KNOX VIDEO PRODUCTS ▲
8547 Grovemont Cl., Gaithersburg, MD 20877
301 840-5805
Character generator/graphics systems.

KOLDWAVE DIV., HEAT EXCHANGERS INC.
8100 N. Monticello Ave., Skokie, IL 60076
312 679-0300
Air conditioning systems.

NEW! Stereo Audio In A Rack-Mountable Console



THE Logitek STEREO RACK

- 11 balanced stereo sources, 2 stereo outputs
- Up to 7 assignable mic inputs
- Stereo pan control on each input channel
- Low-noise, low-distortion circuitry for excellent audio performance

Call 800-231-5870

(TEXAS, ALASKA, CANADA 713-782-4592 COLLECT)

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At Landy Associates, Ikegami equipment comes with



a feature you won't find anywhere else.

Take a good look at the world's most professional line of video equipment. Ikegami color TV cameras — from the compact HL-79E to the fully automatic HK-322 — and a wide range of color and black and white monitors.

Now look again. What you can't see is something Landy Associates builds into every Ikegami we sell.

Service.

We think that if you're buying the best equipment, you deserve the best after-sale support — from repair work to television systems planning. Which is why it makes sense to buy from the one Ikegami dealer who'll serve you as well as your Ikegami does.

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Landy Associates, Inc.
REPRESENTING THE FINEST IN BROADCAST, PRODUCTION AND RECREATION EQUIPMENT

1890 E. Marlton Pike, Cherry Hill, NJ 08003, (609) 424-4660 • 330 Bear Hill Rd. Waltham, MA 02154, (617) 890-6325

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Circle 151 on Reader Service Card

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LAIRD TELEMEDIA ▲
2424 S. 2570 West, Salt Lake City, UT
84119
801 972-5900

Titlers & subtitles; character generators/graphics systems; bit pad digitizers. 16/35mm telecine projectors, 35 mm slide projectors, optical multiplexers. Proc amps; video DAs; passive routing switchers; RGB-to-NTSC encoders.

LAKE SYSTEMS CORP. ▲
287 Grove St., Newton, MA 02166
617 244-6881

La-Kart video cart automation system for Beta, M-format, 3/4-inch U, one-inch C formats; automated library system. Facilities design & engineering services; engineering consultants; mobile vehicle construction.

LANDY ASSOCIATES ▲
1890 E. Marlon Pike, Cherry Hill, NJ
08003
609 424-4660

Facilities design & engineering services. Distributor full line of broadcast equipment.

Field office:
MA 330 Bear Hill Rd., Waltham 02154
617 890-6325
See ad on page 77 Circle No. 151

**LARCAN COMMUNICATIONS
EQUIPMENT** ▲
6520 Northam Dr., Mississauga, Ont.,
Canada L4V 1H9
416 678-9970

FM & VHF transmitters; translators. FM & TV exciters; hybrid & notch duplexers. RF amplifiers, filters & contactless switchers. TV HP antennas. Transmitter plant design & installation services.

Field Office:
MD Charles Coyle, Lewis F. Page, 14440
Cherry Ln. Ct. #201, Laurel 20707
301 498-2200

LAUMIC CO.
306 E. 39 St., New York, NY 10016
212 889-3300
Sales & rentals of video editing equipment.

LDL COMMUNICATIONS
14440 Cherry Ln. Ct. #201, Laurel, MD
20707
301 498-2200

AM, FM, TV HP & TV CP antennas. Rigid transmission line. Tower masts, rigging, hardware, lighting.

LEADER INSTRUMENTS ▲
380 Oser Ave., Hauppauge, NY 11788
516 231-6900

Sync, black burst & color bar generators. Battery-powered portable video monitors. Audio test signal generators, harmonic distortion meters, wow & flutter meters, MTS test equipment. Video test signal generators, waveform monitors, vectorscopes. Field intensity meters, RF test signal generators, phase meters. Oscilloscopes, delayed sweepscopes, voltmeters, multimeters.

LEA DYNATECH ▲
12516 Lakeland Rd., Santa Fe Springs,
CA 90670
800 654-8087

Surge Eliminator surge protectors; Kleanline electronic filters; Transient Eliminator. Lightning dissipation arrays. Engineering con-

sultants.

LEAMING INDUSTRIES ▲
180 McCormick Ave., Costa Mesa, CA
92626
714 979-4511

FM compressor/limiters. Stereo generators. SCPC modulator/demodulator.

LEASAMETRIC
1164 Triton Dr., Foster City, CA 94404
415 574-4441/ 800 553-2255

Broadcast equipment rental services.

LEASING CONCEPTS
3 Radnor Corp. Ctr., Radnor, PA 19087
215 964-8844/ 800 524-8844

Lease financing for broadcast & high-tech equipment.

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COMMUNICATIONS**
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LECTROSONICS
Box 12617, Albuquerque, NM 87195
505 831-1010

Freedom RF mics; portable, self-contained monitor/power amps.

LEE LIGHTING AMERICA ▲
534 W. 25 St., New York, NY 10001
212 691-1910

Rentals of full line lighting & grip equipment, camera filters, lamps, expendables.

Field Office:
CA Evan Green, 3620 Valhalla Dr., Bur-
bank 91505 818 848-1111

LEITCH VIDEO ▲
825K Greenbrier Cir., Chesapeake, VA
23320

804 424-7920/ 800 231-9673
10 Dyas Rd., Don Mills, Ont., Canada M3B
1V5

416 445-9640/ 800 387-0233
Audio DAs, audio routing switchers. Parallel & serial interface video routing switchers. Sync, black burst, color bar & safe title area generators. Frame synchronizers. Comb filter decoders, video delay lines, video/cable equalizers. Proc amps, video DAs, pulse amps, subcarrier amps. Vertical interval processor. Vertical interval adder/deleter; video source ID. Video test signal generators, SCH phase meters, transmitter test generator. Vertical interval test signal generator; digital still file; audio tone generator. Digital clocks, complete clock/timing systems.

See ad on page 74 Circle No. 154

LEMO USA ▲
Box 11488, Santa Rosa, CA 95406
707 578-8811

Cable connectors.

LENCO ELECTRONICS ▲
300 N. Maryland St., Jackson, MO 63755
314 243-3147

Monitor/power amps; audio DAs. Sync, black burst, color bar & safe title area generators. TBCs. NTSC encoders & decoders, comb filter decoders, video delay lines, video/cable equalizers. Proc amps, video DAs, pulse amps, subcarrier amps. Monochrome, NTSC & RGB monitors. Video test signal generators, SCH phase meters, video noise meters.

Field Offices:
AL Ron Burks, 5901 Spanish Moss Ct.,
Mobile 36609 205 660-0738
CA Robert E. Munzner, 27040 Rio Prado,
Valencia 91355 805 297-1060
TX Russ Thalacker, 2520 Laurel Ln., Plano
75074 214 578-0419
NJ George Anderson, III, 10 Stokes Rd.,
Vincentown 08088 609 953-9101
MN Mike Edwards, 18927 147 St., Elk
River 55330 612 441-4390
See ad on page 79 Circle No. 152

LERRO ELECTRICAL CORP. ▲
3125 N. Broad St., Philadelphia, PA 19132
215 223-8200

Facilities design & engineering services; mobile vehicle construction; wiring services.

LEXICON ▲
100 Beaver St., Waltham MA 02154
617 891-6790

Opus random access digital audio recording, mixing & editing system. Audio/video sync delay. Audio digital efx & reverb, digital delay, time compression/expansion.

LIGHTING METHODS ▲
1099 Jay St., Rochester, NY 14611
716 328-1020

Lamps, HMI & CSI fixtures, quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging, lighting control boards, dimmer packs.

**LIGHTNING ELIMINATORS &
CONSULTANTS** ▲
13007 Lakeland Rd., Santa Fe Springs,
CA 90670
213 946-6886

Lightning prevention systems (dissipation arrays); chemically activated ground rods; automatic voltage regulators; surge protectors.

LINES VIDEO SYSTEMS ▲
219 S. Jefferson, Springfield, MO 65806
417 862-5533/ 800 641-4674

Facilities design & engineering services; engineering consultants; audio & video equipment suppliers.

LIPSNER-SMITH CO.
4700 Chase Ave., Lincolnwood, IL 60466
312 677-3000

Ultrasonic film cleaners for film-to-tape transfers; high speed film rewinders.

LISTEC VIDEO CORP. ▲
30 Oser Ave., Hauppauge, NY 11788
516 273-3020

Polar Video compact studio/mobile production switchers, standalone analog efx & colorizers. Listec downstream keyers. TV newsroom computers. High-resolution video monitors. Monitor-based, scroll entry, keyboard entry & ENG/EFP portable teleprompters.

LNR COMMUNICATIONS
180 Marcus Blvd., Hauppauge, NY 11788
516 273-7111

FM exciters; modulators. Upconverters & downconverters; FET & parametric LNAs.

LOGITEK ▲
3320 Bering Dr., Houston, TX 77057
800 231-5870/ 713 782-4592

Audiorack & Stereorack portable consoles;

THE RIGHT STUFF



Lenco's New 600 System Audio Distribution Components Put All the Right Stuff Together...

Lenco's new 600 System audio components bring a new standard of performance to the field of audio/video distribution equipment. But that's not the only reason why you'll want to specify the Lenco 600 System for your next purchase.

UNMATCHED VERSATILITY

Mix Lenco Audio and Video Distribution Equipment to suit your needs. Virtually all Lenco distribution components fit the 600 System Main Frame. And you can mix audio/video in almost any combination in the unique 9 cell frame. You're not limited to a 50/50 maximum video-audio mix. Engineers will also appreciate our innovative frame and module design which ensures ease of installation and maintenance.

ENGINEERED FOR PERFORMANCE

Lenco 600 System components are built to the toughest standards in the industry, and engineered to assure unmatched performance with specifications such as:

**ANY
WAY
YOU
WANT
IT!**

- S/N 105 dBv
- Common Mode Rejection 70 dB
- Intermodulation Distortion < .004%
- Total Harmonic Distortion < .006% up to 24 dBm

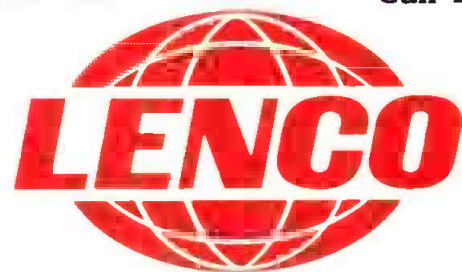
Finally, our design engineers have taken extreme caution using grounding and shielding to minimize crosstalk.

SUSTAINED SUPPORT SERVICE

If you should experience a problem with any Lenco component, we can supply a loan replacement from our factory ... Fast, usually within 24 hours. It's just one more reason why, when you need "the right stuff" for your audio or video operation, your first choice should be *The Professional's Choice ... Lenco.*

For complete technical information on Lenco's New 600 System Components and the full line of quality Lenco distribution equipment.

Call Toll-free: 1-800-325-8494.



300 N. Maryland St.
P.O. Box 348
Jackson, MO 63755
1-314-243-3147

Circle 152 on Reader Service Card

mono studio consoles; Perfectionist stereo studio consoles; audio-for-TV consoles; Crossfire console automation. Monitor speakers. Preamps, line amps, monitor/power amps. Audio DAs. Bright-VU LED displays. Timers.
See ad on page 76 *Circle No. 150*

LOWEL-LIGHT MFG. ▲
475 Tenth Ave., New York, NY 10018
212 947-0950
Location lighting equipment & accessories for video, film & still photography.

LPB ▲
28 Bacton Hill Rd., Frazer, PA 19355
215 644-1123
Signature III mono studio audio consoles; Signature, Alpha & Citation stereo studio consoles. Turntables, pickup arms. AM & FM compressor/limiters. Audio DAs. AM transmitters. Facilities design & engineering services.
Field Office:
CA Richard Burden, 20944 Sherman Way, Canoga Park 91303 213 340-4590

L&R COMMUNICATIONS LTD. ▲
Box 3807, Sioux City, IA 51102
712 252-4101
Tower masts; tower rigging & hardware; tower lighting.

LTM CORP. OF AMERICA ▲
1160 N. Las Palmas Ave., Hollywood, CA 90038
213 460-6166
Mic booms, dollies; carbon mic poles. Sylvania lamps, HMI & CSI fixtures, quartz fixtures, lighting stands & rigging, dimmer packs. Power generators, AC power dividers, HMI ballasts, ac/dc converters & inverters. MSL Fiber optic systems. Lighting /ac cable, cable connectors. Equipment rental services.
Field Offices:
FL John Banner, 909 N.W. 10 Terrace, Ft. Lauderdale 33311 305 522-1070
FL 1509 Pine Ave., Orlando 32824 305 859-0411
NY Rob Halle, 437 W. 16 St., New York 10011 212 243-9288
MI Ginny Hart, 36875 Schoolcraft Rd., Livonia 48150 313 464-1294

L-W INTERNATIONAL ▲
50 W. Easy St., Simi Valley, CA 93065
805 522-3284
Athena 16 mm telecine projectors; optical multiplexers.

LYON LAMB VIDEO ANIMATION ▲
4531 Empire Ave., Burbank, CA 91505
818 843-4831
Video animation controllers. NTSC encoders.

3M BROADCASTING & RELATED PRODUCTS DIV. ▲
3M Center, Bldg. 225-4S-10, St. Paul, MN 55144
612 733-9073
Titlers, subtitles, character/generator graphics systems, digital art/paint systems, camera/VTR digitizers. Digital recorders. Parallel & serial interface video routing switchers. Parallel & serial interface machine control/technical automation, vertical

interval systems. Sync, black burst, color bar generators. Proc amps, video DAs.

3M MAGNETIC MEDIA DIV. ▲
Bldg. 223-55-01, 3M Center, St. Paul, MN 55144
612 733-8765
Open-reel audio tape, carts, cassettes, sprocketed mag film; empty reels & carts. Scotch two-inch & one-inch videotape, 3/4-inch & half-inch cassettes; empty reels, carts, cases.

3M STORMSCOPE WEATHER MAPPING SYSTEMS ▲
223-3N-01 3M Center, St. Paul, MN 55144
612 733-8878
Thunderstorm warning & tracking systems.
Field Office
OH 6530 Singletree Dr., Columbus 43229 614 885-3316

MACKENZIE LABORATORIES
5507 N. Peck Rd., Arcadia, CA 91006
818 579-0440
Audio cart player/recorders; single-deck, dual/triple deck, multideck.

M/A-COM MAC ▲
5 Omni Way, Chelmsford, MA 01824
617 272-3100
Intercity ENG microwave systems; 23 GHz microwave system for point-to-point & STL. Microwave central receivers.

M/A-COM TELECOMMUNICATIONS DIV.
11717 Exploration Ln., Germantown, MD 20874
301 428-5500
DATE modulators. TDMA & SCPC transmit/receive satellite earth stations. Gemini and personal earth stations. Small aperture Ku-band earth terminals for voice videoconferencing/data broadcasting.

MAGNA-TECH ELECTRONIC CO. ▲
630 Ninth Ave., New York, NY 10036
212 586-7240
Sprocketed magnetic film transports, dubbers. 16/35 mm telecine projectors. SMPTE time code generator/readers.
See ad on page 81 *Circle No. 153*

MAGNETIC REFERENCE LAB ▲
229 Polaris Ave. Ste. 4, Mountain View, CA 94043
415 965-8187
Audio test tapes. Audio test signal generators, wow & flutter meters.

MAGNI SYSTEMS ▲
9500 S.W. Gemini Dr., Beaverton, OR 97005
503 626-8400
Personal computer-aided TV test signal generator. Combination waveform monitor/vectorscopes. Burst phase meters, diff. gain/phase meters, SCH phase meters. Telecine color correctors; test signal source.

MAGNUM TOWERS
9370 Elder Creek Rd., Sacramento, CA 95829
916 381-5053
Tower masts, rigging, hardware, lighting.

MALLORY TIMERS CO.
Box 986, Indianapolis, IN 46206

317 261-1220
Timers.
THE MANAGEMENT ▲
Box T, Aledo, TX 76008
817 441-8532
Radio & TV business automation software.

MANHATTAN PRODUCTION MUSIC
300 W. 53rd St., #12C
New York, NY 10019
212 333-5766/800 227-1954
Music libraries.

MARATHON PRODUCTS ▲
334 W. Boylston St., W. Boylston, MA 01583
617 853-0988
ATR head cleaners, degaussers; alignment & tension gauges. Open-reel audio tape, carts; empty reels & carts. Splicing blocks.

MARCOM ▲
Box 66507, Scotts Valley, CA 95066
408 438-4273
Distributor of FM compressor/limiters. TV, radio transmitters. SCAs, antennas, towers, masts. Audio routing switchers. Stereo generators. Demodulators, modulation monitors.

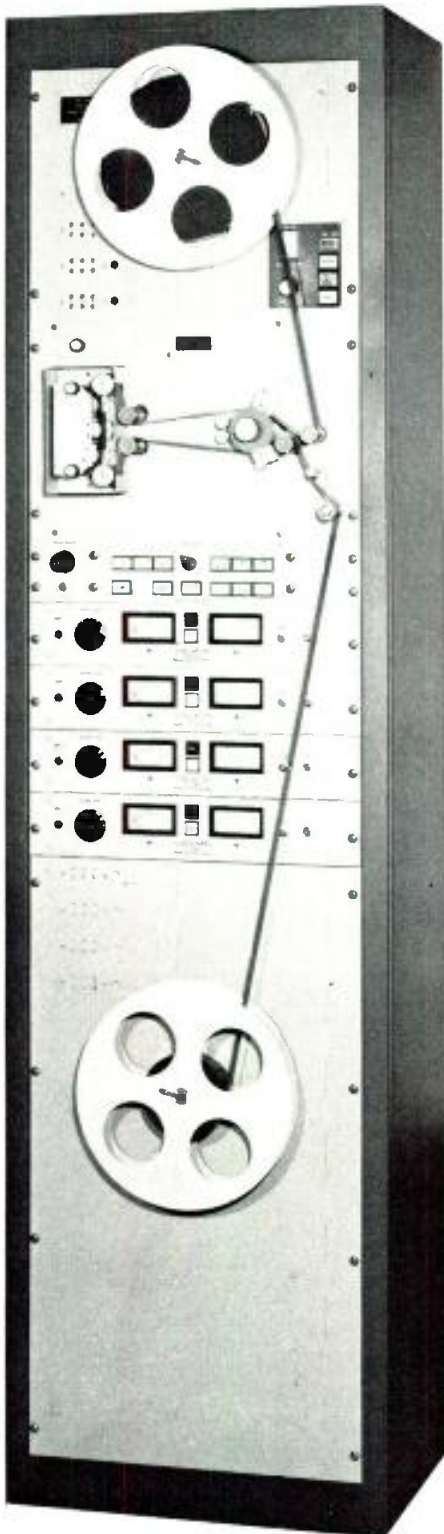
MARCONI INSTRUMENTS ▲
3 Pearl Ct., Allendale, NJ 07401
201 934-9050
Spectrum analyzers; mobile radio test sets. Video test signal generators, television interval timers, TV test line generator/inserters. FM/AM signal generators. Modulation monitors. Microwave counters; amplitude analyzers; AM/FM signal sources. White noise test sets. RF power meters. Voltmeters.

MARK ANTENNA PRODUCTS
2810 S. Wolf Rd., Des Plaines, IL 60018
312 298-9420
Transmit/receive & receive-only satellite earth stations. Communications antennas. Foam dielectric & coaxial transmission line; RF connectors.

MARSHALL ELECTRONIC ▲
Box 438, Brooklandville, MD 21022
301 484-2220
Digital audio efx & reverb; digital delays; audio time compression/expansion.

MARTI ELECTRONICS ▲
Box 661, 1501 N. Main, Cleburne, TX 76031
817 645-9163
AM & FM compressor/limiters. Dynamic mics. Line amps, monitor/power amps. ALC, AGC amps. Intercity, portable ENG & airborne microwave systems; central receivers. Communications antennas. Andrew foam dielectric & coaxial transmission line, RF connectors. Transmitter remote control systems. STLs, TSLs; microwave boosters for aural STLs. FM & TV SCA equipment. Two-way radio communications; remote pickup equipment. Quartz crystals.

MATRIX SYSTEMS CORP.
5177 N. Douglas Fir Rd., Calabasas, CA 91302
818 992-6776
Large automated video production switchers. Parallel & serial interface video routing switchers.



MAGNA-TECH

THE SOUND HEARD AROUND THE WORLD

Magnetic Film
Recorders and Reproducers
for Television and Film
Sound Post-Production

HIGH SPEED

Telecine Magnetic Followers
Video Tape-Film Interlock
Electronic Looping
Dubbing Systems
16 and 35mm Electronic Projectors
Total Facility Engineering

WORLDWIDE SALES OFFICES

Paris
Hi-Fidelity Services
4 Rue Semard
75009 Paris, France

Sydney
Magna-Techtronics (Aust.)
PO Box 150
Crows Nest NSW 2064
Australia — Telex 24655

Johannesburg
Magna-Tech Satty Ltd.
Private Bag #5
Melville 2109
South Africa
Tel: 011-726-4266

Rome
Studio Sound System S.N.C.
Via Teano 305
00171 Roma Italy
Tel: 257-9458

Brussels
A.R.C.
Rue de Boisde Linthout 45
1200 Brussels Belgium

Hong Kong
Paul Yang and Associates
901 Star House
3 Salisbury Road
Kowloon, Hong Kong

Bombay
Capt. P.K. Vishwanath
234/4 Rama Baug,
Deodhar Road
Bombay 400 019, India

Willstatt West Germany
Zenon GMBH
Carl-Benc Str. 6
Willstatt 7601
Tel: 07852/7025
Telex: 753537

London
Branch & Appleby
Stonefield Way
Ruislip
Middlesex HA40YL
England

Kuala Lumpur
Kinematronika Sdn. Bhd.
2852, Jalan Selangor/
Persekutan,
Federal Hill
Kuala Lumpur, Malaysia

Caracas
Cine Materiales srl
Apartado Postal 61.098
Caracas 106 Venezuela

MAGNA-TECH ELECTRONIC CO., INC.

630 Ninth Avenue, New York, N.Y. 10036

Telephone (212) 586-7240

Telex 126191

Cables "Magtech"

Circle 153 on Reader Service Card

MATTHEWS STUDIO EQUIPMENT ▲
2405 Empire Ave., Burbank, CA 91504
818 843-6715

Lighting diffusion, efx material, stands & rigging. Dollies, cranes, jibs, remote pan/tilt systems.

MAXELL CORP. OF AMERICA ▲
60 Oxford Dr., Moonachie, NJ 07074
201 440-8020

Audio & video tape, digital audio tape, cassettes, carts and reels. Rechargeable NiCad, lithium, alkaline, and lead batteries; power packs; chargers.

See ad on page 83

MCCURDY RADIO ▲
108 Carnforth, Toronto, Ont., Canada
M4A 2L4
416 751-6262

Mic mixers; stereo studio & audio-for-TV consoles. Turntables. Digital audio delay. Hardwired intercom systems; digitally controlled intercom. Line amps, monitor/power amps. amp power supplies. Audio DAs, patch panels. Low frequency extenders. VU, LED, PPM meters. Digital clocks, master & slave clocks. Audio post-production services; radio & TV studio design. Post-production switchers. Audio synchronizers and audio/data encryption systems.

See ad on page C3 Circle No. 180

MCG ELECTRONICS
12 Burt Dr., Deer Park, NY 11729
516 586-5125
Surge-Master surge protectors.

MCL ▲
501 S. Woodcreek Rd., Bolingbrook, IL
60439-4999
312 759-9500

LPTV transmitters; RF amps & switches; transmit/receive & transportable satellite earth stations. RF test signal generators.

McMARTIN INDUSTRIES ▲
111 Camino del Rio, Gunnison, CO 81230
303 641-5500

Accu-Five mic mixers. Complete disc playing consoles. ALC & AGC amps, AM & FM compressor/limiters. RF intercom systems. Preamps, line amps, monitor/power amps. EBS two-tone systems. AM, FM, VHF & UHF transmitters. AM & FM exciters, stereo generators, modulators. SAP generators, monitors. SCA generators and receivers; public address sound equipment. RF amps, filters. Modulation monitors, field intensity meters.

MEAD DATA CENTRAL ▲
9393 Springboro Pike, Dayton, OH 45401
513 865-6800

Computer-accessed library of wire service stories, newspapers, magazines.

MEDALLION VIDEO PRODUCTIONS
4001 W. Devon #310, Chicago, IL 60646
312 794-4970

Mobile production facilities rental.

MEDIA COMPUTING ▲
13951 N. Scottsdale RD, Scottsdale, AZ
85260
602 483-9045

The Electronic Newsroom radio & TV newsroom computer software systems. ANGIS automated news graphics interface system. PC Prompter monitor-based, keyboard entry

teleprompters.

MEDIA GENERAL BROADCAST SERVICE

2714 Union Ave. Ext., Memphis, TN 38112
901 320-4212

Radio program & commercial production services; station IDs; music libraries.

MEI ELECTRONICS ▲
910 Sherwood Dr., Unit 19, Lake Bluff, IL
60044

312 295-2606

Digitisound digital audio recorders. Computer automation controllers; Satmaster automatic satellite switchers; complete program automation systems. Audio mastering controller & tone generator.

MERLIN ENGINEERING WORKS ▲
2440 Embarcadero Way, Palo Alto, CA
94303

415 856-0900

VTR, VCR modifications for quad, one-inch B, one-inch C, 3/4-inch U-Matic, M-format, VHS. Q-Driver machine control systems. Standards converters. Digital stereo audio encoders. Speakers. Transport cases.

MICRO COMMUNICATIONS ▲
Box 4365, Manchester, NH 03108
603 624-4351

FM antennas; TV CP, VHF & UHF antennas; communications antennas. HP & LP VHF diplexers, UHF diplexers, multiplexers. Waveguide UHF & VHF diplexers for stereo. RF filters, loads, & switches. MDS/ITFS antennas, multichannel combiners, diplexers. Portable ENG microwave Circular & rectangular waveguide; power dividers, RF connectors. Engineering consultants.

MICRO CONTROLS ▲
Box 728, Burleson, TX 76028
817 295-0965

Transmitter remote control systems; STLs & TSLs; FM SCA & paging equipment. FM exciters.

MICRODYNE CORP. ▲
Box 7213, 491 Oak Rd., Ocala, FL 32672
904 687-4633

Transmit/receive, receive-only & transportable satellite earth stations; upconverters, downconverters; encryption systems; satellite network controllers. Mobile vehicle construction.

MICROFLECT CO. ▲
Box 12985, 3575 25 St. S.E., Salem, OR
97309
503 363-9267

Tower masts, rigging, hardware, lighting. Waveguide support systems & components.

MICRON AUDIO PRODUCTS ▲
210 Westlake Dr., Valhalla, NY 10595
914 761-6520

RF mics; Tram electret/condenser & lavalier mics; mic booms & dollies.

MICROPROBE ELECTRONICS
See MEI

MICROTIME ▲
1280 Blue Hills Ave., Bloomfield, CT
06002

203 242-4242

Genesis 1, ACT 1, RP-1 digital efx genera-

tors, compressor/positioners & standalone analog efx. TBCs, frame synchronizers, TBC/framestores. image enhancers.

MICRO-TRAK CORP. ▲
165 Front St., Chicopee, MA 01013
413 594-8501

Mic mixers; portable, mono studio & audio-for-TV consoles. Pickup arms, complete disc playing consoles. Preamps, monitor/power amps. Audio DAs. Studio furniture; cabinets; studio consoles; equipment racks; cart/tape storage racks.

MICROTRAN CO. ▲
145 E. Mineola Ave., Box 236, Valley Stream, NY 11582
516 561-6050

ATR & VTR head cleaners & degaussers. Audio & video tape erasers & degaussers. Transformers.

MICROWAVE FILTER CO. ▲
6743 Kinne St., E. Syracuse, NY 13057
315 437-3953

Video filters. RF filters.

MICROWAVE NETWORK
10795 Rockley Rd., Houston, TX 77099
713 495-7123

23 GHz microwave radio systems for short distance, intercity communications.

MICROWAVE RADIO
847 Rogers St., Lowell, MA 01852
617 459-7655

Portable ENG microwave systems; central microwave receivers, masts.

MIDWEST COMMUNICATIONS CORP. ▲

1 Sperti Dr., Edgewood, KY 41017
606 331-8990

Mobile vehicle construction including ENG and satellite vehicles; equipment rental services; facilities design & engineering services. Distributor of video equipment.

Field Offices:

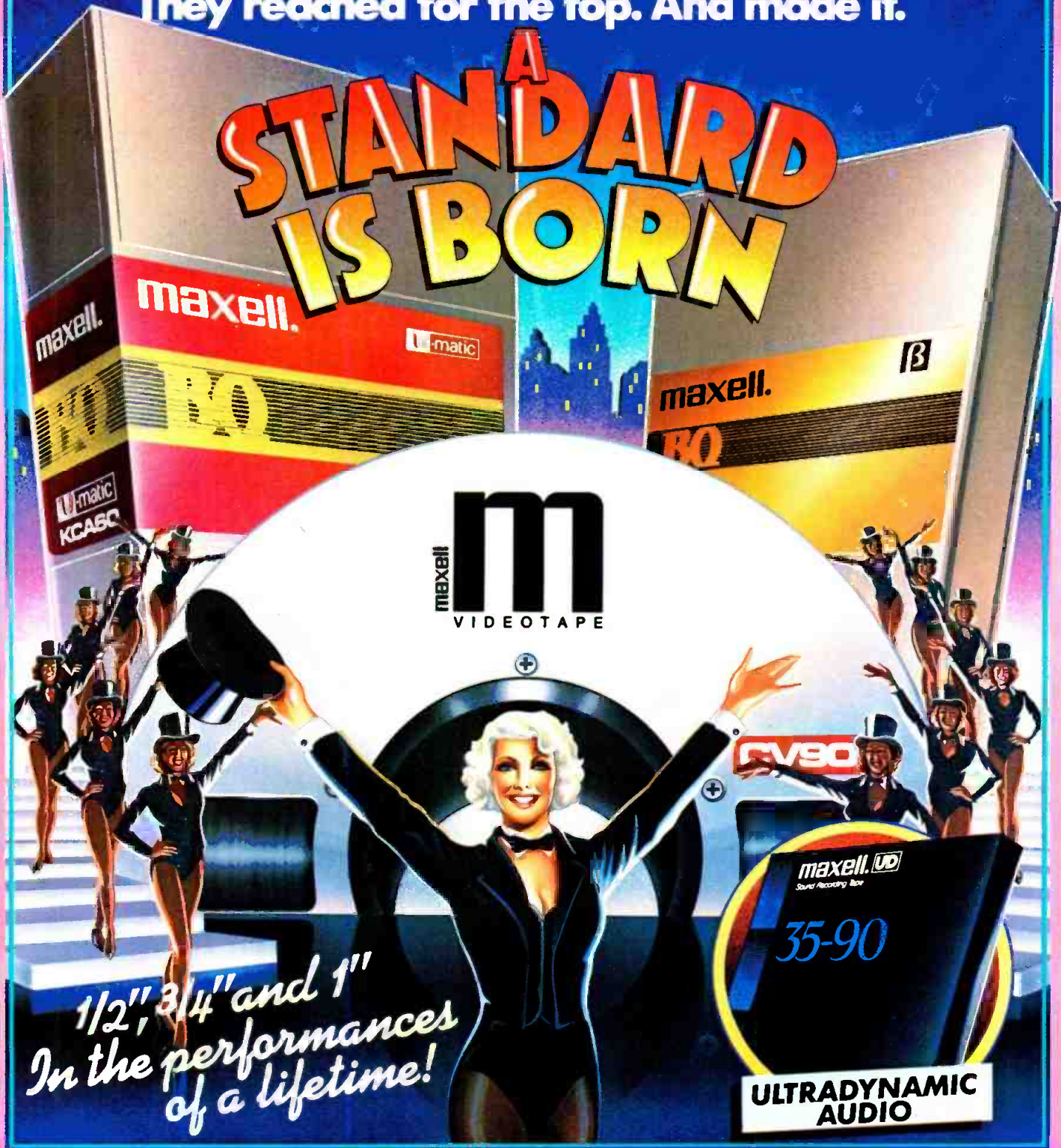
FL Lloyd Hicks, 8875 N.W. 23 St., Miami
33172 305 592-5355
GA Ron Bradley, 522 Armour Cir., Atlanta
30324 404 875-3753
IN Al Perko, 4105 Vincennes Rd., Indianapolis
46268 317 872-2327
KS Rod Herring, 14006 W. 107 St. Shawnee
Mission 66215 913 469-6810
KY Mark Dauer, 1804 Cargo Ct., Louisville
40299 502 491-2888
MD John Handley, 4720B Boston Way,
Lanham 20706 301 577-4903
MI Ron Arendall, Southfield Technicenter
21683 Melrose Ave., Southfield 48075
313 350-3038

MO Larry Mason, 11642 Lilburn Pk. Rd.,
St. Louis 63146 314 569-2240
NC Jim Slate, 2848 Interstate 85 S. #E,
Charlotte 28208 704 399-6336
OH Brad Nogar, 7500 Wall St., Cleveland
44125 216 447-9745
PA John Humphrey, 535 Rochester Rd.,
Pittsburgh 15237 412 364-6780
TN Mike Quinn, 740 Freeland Station Rd.,
Nashville 37228 615 255-2801
VA Kevin Thompson, 2730 Ayliff Rd., Norfolk
23513 804 853-2600
WV Chuck Sizemore, 1020 Grosscup
Ave., Dunbar 25064 304 768-1252

See ad on page 14 Circle No. 108

Maxell Broadcast Quality Tapes.
They reached for the top. And made it.

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*1/2", 3/4" and 1"
In the performances
of a lifetime!*

STARRING A FULL LINE OF PROFESSIONAL AUDIO AND VIDEO TAPE FORMATS
TO ENTERTAIN YOUR EVERY NEED. INTRODUCING THE NEWEST STARS IN TAPE TECHNOLOGY, INCLUDING
DAT, PCM AUDIO TAPE, S-VHS VIDEO TAPE, 8MM VIDEO TAPE, AND BETACAM TAPES!

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A MAXELL DISTRIBUTOR NEAR YOU.

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maxell.
PROFESSIONAL/INDUSTRIAL DIVISION

Maxell Corporation of America, 60 Oxford Drive, Moonachie, NJ 07074 201-641-8600

MIKROLAB ▲
4121 Redwood Ave., Los Angeles, CA
90066
213 306-0120

Monitor speakers, monitors with built-in amps. Line amps; VU meters.

MILAM AUDIO ▲
1470 Valle Vista St., Pekin, IL 61554
309 346-3161

Full-line turnkey audio dealer specializing in recording and broadcast equipment.

L. MATTHEW MILLER ASSOC. ▲
48 W. 21 St., New York, NY 10010
212 741-8011

Equipment rental services; facilities design & engineering services; engineering consultants. Distributor of video equipment.

MILLER PROFESSIONAL EQUIPMENT ▲
10816 Burbank Blvd., N. Hollywood, CA
91601
818 766-9451

Milequip camera tripods, heads, dollies.

MINNEAPOLIS MAGNETICS
9969 Valley View Rd., Eden Prairie, MN
55344
612 944-7660

Replacement audio heads. Satellite network controllers. Tape-based loggers, chart recorders, automatic radio monitors, status/alarm indicators.

MINOLTA CORP. ▲
101 Williams Dr., Ramsey, NJ 07446
201 825-4000

Light meters, illuminance meters, luminance meters, color temperature meters, chroma meters, TV monitor analyzers.

MITCHELL CAMERA CORP. ▲
11630 Tuxford St., Sun Valley, CA 91352
818 768-6400

35 mm studio cameras; geared head, ba-zooka mounting system; director's viewfinder.

MITSUBISHI PRO AUDIO ▲
225 Parkside Dr., San Fernando, CA
91340
818 898-2341

Digital audio recorders. Quad Eight Westar consoles; Westrex film recorders and reproducers.

MOBILE-CAM PRODUCTS ▲
Box A-82108, San Diego, CA 92138
619 692-3208

Mobile vehicle construction. Hardwired intercom/IFB systems. Audio & video DAs. Mult-Box battery-powered device for multiple audio & video ENG feeds. Aluminum mobile vehicle cabinets, equipment racks, roof racks, antenna mounts, electric reels, alternators, engine speed controls. Camera cradles, quick-release camera/VTR cables, padded nylon VTR & accessory bags.

MOBILE SYSTEMS
450 N. Somerset Ave., Indianapolis, IN
46222
800 826-3271/317 638-5037

Mobile vehicle construction; SNG vehicle construction.

MODERN TELECOMMUNICATIONS/MTI ▲
1 Dag Hammarskjold Plaza, New York, NY
10017
212 355-0510

Video production & post-production facilities; mobile production facilities rental.

MODULAR AUDIO PRODUCTS ▲
50 Orville Dr., Bohemia, NY 11716
516 567-9620

AM compressor/limiters, graphic equalizers. Audio preamps, line amps, monitor/power amps, amp power supplies. Audio DAs, audio routing switchers. VU, PPM, LED level displays. Audio test signal generators. Frames.

MODULATION ASSOCIATES
897 Independence Ave., Mountain View, CA 94043
415 962-8000

Diplexers, multiplexers, modulators. Transmit/receive, receive-only & transportable satellite earth stations; upconverters, downconverters; satellite network controllers.

MODULATION SCIENCES ▲
115 Myrtle Ave., Brooklyn, NY 11201
718 625-7333

TV stereo generators; Sidekick multiplexers, TV Sidekick SAP generators. FM composite processor; stereo image enhancer and composite processor; composite line driver; composite audio DA. TV stereo reference decoder. Sidekick, Data Sidekick FM SCA equipment.

MOLE-RICHARDSON CO. ▲
937 N. Sycamore Ave., Hollywood, CA
90038-2384
213 851-0111

Lamps, HMI & CSI fixtures, Molequartz quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging, lighting control boards, Moletronic dimmer packs. Nicad & lead-acid batteries & chargers, power generators, HMI ballasts, ac/dc converters & inverters. Foam insert transportation cases.

MONITOR CORP.
5740 Green Circle Dr., Minnetonka, MN
55343
612 935-4151

High resolution video monitors.

MONROE ELECTRONICS ▲
100 Housel Ave., Lyndonville, NY 14098
716 765-2254

Automatic satellite switchers; line amps; telco interface equipment. parallel interfaces. Transmitter remote control systems.

MOOG MUSIC
2500 Walden Ave., Buffalo, NY 14225
716 681-7200

Music synthesizers.

TOMMY MOORE, INC.
Box 8597, Fort Worth, TX 76124-0597
817 457-3060

Tower masts, rigging, hardware, lighting.

MOSELEY ASSOCIATES ▲
111 Castilian Dr., Santa Barbara, CA
93117-9093
805 968-9621

AM & FM compressor/limiters; audio routing switchers; A-D/D-A converters. Stereo generators; Transmitter remote control systems. Microwave STLs, TSLs. FM SCA equipment. STL & remote control accessories.

MOTOROLA, INC., AM STEREO ▲
1216 Remington Rd., Schaumburg, IL
60173
312 576-0554

AM stereo exciters, generators. AM stereo modulation monitors.

MOTOROLA C&E ▲
17-22 Whitestone Expy., Whitestone, NY
11357
718 746-1100

RF intercom systems. VU meters, LED audio level displays. Nicad batteries & chargers, power generators. RF amps, tubes & attenuators. Intercity microwave equipment. Communications antennas. Rigid, foam dielectric & coaxial transmission line. Tower masts. STLs, TSLs. Two-way radio communications. Remote pickup equipment. Saber portable radios.

MPB TECHNOLOGIES ▲
1725 N. Service Rd., Transcan. Hwy., Dorval, Que., Canada H9P 1J1
514 683-1490

Vista 90 character generator/graphics system.

MPCS VIDEO INDUSTRIES ▲
514 W. 57 St., New York, NY 10019
212 586-3690

Video post-production facilities; studio rental; equipment rental services; recording studios; audio post-production facilities equipment rental services; facilities design & engineering services; engineering consultants. Distributor of full line broadcast equipment.

Field Office:
FL 4100 N. 28 Terrace, Hollywood 33021
305 923-3446/947-3320

MP VIDEO
65 South St., Hopkington, MA 01748
617 435-2131

Subminiature tube and CCD video cameras.

MU-DEL ELECTRONICS ▲
2426 Linden Ln., Silver Spring, MD 20910
301 587-6087

RF amps, attenuators, converters, filters. Satellite upconverters, downconverters; LNAs.

MULTIDYNE ELECTRONICS ▲
Box 528, Locust Valley, NY 11560
516 671-7278

Audio DAs. Titlers, subtitlers. SMPTE time code generator/readers, Sync, black burst, color bar, source ID, safe title area & video slate board/countdown generators. Video/cable equalizers. Video DAs, pulse amps, subcarrier amps. Video test signal generators.

MULTI-TRACK MAGNETICS, DIV. MATRIX CORP.
3 Industrial Ave., Upper Saddle River, NJ 07458
201 327-9400

Magnetic film dubbers & recorders. Solid state telecine systems, 16/35 mm telecine projectors. Time code generators; hard-lock synchronizers for film/tape sync. Facilities design & engineering services.

THE MUSICWORKS ▲
Box 111390, Nashville, TN 37211
800 251-9000/in TN 615 790-1200
Music libraries; syndicated radio programming.

MYCOMP TECHNOLOGIES CORP. ▲
200 McCormick Ave., Costa Mesa, CA 92626
714 545-5111

Sericon parallel & serial interface video routing switchers. Machine control. Audio & video DAs. QC switchers. Facilities design & engineering services.

MYCRO-TEK
9229 E. 37 St. N., Wichita, KS 67226
800 835-2055/316 681-0550
Mycro-Vision & Ernie titlers, character generators.

MZB & ASSOCIATES
4203 Beltway, Dallas, TX 75234
214 233-5535
Mobile vehicle construction; equipment rental service; set/studio design services; engineering consultants; financial consultants; equipment distributor.

NADY SYSTEMS ▲
1145 65 St., Oakland, CA 94608
415 652-2411
RF intercom systems. RF mics. Infrared listening device. Two-way radios.

NAGRA MAGNETIC RECORDERS ▲
19 W. 44 St. #715, New York, NY 10036
212 840-0999
Portable ATRs. Replacement ATR heads. MRL test tapes, leaders. Tape-based loggers. Post production, time code audio recorders; one-inch Type C portable video recorders.
Field Office:
CA 1147 N. Vine St., Hollywood 90038
213 469-6391

NAKAMICHI USA CORP. ▲
19701 S. Vermont Ave., Torrance, CA 90502
213 538-8150
Audio cassette player/recorders; cassette tapes. Headphones.

NALPAK VIDEO ▲
1937C Friendship Dr., El Cajon, CA 92020
619 258-1200
Foam insert and rack configuration cases.

NATIONAL VIDEO CENTER ▲
460 W. 42 St., New York, NY 10036
212 279-2000
Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production facilities; music libraries; satellite transmission.

NAUTEL ▲
201 Target Ind. Cir., Bangor, ME 04401
207 947-8200
AMPFET AM transmitters.
Field Office:
CN Hacketts Cove, RR1, Tantallon, NS B01 3J0 902 823-2233

NEC AMERICA, BROADCAST EQUIPMENT DIV. ▲
1255 Michael Dr., Wood Dale, IL 60191
312 860-7600
SP-3A CCD color cameras. DVE System 10 & System 100 digital efx generators. SR-10 solid state video recorder. Video routing switchers, frame synchronizers; delays. FM, VHF & UHF transmitters. Portable ENG microwave systems. Slow-scan trans-

mitters/receivers.
Field Offices:
CA Frank Stolten, 8300-E Sierra College Blvd., Roseville 95678 916 791-7215
NJ Lawrence Litchfield, 21 Brandywine Terr., Morristown 07960 201 540-0819
IL Gary Schutte, 1255 Michael Dr., Wood Dale 60191 312 860-7600
VA Malcolm Burlison, 901 N. Columbus St., Alexandria 22314 703 548-1502

NEI ▲
934 N.E. 25 Ave., Portland, OR 97232
503 232-4445
Mic mixers; stereo studio consoles. Parametric & graphic equalizers. Analog efx, verb. Monitor/power amps. Real time analyzers.



AUDIO MIXING, TELEVISION STYLE

Designed specifically for television and video post, the split-concept serial architecture found in the Orion AMU series audio mixing system enables interface to virtually any SMPTE controllable device including production, routing, and master control switchers and video editors.

Standard software features include ReMem™ the disc based Recall Memory System that allows on-demand storage, recall, and reset of full panel set-ups (including EQ), providing an invaluable tool for any repetitive program or complex edit session.

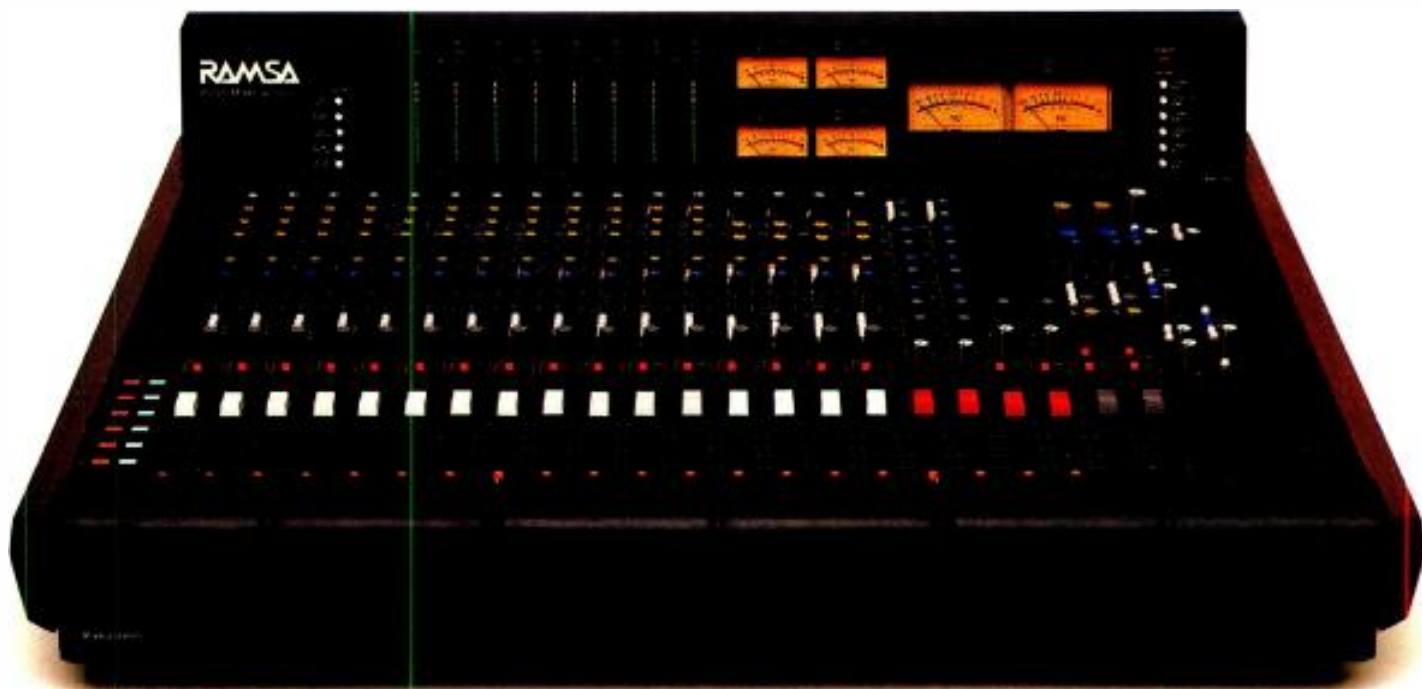
With full input-to-output stereo processing — and up to 32 stereo inputs plus a traditional panel layout, the AMU has the capacity, audio features, and ease of operation necessary for efficient audio production in both broadcast and video post.

State-of-the-art audio mixing for television . . . from . . .

ORION
RESEARCH INC.

4650 W. 160th St. • Cleveland, OH 44135 • (216) 267-7700
Toll Free (except Ohio and outside USA): 1-800-82 AUDIO
Telex: 510 600-0034 • FAX: (216) 267-5894

Circle 155 on Reader Service Card



The Ramsa WR-8616. Broadcast quality... Just ask KAPT, KEYI, KVET and KPEZ/Austin TX, KTXF/Harlingen TX, KBOR/Brownsville TX, WCTS/Minneapolis MN, WKHQ/Charlevoix MI, WFUR/Grand Rapids MI, WMMQ and WITL/Lansing MI, WMAY-WNNS/Springfield IL, WPXT-TV/Portland ME, WRCQ/Hartford CT, WIOV-FM/Lancaster-Reading PA, WHME/South Bend IN, WKJN/Baton Rouge LA, WLWI/Montgomery AL, WGUL/Tampa-St. Petersburg FL, and WSSL/Greenville SC. Or for more information, contact us at 6550 Katella Avenue, Cypress, CA 90630.

RAMSA

Panasonic
Industrial Company

Circle 157 on Reader Service Card

NETWORK PRODUCTION MUSIC

11021 Via Frontera, San Diego, CA 92127
619 451-6400/800 854-2075
Music & sound effects libraries.

NEUMADE PRODUCTS CORP. ▲

720 White Plains Rd, Scarsdale, NY 10583
914 725-4900
Empty audio reels, carts & cases; Neuvator film cleaners. Cabinets, equipment racks; power supplies; rectifiers.

RUPERT NEVE, INC. ▲

Berkshire Industrial Park, Bethel, CT 06801
203 744-6230
Portable & stereo studio audio consoles; 51 Series audio-for-TV consoles; NECAM 96 console automation. System 90 audio DAs.
Field Offices:
CA 6255 Sunset Blvd. #609, Hollywood 90046 213 465-4822
CN 2721 Rena Rd., Malton, ONT L4T 3K1 416 677-6611

NEW ENGLAND DIGITAL CORP. ▲

49 N. Main St., White River Junct., VT 05001
802 295-5800
Synclavier digital audio system for digital synthesis & multitrack recording; editing.

NEWTON ELECTRONICS

340 E. Middlefield Rd., Mountain View, CA 94043
415-967-1473
Video sync & color bar generators. Video test signal generators. Demodulators, RF test signal generators.

NEXUS PRODUCTIONS ▲

10 E. 40 St., New York, NY 10016
212 679-2180
Video post-production facilities.

THE NISSEN GROUP

32 Ridge Dr., Port Washington, NY 11050
516 944-5477
Facilities design & engineering services; engineering consultants.

NISUS VIDEO

6329 Lomas Blvd. NE, Albuquerque, NM 87110
505 268-4587
Lightweight (13 mm tube), single-tube & CCD ENG cameras retrofitted with adjustable rotary shutters.

NORAC BROADCAST POWER SYSTEMS

1305 Corpus Christi, Laredo, TX 78040
512 726-0130
Power generators.

NORDIC SOFTWARE

4910 Dudley St., Lincoln, NE 68504
800 228-0417
Media Master radio business automation hardware & software package.

NORMEX/TELNOX

55 Montpelier Blvd., Montreal, Que., Canada H4N 2G3
Telco interface equipment.

NORPAK CORP. ▲

10 Hearst Way, Kanata, Ont., Canada K2L 2P4
713 502-4174
NABTS teletext delivery systems, terminals; picture creation systems & test equipment for NABTS teletext. RGB video monitors; teltext & videotex caption creation & encoding equipment.

NORTHEAST PRODUCTIONS/NEP ▲

Wilkes-Barre/Scranton Airport, Avoca, PA 18641
800 233-4777/in PA 717 824-6666
Mobile production facilities rental; video post-production facilities; satellite uplinking & downlinking facilities.
Field Offices:
NY Howard Rogers, NEP Sharpshooters, Inc., 56 W. 45 St., New York 10036 212 823-1100
PA Chester Sawicki, Northeast Satellites Div., Scranton 717 826-1616

NORTHERN MAGNETICS

Box 16409, Minneapolis, MN 55416
612 944-8602
Replacement & rebuilt audio heads; head cleaners & degaussers, alignment & tension gauges. Test tapes & leaders.

NORTH WIND POWER CO.

Box 556, Moretown, VT 05660
802 496-2955
Wind energy systems. Lead-acid batteries & chargers, generators, inverters & converters. Towers.

NORTRONICS CO. ▲

8101 10 Ave. N., Minneapolis, MN 55427
612 545-0401
Replacement audio heads.

N.O.V.A. CORP.

5801 Uplander Way, Culver City, CA 90230
213 641-2046
Videotape cleaners, evaluators.

NOVA SYSTEMS ▲

50 Albany Turnpike, Canton, CT 06019
203 693-0238
TBCs, TBC/framestores.
See ad on page 4 *Circle No. 104*

N-PRO

10022 Hazelwood Dr., Oregon City, OR 97045
503 656-5500
Hydraulic ENG vehicle masts.

NTI AMERICA

1680 N. Vine St. #202, Los Angeles, CA 90028
213 462-8945
Digital video test signal generators. Video color time coder. Digital still store.

FRED A. NUDD CORP.

Box 475, 1743 Rte. 104, Ontario, NY 14519
315 524-2531
Tower masts, rigging, hardware; Hughey/Phillips tower lighting. Tower installation, repair & modification.

NURAD ▲

2165 Druid Park Dr., Baltimore, MD 21211
301 462-1700
Microwave systems: intercity, portable ENG, Super Pod airborne, central receivers. Transmitter remote control systems. STLs, TSLs. Remote pickup equipment. Demodulators, antennal monitors. Pedestals, remote pan/tilt systems.

NYTONE ELECTRONICS

2424 S. 900 West, Salt Lake City, UT 84119
801 973-4090
Flying spot scanner (slide to video), optical multiplexers, telecine color correctors.

N-Z VIDEO SYSTEMS

513 Greer Ave., Sikeston, MO 63801
314 471-7145
Facilities design & engineering services; mobile vehicle construction.

O'CONNOR ENGINEERING LABS ▲

100 Kalmus Dr., Costa Mesa, CA 92626
714 979-3993
Tripods, heads, dollies. Foam insert transportation cases.

ODETICS/BROADCAST SALES

1515 S. Manchester, Anaheim, CA 92802
714 774-5000
MERPS multicassette television deck; digital time interval analyzers.
Field Office:
WI Jesse L. Nickels, 1704 N. Wright Rd., Janesville 53545
608 754-2139/800 243-2001
See ad on page 89 *Circle No. 158*

OKI TELECOM ▲

22-08 Rte 208, Fairlawn, NJ 07410
201 654-1414
Digital standards converters.

OKTEL CORP. ▲

1220 Page Ave., Fremont CA 94538
415 490-3100
Digital still stores, magnetic disc recorders; TBCs; weather radar displays.

OLD DOMINION BROADCAST ENGINEERING SVCE.

1101 Front St., Richmond, VA 23222
804 321-4506
Telco interface equipment. Audio cassette player/recorders; rebuilt audio heads. Hard-wired intercom systems. Custom transmitter remote control systems. Antenna tuning units. Low-noise remote pickup equipment.

OLESEN ▲

1535 Ivar Ave., Hollywood, CA 90028
213 461-4631
Lamps, lighting fixtures, diffusion & efx material, lighting stands, lighting control boards, dimmer packs; ac cable & connectors.

OMEGA INTERNATIONAL ▲

2691 Richter, Suite 116, Irvine, CA 92714
714 553-0564
Facility design and engineering services.

OMICRON VIDEO ▲

9700F Owensmouth Ave., Chatsworth, CA 91311
818 700-0742
Audio DAs, audio routing switchers. Manual

master control switchers. Parallel interface video routing switchers. Sync, black burst & color bar generators. Video DAs, pulse amps, subcarrier amps. Audio test signal generators.

OMNIMOUNT SYSTEMS ▲
10850 Vanowen St., N. Hollywood, CA
91605-6470
818 766-9000
Audio/video equipment mounting assemblies.

OMNIMUSIC ▲
52 Main St., Port Washington, NY 11050
516 883-0121
Music libraries on CD and LP; original music scores.

OMNI TECHNOLOGY
120 S.W. 21 Terrace, Ft. Lauderdale, FL
33312
305 583-0626
Distributor of audio and video equipment.

ONAN CORP. ▲
1400 73 Ave. N.E., Minneapolis, MN 55432
612 574-5000
Power generators; inverters.

ONE PASS FILM & VIDEO ▲
1 China Basin Bldg., San Francisco, CA
94107
415 777-5777
Video production & post-production facilities; mobile production facilities rental; audio post-production facilities; equipment rental services.

OPAMP LABS ▲
1033 N. Sycamore Ave., Los Angeles, CA
90038
213 934-3566
Portable, mono studio & audio-for-TV consoles. Audio noise reduction. Audio & video DAs, audio routing switchers, video pulse amps.

OPTICAL DISC CORP. ▲
17517H Fabrica Way, Cerritos, CA 90701
714 522-2370
CD mastering systems. Optical disc recording system. Color bar encoder/generator. Video test signal generators.

OPTICAL ELECTRONICS
Box 11140, Tucson, AZ 85734
602 889-8811
Video sync and signal generators; NTSC encoders.

OPTIMUS
161 E. Grand Ave., Chicago 60611
312 321-0880
Mobile production facilities rental; video post-production facilities.

ORBAN ASSOCIATES ▲
645 Bryant St., San Francisco, CA 94107
415 957-1067
ALC & AGC amps; Optimod AM & FM compressor/limiters; parametric equalizers. Analog efx, reverb. Stereo synthesizers. Stereo generators for FM & TV. Optimod TV audio processor. SAP & PRO channel generators.

ORION RESEARCH ▲
4650 W. 160 St., Cleveland, OH 44135
216 267-7700
AMU and Post-FX audio-for-TV consoles; audio DAs, audio routing switchers. Serial interface video routing switchers; vertical interval machine control/technical automation; video DAs.
See ad on page 85 Circle No. 155

ALLEN OSBORNE ASSOC. ▲
756 Lakefield Rd. Bldg. J, Westlake Village, CA 91361
805 495-8420
Hilomast telescoping microwave masts.

OSRAM CORP. ▲
Box 7062, Jeanne Dr., Newburgh, NY
12550
914 564-6300
HMI lamps & lighting fixtures.

OTARI CORP. ▲
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415 592-8311
Single-deck CTM cart player/recorders. Portable, 2-1/4-track studio & MTR multitrack open-reel ATRs. DTR digital audio recorders. Tape duplicators, loaders, rewinders. SMPTE time code synchronizers.
See ad on page 19 Circle No. 112

PACIFIC POWER SOURCE CO.
15122 Bolsa Chica St., Huntington Beach, CA 92649
800 854-2433/in CA 800 472-8465
Solid state ac power systems; uninterruptible ac power systems.

New "CHARGER" from PACO

Simplifies recharging of Ni-Cad Batteries with Built-in Discharger, that eliminates memory.

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4 Batteries at a time
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PACO DP-1240, (Sony BP-90)



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FAX: 213-687-3524
TLX: 756923

PACO ELECTRONICS U.S.A., INC.

World Trade Center

350 So. FIGUEROA St. (Suite 364) LOS ANGELES, CA 90071

Circle 159 on Reader Service Card

Operation without switching to AC 100V~240V 50/60Hz

PAY LESS ATTENTION TO YOUR VIDEO CART MACHINE



Great idea! Now you can do just that with the TCS2000.

The Cart Machine automatically manages, records and plays-to-air all forms of spots and programs, giving you much more uninterrupted time away from programming concerns.

The Cart Machine holds up to 280 carts on-line. Tracks 65,000 carts in the database. With its 1,000 event look ahead feature, you receive a printed list of needed carts and your saturation spot carts never have to leave the machine.

The Cart Machine's comprehensive software system interacts with your traffic system to download your logs and automatically preplans the spot play lists days in advance.

Now other station operations get your undivided attention—with The Cart Machine.

Odetics

We put *smarts* in The Cart Machine.

Odetics, Inc. 1515 S. Manchester Ave., Anaheim, CA 92802-2907.
Call toll free 1-800-243-2001. In California call 800-238-4422 or 714-774-2200.

Circle 158 on Reader Service Card

PACIFIC RECORDERS & ENGINEERING

2070 Las Palmas Drive, Carlsbad, CA 92009

619 438-3911

News mixer portable audio consoles; BMX, AMX & ABX mono & stereo studio consoles. Tomcat & Micromax single-deck cart player/recorders. Maxtrax audio replacement heads. Complete disc playing consoles. AM & FM compressor/limiters, stereo & mono; parametric equalizers. Preamps. Stereo & mono audio DAs, NTP audio routing switchers, patch panels & jackfields. VU & PPM meters. Delay controller insert switcher. Custom & stock studio furniture, studio consoles, equipment racks. Clocks, timers. Facilities design & engineering consultants.

PACKAGED LIGHTING SYSTEMS

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Lamps, quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging. Stage-Master lighting control boards & dimmer packs. Lighting equipment racks.

PACO ELECTRONICS U.S.A.

350 South Figueroa St., Suite 364, Los Angeles, CA 90071

213 617-9323

Nicad batteries, chargers.

See ad on page 88

Circle No. 159

PAG AMERICA

Box 15194, Asheville, NC 28803

704 274-1438

Nicad batteries & chargers; microprocessor-controlled chargers, solar chargers. Handlamps, ENG light kits.

W.A. PALMER FILMS

1475 Old Country Rd., Belmont, CA 94002

415 592-9170

Recording studios; audio post-production facilities; music libraries; film transfers from video.

PALTEX

2752 Walnut Ave., Tustin, CA 92680

714 838-8833

Two-machine editor/controllers, Abner & Excel A/B roll editors, Esprit, Esprit Plus & Edit-Star multisource editors. Serial and parallel machine interface.

PANASONIC BROADCAST

1 Panasonic Way, Secaucus, NJ 07094

201 348-7000

Cameras: studio, field, ENG, single-tube color, CCD color, monochrome; Recam recorder/cameras. Newvicon, Vidicon camera pickup tubes. 3/4-inch U, M-format, M-II format & VHS VCRs; MARC MERPS multicassette decks. 3/4-inch & half-inch videocassettes. Optical disc recorders. Telecine cameras. Titlers, subtitles; teletext terminals. Portable & compact studio/mobile production switchers. Standalone analog efx, RGB chromakeyers, title keyers. Manual master control switchers. Two-machine editor/controllers, A/B-roll editors,

multisource editors, SMPTE time code generator/readers. Video DAs. Monochrome, NTSC & battery-powered portable video monitors; video projectors.

See ad on page 36-37 Circle No. 124

PANASONIC INDUSTRIAL CO.

1 Panasonic Way, Secaucus, NJ 07094

201 348-7000

Ramsa portable audio consoles, mono & stereo studio consoles, audio-for-TV consoles; graphic equalizers; monitor speakers; dynamic, electret/condenser, RF & lavalier mics; monitor/power amps.

Memory Systems Division: Receive-only satellite earth stations, LNBS. Audio test signal generators; video test signal generators; oscilloscopes, logic analyzers. Capacitors.

PANAVISION

18618 Oxnard St., Tarzana, CA 91356

818 881-1702

16 mm cine cameras; Panacam electronic cinematography camera. Camera lenses.

PATCH BAY DESIGNATION CO.

Box 6278, Glendale, CA 91205

818 241-5585

PatchPrints custom labels for patch bays, control panels, mixers, etc.

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215 860-0303

Timesaver audio tape loaders, timers, rewinders. Economist, Perfectionist audio preamps.

THE PROFESSIONAL CHOICE IN POWER

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Perrott's "214" Our 14.4V (on board) Ni-Cad battery also available in 12.0V and 13.2V and w/built-in charger

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Power products for ALL your video needs

Betacam™ is a TM of Sony Corp

Circle 160 on Reader Service Card

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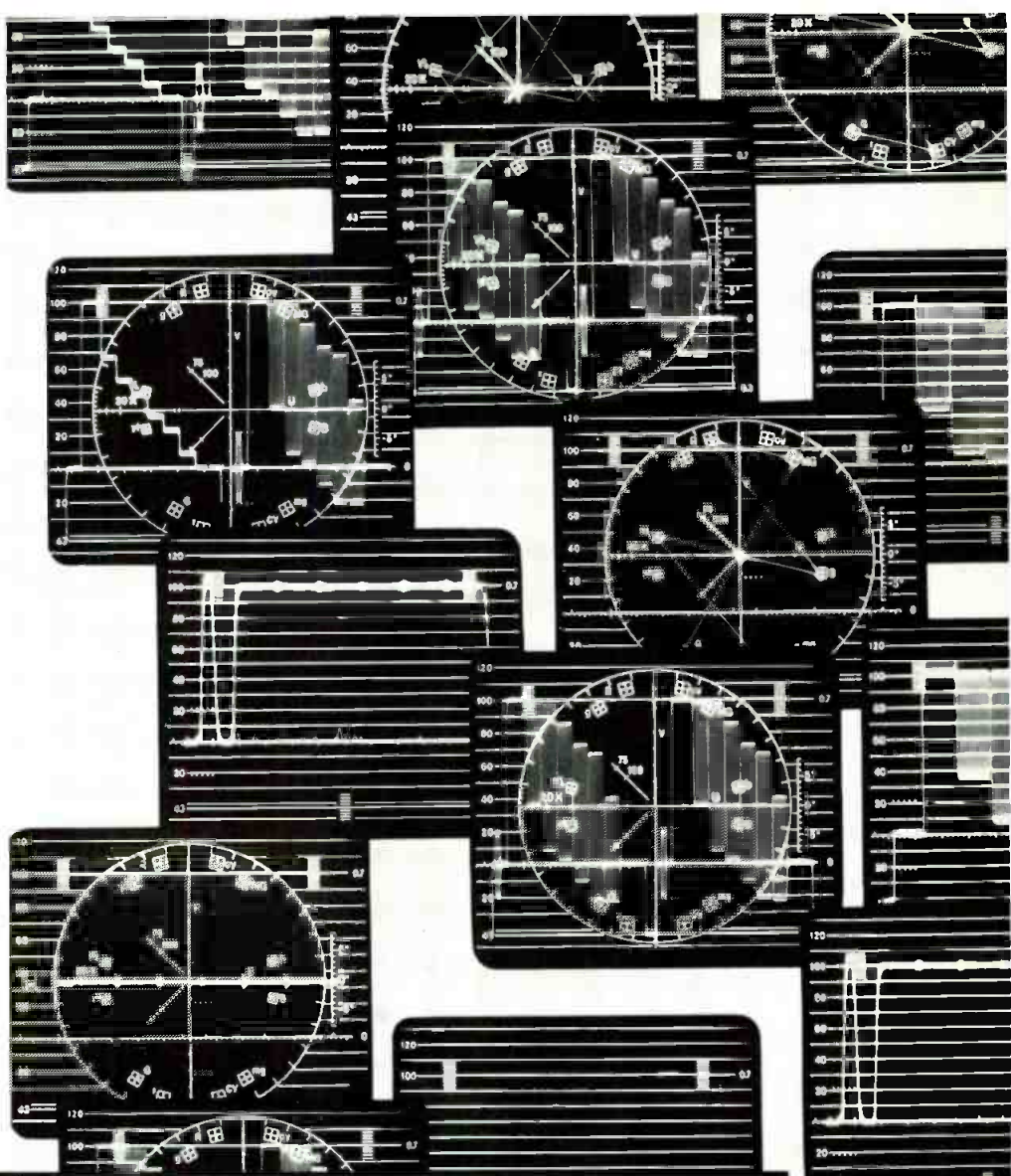
No matter what TV signal you have to analyze, the new Philips Waveform Monitors & Vectorscopes do the job best. Work with the brightest, crispest displays - for the most effective performance.

■ **PM 5665 & PM 5667/68 Waveform Monitor & Vectorscope.** The ultimate in measuring and monitoring. Even VITS appear with greater clarity. And PM 5668 features Sc-H phase.

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■ **PM 5662 Waveform Monitor/Vectorscope.** A combined, portable unit with Sc-H phase display. Ideal when space and power are limited.

A whole new range of Philips Waveform Monitors & Vectorscopes are now ready to fill all your TV-signal monitoring and measuring needs, no matter where you have to work. With, of course, worldwide Philips service guaranteed for a unit's entire product lifetime.



Test the difference

All over the world, in broadcasting, program production and set manufacturing, Philips Professional Television instruments are used when state-of-the-art technology is needed to ensure the highest test and measuring standards. That's why we say with pride ...

*Every day,
over a billion people
watch us work.*



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Philips Test & Measuring Instruments, INC.
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(201) 529-3800 TWX 710-988-5348
For the Philips Sales Office or Representative nearest you call Toll Free 800-631-7172



Test & Measurement

PHILIPS

PEGASUS SYSTEMS
See A.F. ASSOCIATES

PEIRCE-PHELPS, AUDIO/VIDEO SYSTEMS DIV. ▲
2000 N. 59 St., Philadelphia, PA 19131
215 879-7171

Facilities design & engineering services; mobile vehicle construction; turnkey television systems. Design, engineering & installation of custom teleconferencing systems.
Field Offices:
CA 575 Anton Blvd., Costa Mesa 92626 714 432-6305
MD Fred Bergstrasser, 12288 Wilkins Ave., Rockville 20852 301 984-7979
NJ 880 Bergen Ave. #505, Jersey City 07306 201 420-1061
PA Hal Morrison, 490 S. St. John's Church Rd., Camp Hill 17011 717 761-0240

PENNY & GILES ▲
2716 Ocean Park Blvd. #1005, Santa Monica, CA 90230
213 393-0014
Rotary & slide attenuators; motorized faders. T-bar controllers, joysticks.

PEP ▲
25 W. 54 St., New York, NY 10019
212 246-2490
Nicad batteries & chargers, ac adapters. ENG VHS interface for Sony editors. Frezzi On-Cam VTR system.

PERROTT ENGINEERING LABS ▲
7201 Lee Hwy., Falls Church, VA 22046
703 532-0700
Nicad, silver-zinc & lead-acid batteries, chargers. Quartz lighting fixtures, lamps, cyc lighting. Lighting/ac cable, cable connectors. Quartz crystals; crystal filters, oscillators.
See ad on page 90 Circle No 160

PESA AMERICA ▲
6073 N.W. 167 St., #C4, Miami, FL 33015
305 556-9638/800 USA PESA
Hardwired intercom systems; audio DAs. Production switchers; character generator/graphics systems; NTSC & high-resolution video monitors. LPTV transmitters, translators; modulators; receive-only satellite earth stations. Burst phase meters, SCH phase meters. Mobile vehicle construction.

PHILIPS TEST & MEASURING INSTRUMENTS ▲
85 McKee Dr., Mahwah, NJ 07430
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Sync & color bar generators. Color analyzers. VITS inserters & generators; pattern generators; sync/component video generators. Frequency counters; IF & RF modulators. Waveform monitors, vectorscopes, automatic VITS analyzers. Demodulators. Oscilloscopes, logic analyzers.
Field Office:
CA 3760 Cahuenga Blvd. W., N. Hollywood 91604 818 506-0550
See ad on page 91 Circle No 161

PICTURE MANAGEMENT SYSTEMS ▲
1071 Wisconsin Ave. N.W., Washington, DC 20007
202 338-6390
Photo Store videodisc stock shot library.

PINNACLE SYSTEMS ▲
2398 Walsh Ave., Santa Clara, CA 95051
408 970-9787
Digital still store; 2030 digital art/paint systems and 3D modeling units, digital efx generators.

PINZONE COMMUNICATIONS PRODUCTS ▲
14850 Cross Creek Park, Newbury, OH 44065
216 564-9093
TCR-100 refurbishing, rebuilding; TCR-100 diagnostics computer. VIMCAS vertical interval multichannel audio system. Transmit/receive, receive-only & transportable satellite earth stations; upconverters, downconverters; Dexcel LNAs. Cablewave rigid, foam dielectric & coaxial transmission line, power dividers.

PIONEER COMMUNICATIONS ▲
600 East Crescent Ave., Upper Saddle River, NJ 07458
201 327-6400
Laser disc players.

PIRELLI COMMUNICATION SYSTEMS ▲
2 Tower Dr., Wallingford, CT 06492
800 523-7893/203 284-1680
Fiber optic systems, modulators; upconverters, downconverters.

PITTARD DESIGN ▲
6335 Homewood Ave., Hollywood, CA 90028
213 462-2300
Graphic design for television.

PLASTIC REEL CORP. OF AMERICA ▲
Brisbin Ave., Lyndhurst, NJ 07071
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Plio-Magic empty audio & video tape reels, carts, cases. Moduline equipment racks. Videocassette storage & shipping containers for all formats.
Field Offices:
CA 8140 Webb Ave., N. Hollywood 91605 213 504-0400
IL 1302 W. Randolph, Chicago 60607 312 942-1950

POLAROID CORP. ▲
575 Technology Sq., #2S, Cambridge, MA 02139
617 577-2000/800 343-5000
Half-inch video cassettes; Freeze frame film recorders.

CONSTANTINE N. POLITES & CO.
833 Guenther Ave., Yeadon, PA 19050
215 626-4643
Scaffolding couplers for lighting grids.

POLYCOM TELEPRODUCTIONS ▲
142 E. Ontario, Chicago, IL 60611
312 337-6000
Video production & post-production facilities; mobile production facilities rental; recording studios; equipment rental services; earth station site selection; videotape duplication services; international standards conversion.

PORTABLE ENERGY PRODUCTS
1875 S. Pearl St., Denver, CO 80210
303 778-8616
Nicad & sealed lead-acid batteries, chargers.

PORTA-PATTERN ▲
Box 38945, 750 N. Highland Ave., Los Angeles, CA 90038
213 461-3561
Video test charts, slides, films, transparencies. Camera optical test media.

PORTLAND INSTRUMENT/AUDIO DEVELOPMENTS ▲
1101A Air Way, Glendale, CA 91201
818 500-0137
Mic mixers, portable audio consoles; DAs.

POSITIVE VIDEO ▲
15 Altarinda Rd., Orinda, CA 94563
415 254-3902
Video post-production facilities.

THE POST GROUP ▲
6335 Homewood Ave., Hollywood, CA 90028
213 462-2300
Video post-production facilities.

POTOMAC INSTRUMENTS ▲
932 Philadelphia Ave., Silver Spring, MD 20910
301 589-2662
Transmitter remote control systems. Audio test signal generators, harmonic distortion meters, IM meters, spectrum analyzers, real-time analyzers; wow & flutter meters. Demodulators, antenna monitors, field intensity meters, RF test signal generators, synthesized monitor/receiver, audio program analyzer.

POWERTRONIX ▲
0623 Lawson River Ave., Fountain Valley, CA 92708
714 963-5411
Audio preamps, line amps, and monitor/power amps; amp power supplies.

PRECISION DESIGN ▲
27106 46 Ave S., Kent, WA 98030
206 852-5070
ROAM mic mixers, portable consoles.

PRIME IMAGE ▲
19943 Via Escuela, Saratoga, CA 95070
408 867-6519
TBC— with and without digital effects and TBC SYNC with or without digital effects.

PRO BATTERY CO. ▲
3941 Oakcliff Industrial Ct., Atlanta, GA 30340
800 451-7171/404 449-5900
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Field Office:
CA 1220 Pear Ave., Mountain View 94043 800 451-7171

PRODUCTION MASTERS ▲
321 First Ave., Pittsburgh, PA 15222
412 281-8500
Video production & post-production facilities; Computer graphics; mobile production facilities rental; recording studios; audio post-production facilities; equipment rental.

PROTECH AUDIO CORP. ▲
Flowerfield Bldg. #1, St. James, NY 11780
516 584-5855
Mic mixers. Audio head cleaners, degauss-

ers. ALC, AGC amps; AM & FM compressor/limiters. Hardwired intercom systems. Preamps, line amps, monitor/power amps; amp power supplies. Audio DAs, audio routing switchers. Slide attenuators; LED audio level displays. Audio transformers.

PYRAMID VIDEO ▲
480 Natl. Press Bldg., Washington, DC 20045
202 783-5030

Video production & post-production facilities; ENG production crews & equipment rentals; video duplication services; satellite & microwave transmission services, uplinking, downlinking, telco transmit & receive.

QEI CORP. ▲
Box D, Williamstown, NJ 08094
609 728-2020/800 334-9154
FM transmitters, translators, FM exciters, stereo generators. Modulation monitors; RF amplifiers.

QSC AUDIO PRODUCTS ▲
1926 Placentia Ave., Costa Mesa, CA 92627
714 645-2540
Monitor/power amps.

QSI SYSTEMS ▲
12 Linscott Rd., Woburn, MA 01801
617 938-1403
Black burst, color bar & SID generators, video slate board/countdown generators. Video DAs. Compact, studio/mobile production switchers.

Q-TV ▲
104 E. 25 St., New York, NY 10010
212 460-9050
Teleprompters: monitor-based, scroll entry, keyboard entry, ENG/EFP portable.

QUAD EIGHT/WESTREX ▲
225 Parkside Dr., San Fernando, CA 91340
818 898-2341
Superstar stereo studio consoles, Westar audio-for-TV consoles, Compumix console automation, Westrex 16/35 mm magnetic film dubbers; projectors.

Field Offices:
NY 555 W. 57 St. #1530, New York 10019
212 713-1600
TN 2200 Hillsboro Rd. #218, Nashville 37212
615 298-6613
CN Toronto, Ont. M5A 1J2 416 365-3363

QUANTA CORP. ▲
2440 S. Progress Dr., Salt Lake City, UT 84119
801 974-0992
Microgen titlers, subtitles; Quantafont character generator/graphics systems; Quanta-paint & Dimension 32 digital art/paint systems; Dimension 3D modeling & animation system.

QUANTE CORP.
3350 Scott Blvd., Bldg. 15, Santa Clara, CA 95054
408 727-2077
Fiberoptic systems; audio & video encoders.

QUANTEL ▲
655 Washington Blvd., Stamford, CT 06901

203 348-4104
Digital still stores; Cypher character generator/graphics system; Paintbox digital art/paint system; Mirage 3D modeling & manipulation system; Encore digital efx generator; compressor/positioners; frame synchronizers; TBC/framestores; Satin standards converter. Harry digital animation, recording, editing & efx processor.
See ad on page 31 Circle No. 118

QUANTUM AUDIO LABS
1905 Riverside Dr., Glendale, CA 91201
213 841-0970
Portable audio consoles; mono & stereo studio, audio-for-TV consoles.

QUICKSCAN SYSTEMS LTD.
9465 Wilshire Blvd., Beverly Hills, CA 90212
213 876-6596
Stillframe video electronic publishing method (by licence); video post-production facilities.

QUICK-SET
3650 Woodhead Dr., Northbrook, IL 60062
312 498-0700
Tripods, heads, pedestals, dollies, remote pan/tilt systems.
See ad on page 93 Circle No. 162

RADIATION SYSTEMS
1501 Moran Rd., Sterling, VA 22170

703 450-5680
C- & Ku-band transmit/receive, receive-only & transportable earth stations. Microwave & communications antennas.

RADIO ARTS ▲
210 N. Pass Ave. #104, Burbank, CA 91505
818 841-0225/800 423-2840
Syndicated radio programming.

RADIO COMPUTING SERVICES
1 Chase Rd. #206, Scarsdale, NY 10583
914 723-8567
Computer software for music research & scheduling.

RADIO PROGRAM SERVICES ▲
3615 E. Uintah #10, Colorado Springs, CO 80909
303 574-8628
Music libraries; syndicated radio programs.

RADIO SYSTEMS
PO Box 356, Edgemont, PA 19028
215 356-4700

Stereo studio consoles. Key/Cart single-deck cart player/recorders. Preamps, line amps, monitor/power amps, amp power supplies. Audio DAs. LED audio level displays. Custom-built studio furniture. Phase II carrier current AM transmitter. FM SCA equipment. Studio timers. Facilities design & engineering services: set/studio design services.

QRTH-1 Rainbow Tripod/ Fluid Head Combo

The new QuickSet Tripod and Fluid Head Combination (QRTH-1) offers the professional looks, ruggedness, stability and features of the expensive "Broadcast Style" equipment at an affordable price.

- 20 Pound Capacity Fluid Head
- 75mm Claw Ball Base
- Dual Handles with non-slip grip
- Large Mounting Plate with Quick-On Feature
- Both 1/4" and 3/8" Camera Screws Provided
- Bubble Level
- Rugged Aluminum Alloy Tripod
- Calibrated Crutch Leg with Center Struts
- Convertible Indoor-Outdoor Foot with Spike Tips
- Lightweight - Less than 17 pounds (Tripod - 10 lbs., Head - 7)
- Seven Standard Colors Available.



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INFORMATION

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QUICKSET

QuickSet International, Inc.
3650 Woodhead Drive Northbrook, IL 60062
312/498-0700 Telex 72-4362

Circle 162 on Reader Service Card

RADIOTECHNIQUES ▲
402 Tenth Ave., Haddon Heights, NJ
08035
609 546-0472

Facilities design & engineering services;
set/studio design services; engineering
consultants; earth station site selection.

RAM BROADCAST SYSTEMS ▲
346 W. Colfax, Palatine, IL 60067
312 358-3330

U.S. distributor for McCurdy Radio prod-
ucts. Phasescope stereo monitoring device.

RAMKO RESEARCH ▲
3501 #4 Sunrise Blvd., Rancho Cordova,
CA 95670
916 635-3600

Mic mixers, portable audio consoles, DC Se-
ries mono & stereo studio consoles. XL Se-
ries power amps & audio consoles. Primus,
Phasemaster single-deck cart player/
recorders, Phasemaster real-time phase
correcting cart player. AM compres-
sor/limiters, audio noise reduction.
Preamps, line amps, monitor/power amps.
Audio DAs, audio routing switchers. VU,
PPM & LED audio level displays.

RAMSA/PANASONIC PRO AUDIO ▲
6550 Katella Ave., Cypress, CA 90630
714 895-7200

Mic mixers; portable, mono & stereo studio,
audio-for-TV consoles. Modular console for
post-production. Condenser mics; monitor
speakers. Power amps.

See ad on page 86 *Circle No. 157*

RANGERTONE RESEARCH ▲
115 Roosevelt Ave., Belleville, NJ 07109
201 751-6833

Solid state telecine systems, telecine cam-
eras, 16/35 mm telecine projectors, 35 mm
slide projectors, optical multiplexers. tele-
cine control systems.

RANK CINTEL ▲
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10994
914 353-1914

Magnetic film dubbers; Slide File digital still
store. Art File digital paint system; Solid
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telecine color correctors, Amigo telecine
control systems, Ferrit sound dubber;
field/framestores.

Field Offices:
IL 33 W. Higgins Rd. #2070, S. Barrington
60010 312 426-2450

**RATIONAL BROADCAST
SYSTEMS** ▲
2306 Church Rd., Cherry Hill, NJ 08002
609 667-7300

Parallel, serial interface machine control; TV
business automation hardware and
software.

RAYCOM GROUP
1400 Eutaw Pl., Baltimore, MD 21217
301 561-3331

Skylink SNG communication system. Broad-
band power amps; ENG microwave trans-
mitters & receivers.

**RCA AMERICAN
COMMUNICATIONS** ▲
4 Research Way, Princeton, NJ 08540-
6684
609 987-4000

Satellite transmission services; post-pro-
duction services.

**RCA NEW PRODUCTS & CCTV DIV.,
TUBE OPERATIONS** ▲
New Holland Ave., Lancaster, PA 17604
717 295-6123

Camera pickup tubes. RF amps, RF tubes.
Fiberoptic systems. CCD cameras; color
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Field Office:
CA 23860 Hawthorne Blvd., Torrance
90505 213 373-8514

R-COLUMBIA PRODUCTS ▲
2008 St. Johns Ave., Highland Park, IL
60035
312 432-7915

Headphones. Hardwired & RF intercom sys-
tems. Dynamic, electret/condenser, RF &
lavalier mics. IFB/ENG telephones, tele-
phone headphones. Two-way radio
communications.

REACH ELECTRONICS ▲
1600 W. 13 St., Lexington, NE 68850
308 324-6661

Pocket Pagers RF intercoms.

REAL RADIO CO. ▲
127 Glen Summer Rd., Pasadena, CA
91105
818 795-4900

Syndicated radio programming.

**REAL WORLD TECHNOLOGIES
GROUP** ▲
130 McCormick Ave. #109, Costa Mesa,
CA 92626
714 957-1061

UniVUer VU & PPM meters, video monitor
audio level displays. Safe title area gener-
ators. MonSter stereo coherency meter.
Blanking width verifier. Facilities design &
engineering services; mobile vehicle con-
struction.

RECORTEC ▲
275 Santa Ana Ct., Sunnyvale, CA 94086
408 737-8441

Videotape loaders, timers, rewinders; video-
tape cleaners, evaluators; tape erasers,
degaussers.

REDLAKE CORP. ▲
15005 Concord Cir., Morgan Hill, CA
95037
408 779-6464

Cine cameras & lenses. Lead-acid batteries
& chargers; camera tripods & heads.

REEVES TELETAPE ▲
708 Third Avenue, New York, NY 10017
212 573-8888

Video production & post-production faci-
ties; mobile production facilities rental.

REGISTER DATA SYSTEMS ▲
Box 1246, Perry, GA 31069
800 521-5222

Radio business automation hardware & soft-
ware. Sea-Tex weather radar displays.

RE INSTRUMENTS CORP. ▲
31029 Center Ridge Rd., Westlake, OH
44145
216 871-7617

Digital fiberoptic systems. Dual-channel au-
dio analyzer; TV stereo test generator. RF

test signal generators. Spectrum and real
time analyzers; MTS test equipment.

**RE-PLAY VIDEO CARTRIDGE
SVCE.** ▲
328 Meritt Ave., Pittsburgh, PA 15227
412 885-0959

TCR-100 two-inch video cartridge reloading
service.

RESEARCH TECHNOLOGY INTL./RTI
4700 Chase Ave., Lincolnwood, IL 60646
312 677-3000/800 323-7520

Retec empty videotape reels, carts, cases;
tape cleaners, evaluators, erasers, de-
gaussers. Ultrasonic film cleaners. VITC
reader/generators. Dropout analyzers.

RF SPECIALTY PRODUCTS
4214 San Pedro, San Antonio, TX 78212
512 736-6116

RF filters, loads & switches; antenna tuning
units; power dividers, RF connectors; tower
lighting; phaser, diplexer.

RF TECHNOLOGY ▲
145 Woodward Ave., S. Norwalk, CT
06854
203 866-4283

RF mics. RF amplifiers. LNAs. Microwave
systems: intercity, portable ENG, airborne,
central receivers.

RICHARDSON ELECTRONICS LTD. ▲
40 W. 267 Keslinger Rd., IL 60147
800 323-1770

Distributor of full line broadcast tubes &
components.

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ada V6H 1A5
604 734-1217

Mic mixers; portable, mono & stereo studio,
audio-for-TV consoles, console automation.
Computer automation controllers; complete
program automation systems. ALC & AGC
amps, graphic equalizers. Preamps, line
amps, monitor/power amps, amp power
supplies. Audio DAs, audio routing
switchers.

RJW SOFTWARE ▲
251 Rolling Meadow Dr., Billings, MT
59101
406 628-7344

HitList computerized music scheduling and
library maintenance system.

ROM/DIV. ANCHOR AUDIO ▲
913 W. 223 St., Torrance, CA 90502
213 533-1498

Automatic time/weather announcers. ALC &
AGC amps. Monitor speakers, headphones.
Hardwired interoms. Preamps, line amps.
monitor/power amps, amp power supplies.
Audio DAs, audio routing switchers, audio
patch panels & jackfields, telco interface
equipment. VU & PPM meters. Audio test
signal generators; MTS test equipment. Au-
dio cable.

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516 328-1100

Sync & color bar generators. FM & TV excit-
ers, modulators. Transmitter remote control
and monitoring equipment. Spectrum an-

alyzers. Video test signal generators, waveform monitors, diff. phase/gain meters, video noise meters, automatic VITS analyzers. Demodulators, modulation monitors, field intensity meters, sideband analyzers, RF power meters & wattmeters, RF test signal generators, impedance bridges. Oscilloscopes, voltmeters, multimeters, logic analyzers. Automatic TV monitors, automatic radio monitors, status/alarm indicators.

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 MI Bob Zeichner, 27260 Haggerty Rd., Suite A12, Farmington Hills 48018 313 559-5665

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 212 397-5400
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 NY 423 W. 55 New York 10019
 212 541-5900
 TN Box 280, Nashville 37202
 615 366-1890
 CN 1445 Cote de Liesse, Montreal, Que.
 H4T 1E5 514 342-4441
 See ad on page 95 Circle No. 163

SATCOM TECHNOLOGIES ▲
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 404 448-2116
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 See ad on page 26 Circle No. 113

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 415 935-1226
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 416 299-6888
 Sync, black burst, color bar & safe title area generators. TBCs, field synchronizers, frame synchronizers, field/framestores, TBC/framestores. Encryption systems, MAC systems. Video test signal generators.
 See ad on page 62 Circle No. 142

SCIENTIFIC SYSTEMS ▲
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 201 255-2230
 Audio preamps, line amps, monitor/power amp. Audio DAs.

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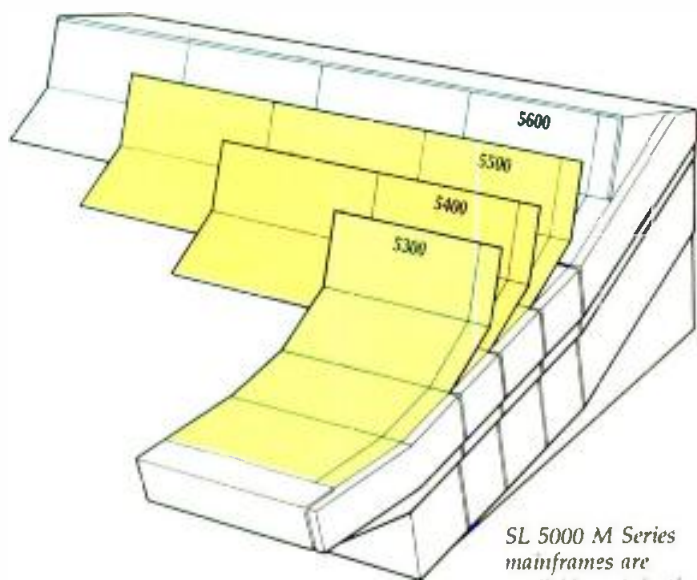
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Mic mixers. Preamps, line amps, monitor/power amps. Audio DAs, audio patch panels & jackfields, audio multi boxes & splitters. Audio test signal generators

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Audio cassette players/recorders. ENG, studio & field cameras. VHS VCRs. Telecine cameras. NTSC, RGB & high-resolution video monitors; video projectors.

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GA Ron Parker, 725 Old Norcross Rd., Lawrenceville 30245 404 995-0717
IL Paul Insko, 1300 Naperville Dr., Romeo-

ville 60441 312 759-8555

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See ad on page 34 Circle No. 121

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See ad on page 33 Circle No. 119

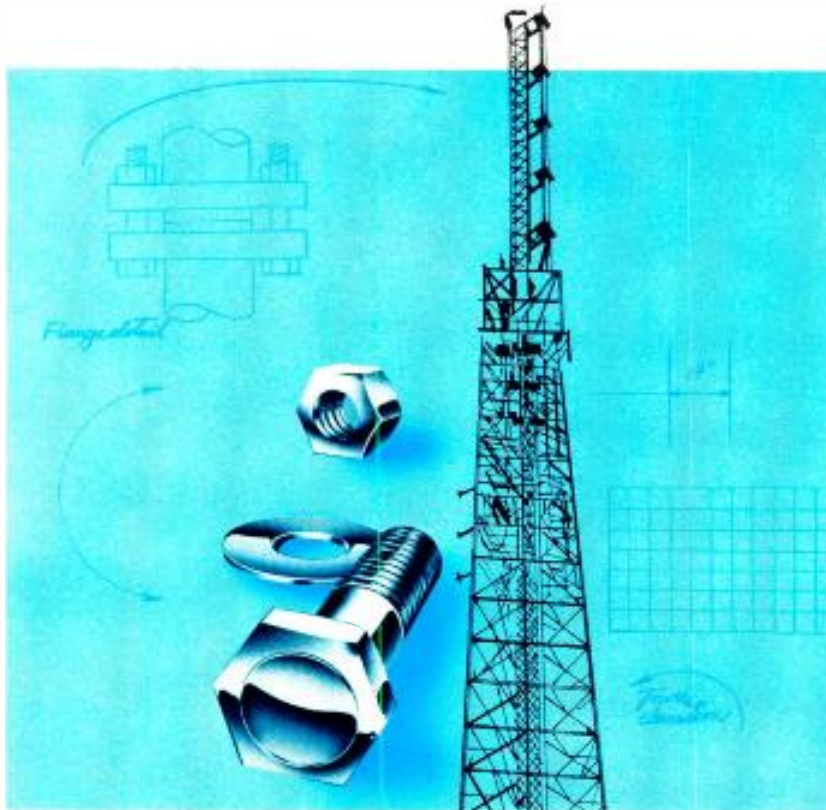
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Field Offices:

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NY Piers Plaskitt, 101 Park Ave. #2506, New York 10019 212 315-1111

See ad on page 97

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Studio & field cameras; Betacam three-tube, single-tube & CCD ENG cameras, recorder/cameras; HDTV cameras. One-inch C VTRs; ¼-inch U & half-inch Betacam VCRs. Betacart MERPS multicassette system. VTR slow-mo systems; Super Motion video sys-

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GA Andy Kryworuchenko, 3175A Northwood Pkwy., Norcross 30071 404 263-8015

HI T. Katoh, 1020 Auahi St., Honolulu 96814 808 531-5981

IL Craig Taylor, 500 Park Blvd., Itasca 60143 312 773-6046

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(404) 458-3280

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Mic mixers, stereo studio & audio-for-TV consoles. 2-1/4-track & multitrack ATRs. Digital audio recorders. Replacement audio heads; open-reel tape. SMPTE time code synchronizers; editors for digital audio. CD/DAD players. Parametric equalizers. Digital efx, reverb. Monitor speakers. Electret/condenser, lavalier & shotgun mics. Audio layback system; centertrack time code recorder/reproducer.

See ad on page 2-3 *Circle No. 102*

SONY PRO VIDEO DIV. ▲

1600 Queen Anne Rd., Teaneck, NJ 07666
201 833-5200

ENG & studio cameras for industrial use. 3/4-inch U VCRs; editing systems, switchers, projection TVs, industrial 8 mm & Betamax VCRs.

See ad on page 11 *Circle No. 109*
See ad on page 12-13 *Circle No. 110*

SONY INFORMATION SYSTEMS DIV. ▲

1 Sony Dr., Park Ridge, NJ 07656
201 930-1000

Digital still stores, optical disc recorders, interactive video systems, electronic still frame cameras & recording equipment. Bit pad digitizers, camera/VTR digitizers. Sprinter video duplication system.

SONY MAGNETIC PRODUCTS CO. ▲

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Audio cassettes, open-reel tape. One-inch videotape, 3/4-inch & half-inch cassettes, digital cassettes; empty reels, carts & cassettes; tape cleaners & evaluators.

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CA Mark Rath, 10833 Valley View St. Box 6016, Cypress 90630-0016 714 229-4246
GA John Riggs, 3175A Northwoods Pkwy., Norcross 30071 404 662-3819
IL Michael Cullen, 500 Park Blvd., Hamilton Lakes, Itasca 60143 312 773-6000
NJ Joe Balsam, 15 Essex Rd., Paramus 07652 201 368-5000

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818 893-4351

Stereo studio & audio-for-TV consoles. Multitrack ATRs.

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314 962-9870

Monitor speakers; PageKom hardwired intercoms. Select Series cabinets, studio consoles, equipment racks. Audio transformers.

SOUNDScriBER

77 Rte. 125, Kingston, NH 03848
603 642-4441

Logging recorders. Bulk demagnetizers, rewinders.

SOUND TECHNOLOGY ▲

1400 Dell Ave., Campbell, CA 95008
408 378-6540

Audio routing switchers. Tape recorder test equipment; audio test signal generators, harmonic distortion meters, IM meters, spectrum analyzers, real-time analyzers, wow & flutter meters, MTS test equipment.

SPECIALTY VEHICLES ▲

450 N. Ssomerset Ave., Indianapolis, IN 46222

317 638-5037

Mobile vehicle construction.

See ad on page 96 *Circle No. 164*

SPECTRA SONICS ▲

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801 392-7531

Mic mixers, portable consoles, mono & stereo studio consoles, audio-for-TV consoles. ALC & AGC amps, AM & FM compressor/limiters, graphic equalizers. Analog efx, reverb. Monitor speakers. Preamps, line amps, monitor/power amps, amp power supplies. Audio DAs, rotary & slide attenuators, VU meters. Audio test signal generators, noise filters. Audio cable, transformers.

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214 361-2126

Facilities design & engineering services; engineering consultants; earth station site selection; RFI measurements.

SPENCER BROADCAST ▲

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602 242-2211

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STAINLESS, INC. ▲

Third St., N. Wales, PA 19454
215 699-4871

Microwave & tower masts, tower rigging & hardware, tower lighting.

See ad on page 98 *Circle No. 166*

STANCIL CORP.

2644 S. Croddy Way, Santa Ana, CA 92704

714 546-2002

Multitrack audio logging recorders.

STANDARD COMMUNICATIONS CORP. ▲

Box 92151, Los Angeles, CA 90009
213 532-5300

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STANTON MAGNETICS ▲

200 Terminal Dr., Plainview, NY 11803
516 349-0235

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STANTRON/UNIT OF ZERO CORP. ▲

6900 Beck Ave., N. Hollywood, CA 91605
213 875-0800

Rack configuration transportation cases, editing/production consoles. Cabinets, studio consoles, equipment racks, cart/tape storage.

STAR CASE ▲

648 Superior, Munster, IN 46321
219 922-4440

Foam-insert & rack configuration transportation cases.

STARFAX ▲

654 Hawthorne St., Glendale, CA 91204
818 244-3600

Video post-production facilities; mobile production facilities rental; telecine services.

STEENBECK ▲

9554 Vassar Ave., Chatsworth, CA 91311
818 998-4033

Sprocketed mag film; SMPTE time code synchronizers; film recorders.

STOREEL CORP. ▲

3337 W. Hospital Ave. Box 80523, Atlanta, GA 30341

404 458-3280

Stor-Max & Railrider high-density storage cabinets; All Aboard mobile & static audio cart cabinets.

See ad on page 99 *Circle No. 167*

LOST AND FOUND



Daven designed audio step attenuators, pads and attenuation networks are available from Shallco.

Shallco, Inc., P. O. Box 1089, Smithfield, NC 27557
919/934-3135

Circle 168 on Reader Service Card

STRAIGHT WIRE AUDIO ▲
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800 368-2081 703 522-7780

Amplifiers for upgrading & customizing audio cart machines. Audio DAs. CD players. SpeedDemon variable speed controller for CD players. Phono preamps, line amps, amp power supplies. Wall plug transformers.

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Field Offices:
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201 791-7000
CN 6490 Viscount Rd., Mississauga Ont. L4V 1H3
416 677-7130

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615 254-5651

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818 780-4234
CA Fred Layn, 954 Hawthorne Ave., Walnut Creek 94596
415 930-9866
IL Brian Tucker, 111 South Dr., Tower Lake, Barrington 60010
312 526-1660
NY Nick Balsamo/Peter Kehoe, 155 Ave. of the Americas, New York 10013
212 255-4462
TX Chris Ware, 831 Woodlawn Ave., Dallas 75208
214 943-2239
See ad on page C2 *Circle No. 100*

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312 676-9177

Analog audio reverb; ISS stereo simulator/recognition control system for MTS broadcasting.

SUPERIOR ELECTRIC CO. ▲
383 Middle St., Bristol, CT 06010
203 582-9561

Stabiline automatic voltage regulators & surge protectors.

SURCOM ASSOCIATES ▲
305 Wisconsin Ave., Oceanside, CA 92054
619 722-6162

Jennings & Cornell Dubilier capacitors; relays.

SWAGER COMMUNICATIONS
Box 569, Angola, IN 46703
219 495-5165

Tower masts, rigging, hardware & lighting.

SWIDERSKI ELECTRONICS ▲
1200 Greenleaf Ave., Elk Grove Village, IL 60007

312 364-1900
Distributor of full line video equipment. Equipment rental services; facilities design & engineering services; mobile vehicle construction.

Field Office:
WI Robert M. Wiese, 3665 Shadybrook Pl., Brookfield 53005
414 781-1818

SWINTEK ENTERPRISES ▲
587 Division St., Campbell, CA 95008
408 378-8091

RF intercom systems. RF mics. Communications antennas; slow-scan transmitters/receivers; two-way radio communications.

SWITCHCRAFT ▲
5555 N. Elston Ave., Chicago, IL 60630
312 792-2700

Jackfields & patch bays, audio cable, cable connectors.

SWR, INC. ▲
Box 215, Goffstown, NH 03045
603 529-2500

RF switches. FM, TV HP & CP antennas. WaveGuide rigid UHF transmission line, power dividers. Engineering consultants.
See ad on page 101 *Circle No. 169*

SYMBOLICS ▲
1401 Westwood Blvd., Los Angeles, CA 213 478-0681

Video animation controllers. Digital art/paint systems; 3D modeling & manipulation; camera/VTR digitizers.

SYMETRIX ▲
4211 24 Ave. W., Seattle, WA 98199
206 282-2555

AM & FM compressor/limiters, parametric equalizers. Preamps, monitor/power amps. Audio patch panels, jackfields.

SYSTEMATION ▲
337 N. Water St., Decatur, IL 62523
217 428-7101

Complete cassette & digital program automation systems. Radio business automation software & hardware. Telco interface equipment. Recording studios, audio post-production facilities, music libraries.

TABER MANUFACTURING & ENGINEERING CO. ▲

1880 Embarcadero Rd., Palo Alto, CA 94303
415 493-3814

Replacement & rebuilt audio heads. Audio cassettes, test tapes & leaders. Audio & video tape erasers & degaussers.

TAMRON INDUSTRIES ▲
24 Valley Rd., Port Washington, NY 11050
516 883-8800

Video camera lenses.

WILLIAM B. TANNER CO. ▲
2714 Union Ext., Memphis, TN 38112
901 320-4212

Music library; radio & TV audio production.

TANNOY NORTH AMERICA ▲
300 Gage Ave. #1, Kitchener, Ont., Canada N2M 2C8
519 745-1158

Studio playback monitors & amps.

TASCAM PRO AUDIO DIV./TEAC ▲
7733 Telegraph Rd, Montebello, CA 90640
213 726-0303

Mono & stereo studio consoles, audio-for-TV consoles. Audio cassette player/recorders; 2-1/4-track & multitrack studio ATRs; cassette duplicators. CD/DAD players. Parametric & graphic equalizers.

TBS FIELD OPERATIONS ▲
1050 Techwood Dr. NW, Box 105264, Atlanta, GA 30348-5264
404 827-1717

Mobile production facilities rental.

TDK ELECTRONICS CORP. ▲
12 Harbor Park Dr., Port Washington, NY 11050
516 625-0100

Open-reel audio tape, audio cassettes, empty reels & carts, head cleaners, tape erasers & degaussers. Video head cleaners & degaussers, half-inch videocassettes.

TEATRONICS ▲
3100 McMillan Rd., San Luis Obispo, CA 93401
805 544-3555

Lamps; HMI, CSI fixtures; quartz fixtures; cyc lighting; lighting control boards; dimmer packs.

SWR INC
is Systems With Reliability.
Manufacturers of State of the Art
Transmission Line, Waveguide, High
Power VHF & UHF Antennas, and a
complete line of FM Antennas.
SWR, INC. ROUTE 77 NO. WEARE NH 03281 (603) 529-2500

Circle 169 on Reader Service Card

TECH ELECTRONICS ▲
 6000 Peachtree Rd. N.E., Atlanta, GA 30341
 404 455-7626
 Programmable videotape controllers; Dub-Master parallel & serial interface machine control.

TECHNICAL PROJECTS ▲
 Box 1449, Barrington, IL 60011
 800 562-5872 312 381-5350
 Hardwired intercoms. Audio test signal generators, harmonic distortion meters, IM meters, wow & flutter meters.

TECHNICS/PANASONIC ▲
 1 Panasonic Way, Secaucus, NJ 07094
 201 348-7783
 Audio cassette player/recorders. Reel-to-reel ATRs. CD/DAD players, turntables, tonearms. Audio equalizers. Monitor speakers. Preamps, monitor/power amps.

TECHNOV INDUSTRIES ▲
 3974 Amboy Rd., Staten Island, NY 10308
 718 356-4700
 Two-machine controller/expanders; sync, colorbar sync & black burst generators; NTSC decoders; video DAs.

TECHRON ▲
 1718 W. Mishawaka Rd., Elkhart, IN 46517
 219 294-8300
 Audio test signal generators, spectrum analyzers.

TECTAN ▲
 1900 Bates Ave. Box 271872, Concord, CA 94527
 415 798-2222
 Audio noise reduction. Diplexers, multiplexers. Transmit/receive earth stations. FM subcarrier equipment.

TEKSKIL INDUSTRIES ▲
 #108 15290 103A Ave., Surrey, BC, Canada V3R 7A2
 604 589-1100
 Monitor-based, scroll entry, keyboard entry & ENG/EFP portable teleprompters.

TEKTRONIX ▲
 Box 500, M/S 58-699, Beaverton, OR 97077
 503 627-2230
 Video sync, black burst & color bar generators. TBCs, field synchronizers, frame synchronizers, field/framestores, TBC/framestores, video/audio sync delays. NTSC, RGB & high-resolution video monitors.

Audio test signal generators, spectrum analyzers. Video test signal generators, waveform monitors, vectorscopes, combination waveform/vectorscopes, SCH phase meters, video noise meters, automatic VITS analyzers. Demodulators, modulation monitors. Oscilloscopes, delayed sweepsopes, logic analyzers. Automatic TV monitors. TV production protocol analyzer.
Field Offices:
 AL Jim Edwards, 4900 Corporate Dr. #H, Huntsville 35805 205 830-9212
 CA Chris Davies, Box 19523, Irvine 92713

714 660-8080
 CA Box 8500, Woodland Hills 91365
 818 999-1711
 CA John Neilson, 3451 Vincent Rd., Pleasant Hill 94523 415 932-4949
 CO John Kelley/Ron Barnes, 393 Inverness Dr. S., Englewood 80112 303 799-1000
 FL Dave Walters, 3657 Maguire Blvd. #100, Orlando 32803 305 894-3911
 GA Dick Walters/Paul Hogan, Box 6500, Norcross 30091 404 449-4770
 IL Mel Infanzon, 5350 Keystone Ct., Rolling Meadows 60008 312 259-7580
 IN Steve Brant, 8751 Wesleyan Rd., Indianapolis 46268 317 872-3708
 MA Tom Christenson, 482 Bedford St., Lexington 02173 617 861-6800
 MD Jim Capps, Box 6026, Gaithersburg 20877 301 948-7151
 MO Glen Green, 2318 Millpark Dr., Maryland Hgts. 63043 314 429-7707
 NJ Jim Quinn, 40 Gill Ln., Woodbridge 07095 201 636-8616
 NY Bhaskar Pant, 1895 Walt Whitman Rd., Melville 11747 516 756-9690
 NY Bill Denne, 1 Northern Concourse, N. Syracuse 13212 315 455-6661
 OR Warren Beals, 10220 S.W. Nimbus Dr., Portland 97223 503 620-9100
 PA Tom Jordan, 450 Sentry Pky., Blue Bell 19422 215 825-6400
 PA Ken Kinman, 1051 Brinton Rd. #300, Pittsburgh 15221 412 244-9800
 TX Austin Basso, Box 165027, Irving 75016 214 550-0525

TELCOM RESEARCH ▲
 1163 King Rd., Burlington, Ont., Canada L7R 3X5
 416 681-2450
 SMPTE time code generator/readers; VITC reader/generators.

TELECTRO SYSTEMS CORP. ▲
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 718 651-8900
 Audio cassette player/recorders, portable ATR. Monitor speakers; hardwired intercoms.

TELEDYNE ACOUSTIC RESEARCH ▲
 330 Turnpike St., Canton, MA 02021
 617 821-2300
 Turntables; monitor speakers.

TELEDYNE ENERGY SYSTEMS ▲
 110 W. Timonium Rd., Timonium, MD 21093
 301 252-8220
 Telan thermoelectric power generators.

TELE EDIT ▲
 10 S. Fifth St. #640, Minneapolis, MN 55402
 612 333-5480
 Video post-production facilities.

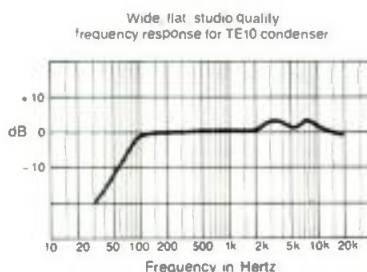
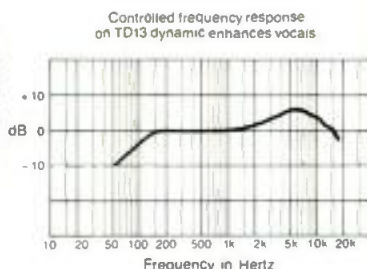
TELE-IMAGE ▲
 6305 N. O'Connor LB 6, Irving, TX 75039-3510
 214 869-0060
 Video production & post-production facilities; mobile production facilities rental.

Performance impressive enough to change a sound pro's old habits.

SURPRISING!

Telex TE10 and TD13 sound reinforcement mics are making believers out of sound pros who have been automatically specifying the same microphone for years. These new low mass design condensers (TE10) and high output dynamics (TD13) are meeting the demands of even the toughest pros while at the same time providing unexpected savings. Surprise yourself. For detailed information write Telex Communications, Inc.,

9600 Aldrich Avenue So.,
 Minneapolis, MN 55420.



TELEX
 TELEX COMMUNICATIONS, INC.

Circle 170 on Reader Service Card

Cover More Live!

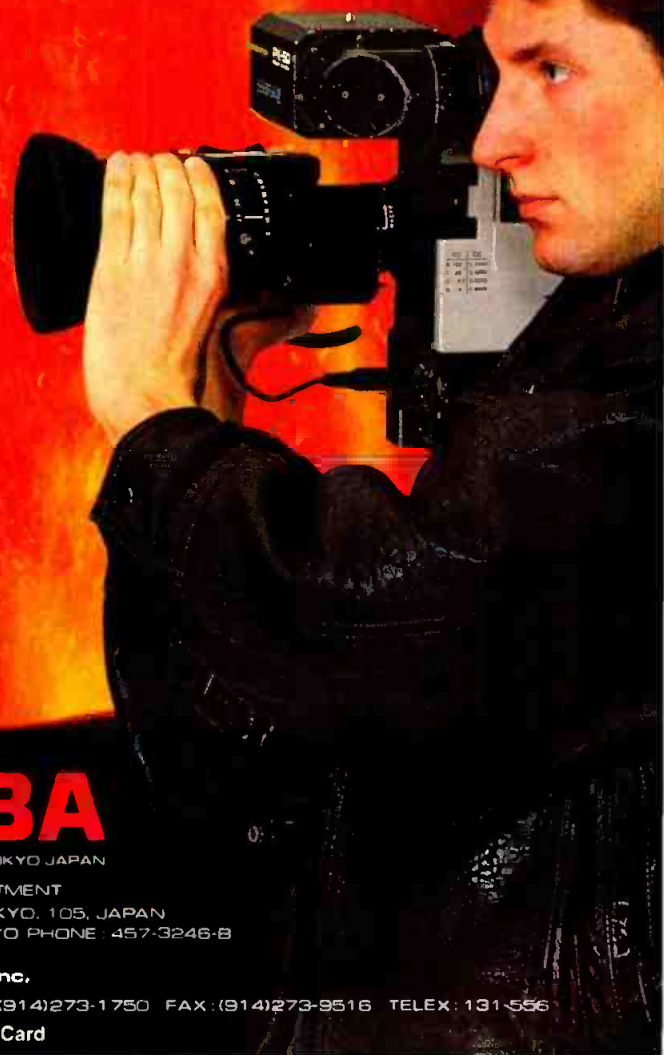
Presenting Today's Liveliest Portable Satellite Scoop System.

Toshiba's Portable Satellite Scoop System takes the work out of scoring live news coverage scoops. It weighs only 100kg. That makes it the lightest, most compact satellite news gathering system available today. Everything fits into seven handy carrying units for easy loading aboard a small van or helicopter.

On-site assembly takes two people just seven minutes. No tools are required. Adjustment of the high-performance offset antenna is equally simple.

Toshiba's single-action standby system incorporates microprocessors to assure high operating ease, economy and reliability. Basic equipment power consumption is 800VA max.

The Toshiba Portable Satellite Scoop System moves faster and easier. That means big time and cost savings.



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ELECTRONIC SYSTEMS DEPARTMENT

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TELEX J22587 TOSHIBA CABLE TOSHIBA TOKYO PHONE 457-3246-8

TOSHIBA AMERICA, Inc.

ARMONK OFFICE: 111 BUSINESS PARK DR., ARMONK, NY 10504 PHONE:(914)273-1750 FAX:(914)273-9516 TELEX:131-556

Circle 173 on Reader Service Card

www.americanradiohistory.com

TELE-MEASUREMENTS

145 Main Ave., Clifton, NJ 07014
201 473-8822/800 223-0052

Facilities design & engineering services; engineering consultants; mobile vehicle construction; studio design; teleconferencing services.

TELEMET, DIV. GEOTEL

185 Dixon Ave., Amityville, NY 11701
516 842-2300

RGB & encoded chromakeyers. Parallel interface video routing switchers. Color bar generators. NTSC decoders, comb filter decoders, video/cable equalizers. Video & audio DAs, pulse amps. Modulators; fiberoptic systems. Spectrum analyzers; video test signal generators, diff. gain/phase meters; stereo/quadrature demodulators, sideboard analyzers.

TELEMETRICS

7 Valley St., Hawthorne, NJ 07606
201 423-0347

Standalone CCUs, lens remote control & automated camera control systems. Remote pan/tilt systems.

See ad on page 104 Circle No. 172

TELEPAK SAN DIEGO

4783 Ruffner St., San Diego, CA 92111
619 268-8559

Padded nylon transportation cases.

TELESCRIPT

445 Livingston St., Norwood, NJ 07648
201 767-6733

Monitor-based teleprompters.

TELESIS PRODUCTIONS

277 Alexander St. #600, Rochester, NY 14607

716 546-5417

Video post-production facilities.

TELETECH

Box 924, Dearborn, MI 48121
313 562-6873

Facilities design & engineering services. RF consulting for AM/FM/TV transmission; turn-key transmission system construction; contract engineering; application preparation.

TELEVISION ENGINEERING CORP.

580 Goddard Ave., Chesterfield, MO 63017

314 532-4700

Mobile vehicle construction; engineering consultants.

TELEVISION EQUIPMENT ASSOCIATES

Box 393, S. Salem, NY 10590
914 763-8893

Racal headsets. Elcon videotape cleaners & evaluators. Matthey video delay lines, filters, video DAs. IRT monitor calibrators. Filters to remove subcarrier signals.

TELEVISION TECHNOLOGY CORP.

See TTC

TELEX COMMUNICATIONS

9600 Aldrich Ave. S., Minneapolis, MN 55420

612 884-4051

Tape duplicators. Audicom intercom sys-

tems. Dynamic, electret/condenser, RF, stereo & lavalier mics; mic booms, dollies. Autoloader for VHS duplication.

See ad on page 102 Circle No. 170

TELFAX COMMUNICATIONS

502 Bank St., Box 31, Webster City, IA 50595

515 832-1263

Mic mixers, portable consoles. Audio DAs, audio routing switchers, telco interface equipment.

TELNOX

55 Montpellier Blvd., Montreal, Que., Canada H4N 2G3

Telco interface equipment.

TEMTRON ELECTRONICS LTD.

15 Main St., Box 170, E. Rockaway, NY 11518

516 599-6400 800 645-2300

Distributor of audio mixers, mics, camera pickup tubes, single-tube color cameras, CRTs for studio monitors, Fuji quartz-halogen lamps. RF tubes, color analyzers, color pattern generators, video test signal generators, waveform monitors, vectorscopes, burst phase meters.

TENNAPLEX SYSTEMS

21 Concourse Gate, Nepean, Ont., Canada K2E 754

301 561-1999

Broadband FM & TV HP panel antennas.

remote control } PLUS {

- camera video from camera
- external video to viewfinder
- microphone audio from camera
- interphone (bi-directional)
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} PLUS

coax cable-local power, or optional triax cable-remote power

(up to 2500 feet using standard coax cable, or up to 1 mile using triax cable)

your camera

Telemetrics camera adapter

RM-P3 remote control unit

Telemetrics base station

Telemetrics Made in U.S.A.

TELEMETRICS INC.

CONTROL UNIT RM-P3

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GAIN VIDEO FREQ COMP S/C PHASE H PHASE CARRIER REFERENCE PRIVATE COMMON VOLUME MIC OFF

Telemetrics Inc.

7 Valley St. Hawthorne, N.J. 07506

* For Information Call (201)423-0347

"Telemetrics—over 20 years the innovators in camera control signal multiplexing"

* Ask for details on Telemetrics Remote Pan/Tilt Systems.

THOMSON-CSF



THE FURTHER WE GO, THE FURTHER YOU GO.

At Thomson-CSF we've been pioneers in developing the use of high-power tetrodes in transmitters for more than 70 years.

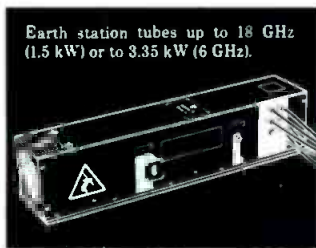
Over the years we've stayed ahead with such developments as Pyrobloc[®] grids and the Hypervapotron[®] cooling system.

We offer: A complete line of tubes for radio broadcasting applications from FM to the most powerful SW and LW transmitters – the quality of our 500-600 kW tubes has been amply demonstrated in 15 years of service in over forty transmitters worldwide.

A complete line of power grid tubes and their associated cavities for UHF/VHF TV transmitters. Thanks to their efficiency, reliability and tight tolerances, systems makers can offer their customers substantially more cost-effective products.



High power radio broadcasting tetrodes up to 1.2 MW.



Earth station tubes up to 18 GHz (1.5 kW) or to 3.35 GHz (6 GHz).



High efficiency space TWTs (including 50 W and 100 W Ku-band for next generation DBS Satellites).

A complete line of klystrons and TWT's for ground stations and space TWT's for direct broadcasting satellites (DBS) designed to last for at least a decade.

And we also produce high-resolution image pick-up tubes and devices (CCDs), and high-luminosity CRTs for top range professional applications.

In radio and television, telecommunications, military and civil aviation, as well as in a wide range of scientific and medical applications, Thomson-CSF know-how gets your systems moving. Fast.

The world's most powerful tubes for radio and TV broadcasting.



UHF and VHF tetrodes up to 50 kW. FM tetrodes up to 100 kW.



Matched cavities for best results.



THOMSON-CSF
ELECTRON TUBES

THOMSON ELECTRON TUBES AND DEVICES CORPORATION
550 Mount Pleasant Avenue
P.O. Box 6500
DOVER, NEW JERSEY 07801
Tel.: (201) 328-1400. TWX: 710987 7901.

Belgique: BRUXELLES
Tel: (32 2) 648 64 85
Tx: 23113 THBSX B

Brazil: SAO PAULO
Tel: (55 11) 547 47 22
Tx: (011) 24 226 TCSF BR

Canada: MONTREAL QUEBEC
Tel: (1 514) 288 41 48
Tx: 5 560 248 TESAF MTL

Deutschland: MÜNCHEN
Tel: (49 89) 74 79 0
Tx: 522 916 CSF D

España: MADRID
Tel: (34 1) 405 16 15
Tx: 46 033 TCCE E

France: BOULOGNE BILLANCOURT
Tel: (33 1) 45 04 81 75
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Italia: ROMA
Tel: (39 6) 639 02 48
Tx: 620683 THOMIE I

Japan: TOKYO
Tel: (81 3) 26 63 46
Tx: 2 324 241 THCSF J

Sverige: TYRESÖ
Tel: (46 8) 742 02 10

United Kingdom: Basingstoke
Tel: (44 756) 29 155
Tx: 858 865 TESAF G

U.S.A.: DOVER
Tel: (1 201) 328 1400
TWX: 710987 7901

Circle 171 on Reader Service Card

TENTEL CORP. ▲
1506 Dell Ave., Campbell, CA 95008
408 379-1881

Tentelometer tape tension gauges & head tip protrusion gauge. Spindle height gauge.

TEPCO CORP. ▲
Box 680, Rapid City, SD 57709
605 343-7200

FM translators; TV translators; microwave subcarrier filter. RF amps, filters.

TERMINAL SYSTEMS CORP. ▲
Box 943, Merrimack, NH 03054
603 424-5033

Acorn radio & TV newsroom software for IBM computers.

TEXAR ▲
616 Beatty Rd., Monroeville, PA 15146
412 856-4276

ALC, AGC amps; AM & FM compressor/limiters; audio noise reduction.

TEXAS ELECTRONICS ▲
Box 7225, Dallas, TX 75209
214 631-2490

Weather instruments.

TEXSCAN CORP. ▲
3102 N. 29 Ave., Phoenix, AZ 85076
602 252-5021

Parallel machine control & automation, automated commercial insertion; subcarrier & teletext data decoders; video & audio DAs; weather information digital displays; character generators; business automation hardware & software.

Field Offices:

IN 3169 N. Shadeland Ave., Indianapolis 46226 317-545-4196

TX 1440 Goodyear Dr., El Paso 79936 800 351-2345

UT 3855 S. 500 West #S, Salt Lake City 84115 801 262-8475

TEXWIPE ▲
650 E. Crescent Ave., Upper Saddle River, NJ 07458
201 327-9100

Texswabs & Wetswab audio & video head cleaners.

TFT ▲
3090 Oakmead Village Dr., Santa Clara, CA 95051
408 727-7272

EBS two-tone systems. AM stereo exciters; intercity microwave systems; transmitter remote control systems; STLs, TSLs; remote pickup equipment. MTS test equipment; modulation monitors, frequency monitors & controllers.

THEATRE SERVICE & SUPPLY CORP. ▲
1792 Union Ave., Baltimore, MD 21211
301 467-1225

Hardwired intercom systems. Lamps, HMI & CSI fixtures, quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging, lighting control boards, dimmer packs. Scenery rigging, props, materials.

THERMODYNE INTERNATIONAL ▲
20850 S. Alameda St., Long Beach, CA 90810
213 603-1976

Foam insert & rack configuration transportation cases.

THOMSON BROADCAST ▲
30 Commerce Rd. Stamford, CT 06902
203 348-1995

Field & ENG cameras; recorder/cameras. Betacam VCRs. Solid state telecine systems, telecine color correctors. Digital production switchers.

THOMSON VIDEO EQUIPEMENT ▲
17 rue de Petit Albi BP 8244, Cergy Pontoise Cedex, France 95801
(33-1) 34-20-7000

Cameras: studio, field, ENG, lightweight, CCD color, monochrome. One-inc C VTRs, ¾-inch U, Betacam & component digital VCRs. Digital still store, video animation controllers, 35 mm slide projectors, character generator/graphics systems, digital art/paint systems. Compact, studio/mobile, component & large automated production switchers; post-production switchers. Digital efx generators, RGB chromakeyers; serial interface video routing switchers & machine control/technical automation.

Two-machine editor/controllers, A/B-roll editors, multisource editors, SMPTE time code generator/readers, VITC reader/generators. TBCs, image enhancers, color correctors. PAL/SECAM encoders, decoders, video/cable equalizers. Monochrome, digital, RGB, NTSC, PAL & SECAM video monitors. CCD slide scanners; component digital switcher; A/D, D/A converters; parallel/serial (Pls) — S/P converters. Video test signal generators, waveform monitors, vectorscopes, full automatic test meter. Facilities design & engineering services; mobile vehicle construction.

THOMSON ELECTRON TUBES & DEVICES ▲
Box 6500, Dover, NJ 07801
201 328-1400

Camera pickup tubes. RF tubes. Vacuum tubes.

See ad on page 105 Circle No. 171

THOMSON-LGT ▲
1, Rue de l'Hautail, Zone des Boutries, F78700 Conflans Ste. Honorine, France 33.334.90.31.00/Telex 696.833 F

FM, VHF, UHF & LPTV transmitters; translators. FM & TV exciters, stereo generators, diplexers, multiplexers. Receive-only earth stations. FM, TV HP & TV CP antennas. Power dividers.

Field Office:

NJ Jerry E. Smith, 3 Tamarac Ln., Medford 08055 609 654-5935

TIFFEN MFG. CO. ▲
90 Oser Ave., Hauppauge, NY 11788
516 273-2500

Lens filters.

TIMES FIBER COMMUNICATIONS ▲
358 Hall Ave., Box 384, Wallingford, CT 06492
203 265-8500

Rigid, foam dielectric & coaxial transmission line. Video cable.

TMD, DIV. WILL-BURT CO. ▲
Box 900, Orrville, OH 44667
216 682-7015

Telescoping antenna masts.

TOPAZ, INC.
9192 Topaz Way, San Diego, CA 92123
619 279-0111

Power generators; ac/dc converters, inverters. Transformers, automatic voltage regulators, surge protectors.

TORPEY CONTROLS & ENGINEERING ▲
98-2220 Midland Ave., Scarborough, Ont., Canada M1P 3E6
416 298-7788

Digital clocks, timers, complete analog & digital clock/timing systems. Central digital thermometer.

TOSHIBA AMERICA ▲
9740 Irvine Blvd., Irvine, CA 92718
714 380-3000

Studio, field & ENG cameras. Production switchers. Digital effects processors. Frame synchronizers. Audio/video delay systems.

See ad on page 103 Circle No. 173

TOTAL SPECTRUM MANUFACTURING
See TSM

TOWNSEND/BROADCAST SYSTEMS ▲
79 Mainline Dr., Westfield, MA 01085
413 568-9581

VHF, UHF, LPTV & MDS transmitters; translators. TV exciters, stereo generators, diplexers, multiplexers. RF amps, tubes, filters, loads, switches. TV HP & CP antennas. Rigid, foam dielectric & coaxial transmission line; power dividers, RF connectors. Transmitter remote control systems. STLs, TSLs. Television transmitter installations.

Studio furniture, cabinets, studio consoles, equipment racks. Equipment rental services; facilities design & engineering services; financial consultants; earth station site selection; mobile vehicle construction.

TPC COMMUNICATIONS
Production Plaza, Sewickley, PA 15143
412 771-4700

Video production & post-production facilities; mobile production facilities rental.

TRANSCOM DIGITAL
902 Broadway, New York, NY 10010
212 529-1000

Video production & post-production facilities; recording studios; audio post-production facilities; music libraries.

TRANSMISSION STRUCTURES LTD. ▲
Box 907, Vinita, OK 74301
918 256-7883

Tower masts, rigging, hardware & lighting.

TRIDENT USA ▲
303 N. Stanley Ave., Los Angeles, CA 90036
213 933-7555

Stereo studio consoles; Optimix console automation.

TRI-EX TOWER CORP. ▲
7182 Rasmussen Ave., Visalia, CA 93278
209 651-2171

Microwave masts; tower masts, rigging, hardware, lighting.

TRIPLE CROWN ELECTRONICS ▲
4560 Fieldgate Dr., Mississauga, Ont.,
Canada L4W 3W6
416 629-1111

AM, FM, VHF, UHF & LPTV transmitters; translators. FM & TV exciters, stereo generators, modulators. Receive-only earth stations. SMATV systems. Cable TV distribution equipment.

TROMPETER ELECTRONICS ▲
31186 La Baya Dr., Box 5069, Westlake
Village, CA 91359-5069

213 707-2020 Coaxial patch fields. Video/RF connectors. RF attenuators, loads, connectors. Video cable, cable connectors, video patch panels and jackfields.

**TSM/TOTAL SPECTRUM
MANUFACTURING** ▲
20 Virginia Ave., W. Nyack, NY 10994
914 358-8820

Tilting stands, color graphics stands; camera pan/tilt systems; MultiController camera motion control system; Monobrace camera stabilizing system; ENG accessories.

**TTC/TELEVISION TECHNOLOGY
CORP.** ▲
2360 Industrial Ln., Box 1385, Broomfield,
CO 80020-8385
303 465-4141

Wilkinson AM & FM transmitters, FM exciters, diplexers, rectifiers, surge protectors. TTC VHF, UHF (Silverline high power, klystron) & LPTV transmitters, translators, modulators, STLs & TSLs. Ampro mono & stereo studio consoles, single-deck cart player/recorders, rotary & slide attenuators. Scully dual-/triple-deck cart player/recorders, 2-/4-track & multitrack ATRs.

TTE ▲
2233 S. Barry Ave., W. Los Angeles, CA
90064
213 478-8224

Comb filter decoders, video & RF filters; transformers, hum bucking coils.

TUI COMPUTER SERVICES
Trademark Square III, Metro Center, 240
Great Circle Dr., Nashville, TN 37228
615 242-4477

Newstech software for TV newsrooms.

TWENTIER SYSTEMS
2000 Powell St., #700, Emeryville, CA
94608
415 654-1168

Radio & TV business automation software, hardware & newsroom computers.

TYLER CAMERA SYSTEMS ▲
14218 Aetna St., Van Nuys, CA 91401
818 989-4420

Camera stabilizing systems, helicopter rigs. Equipment rental services.

UHER OF AMERICA ▲
7067 Vineland Ave., N. Hollywood, CA
91605
818 764-1120

Audio cassette player/recorders. Portable open-reel ATRs.

ULTIMATE SUPPORT SYSTEMS ▲
2506 Zurich Dr. Box 470, Ft. Collins, CO
80522
303 493-4488

Mic stands, lighting booms & trees, tipods & heads, studio furniture & equipment racks. Set/studio design services.

ULTIMATTE CORP. ▲
18607 Topham St., Reseda, CA 91335
818 345-5525

Ultimatte, Newsmatte RGB chromakeyers.
See ad on page 107 *Circle No. 174*

**ULTRA AUDIO PIXTEC, DIV. AUDIO
INTL.**
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213 651-5563

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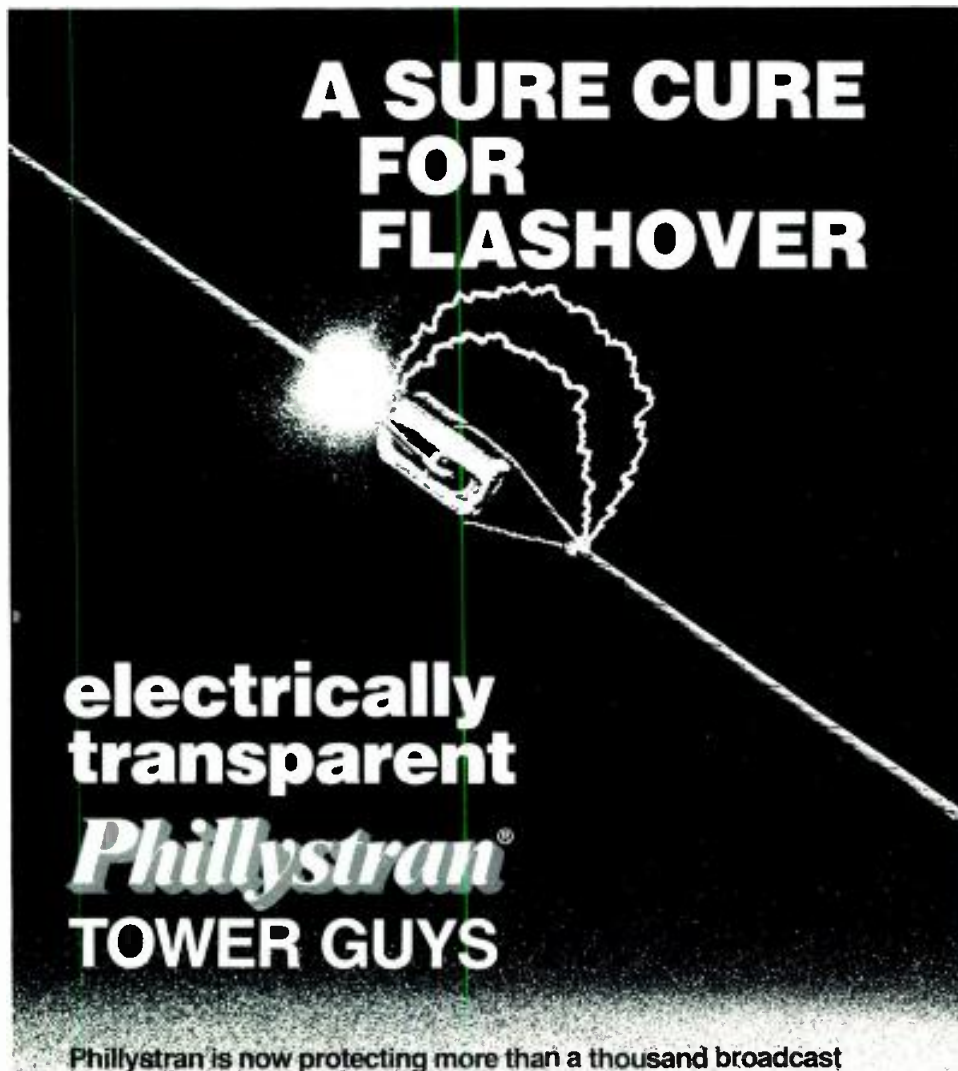
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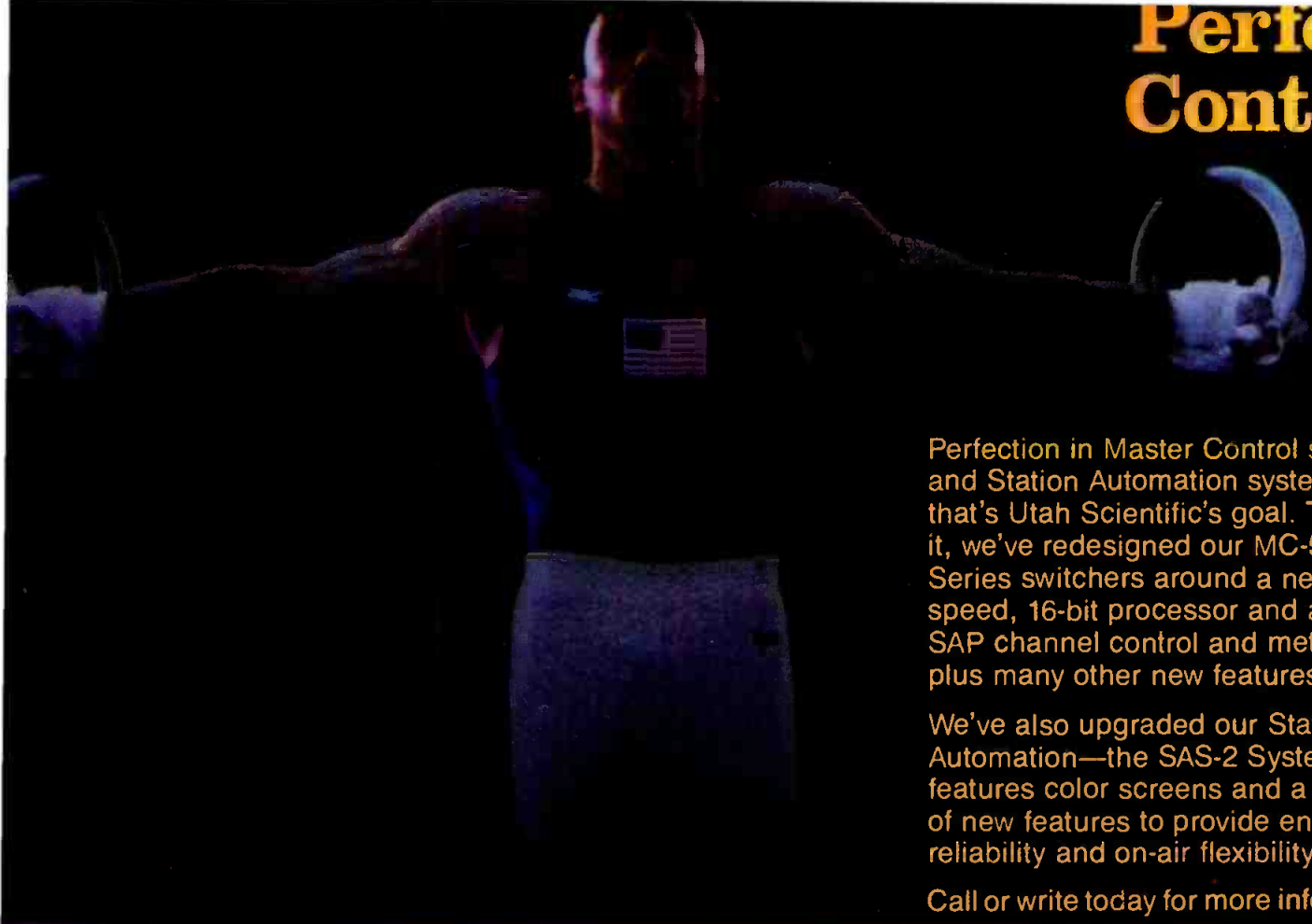
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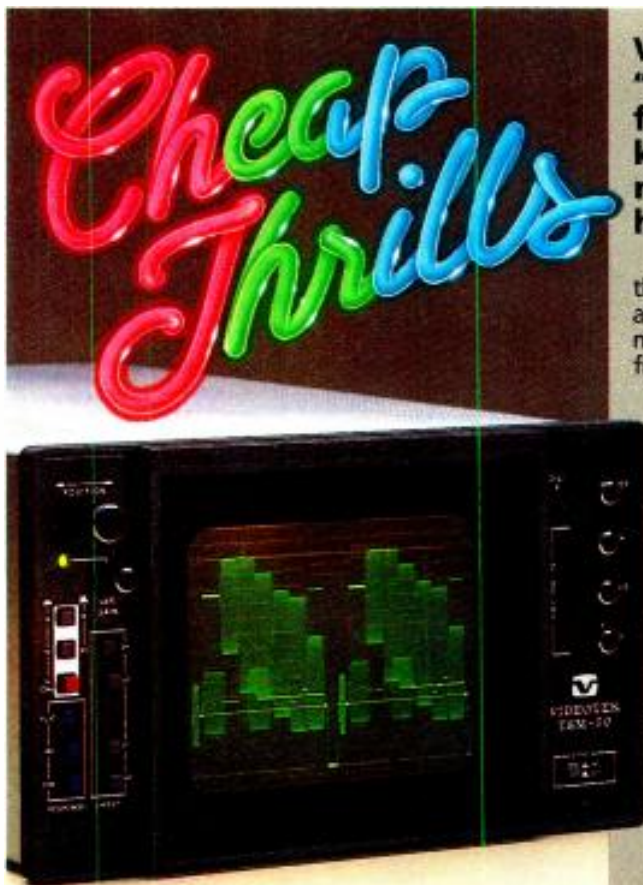
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See ad on page 35 Circle No. 123

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