

AUGUST 1986

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BROADCAST MANAGEMENT/ENGINEERING



THE SOURCE

1986 BUYERS GUIDE TO BROADCAST EQUIPMENT AND RELATED SERVICES

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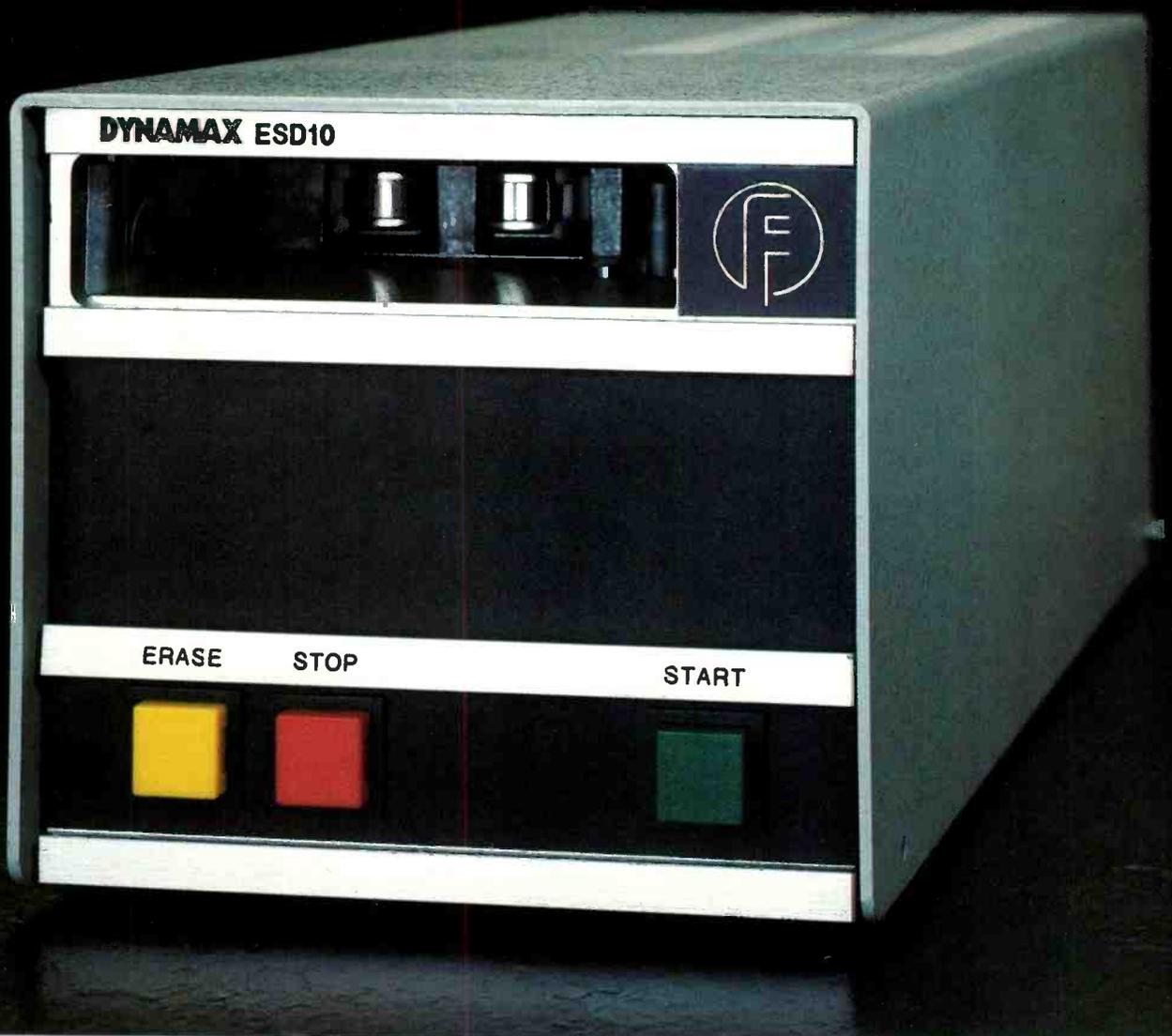
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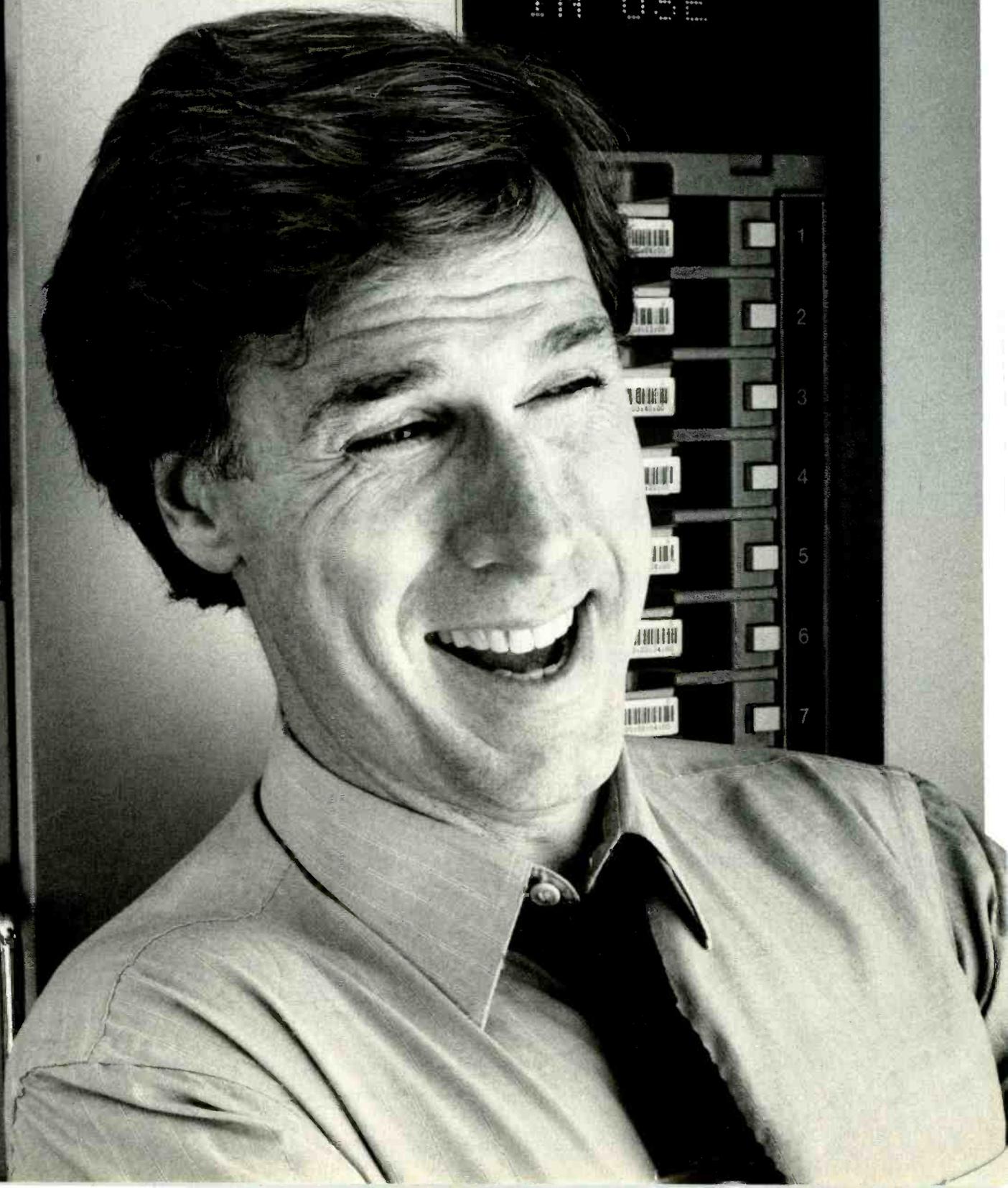
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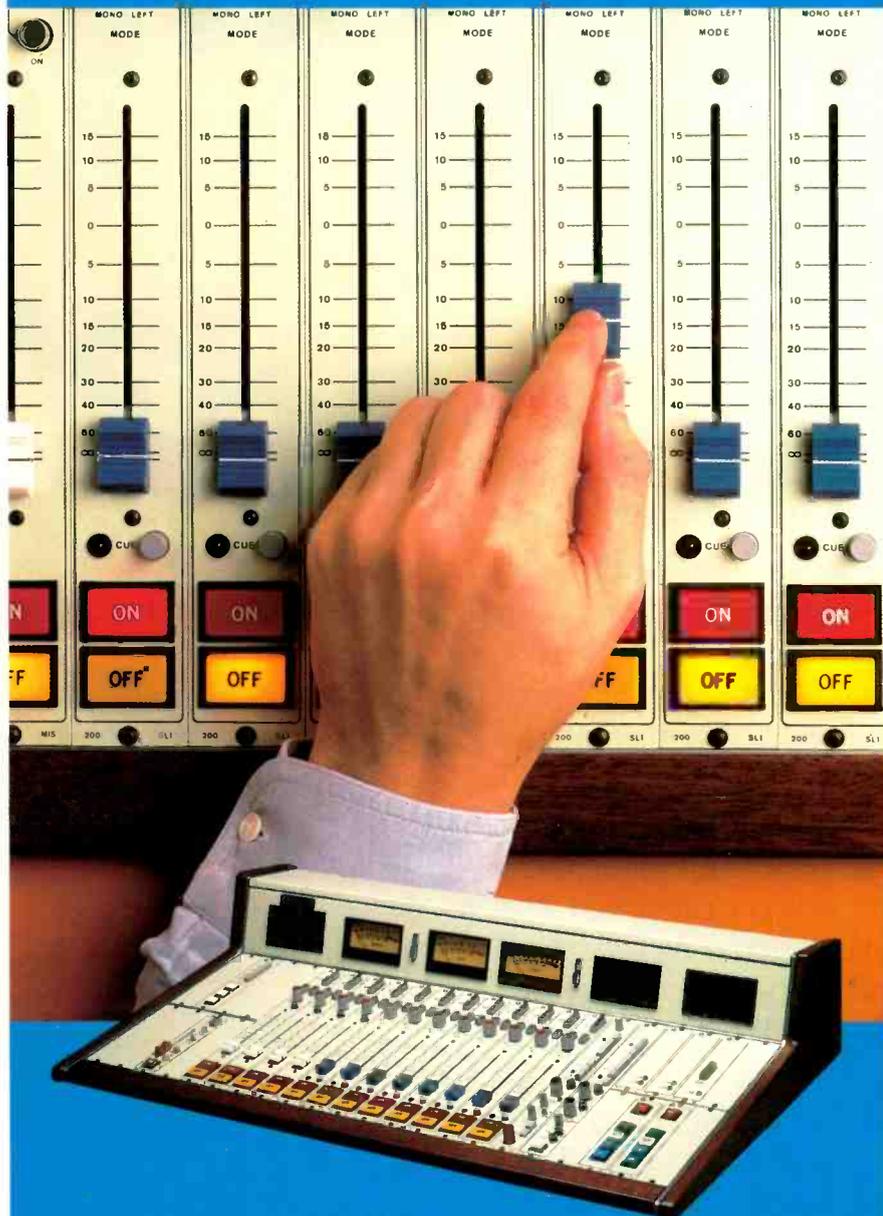
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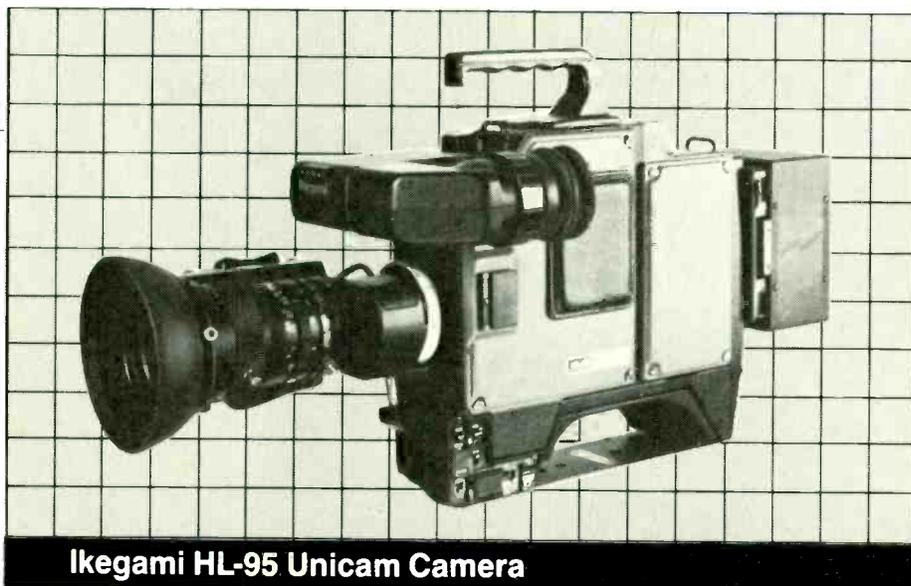
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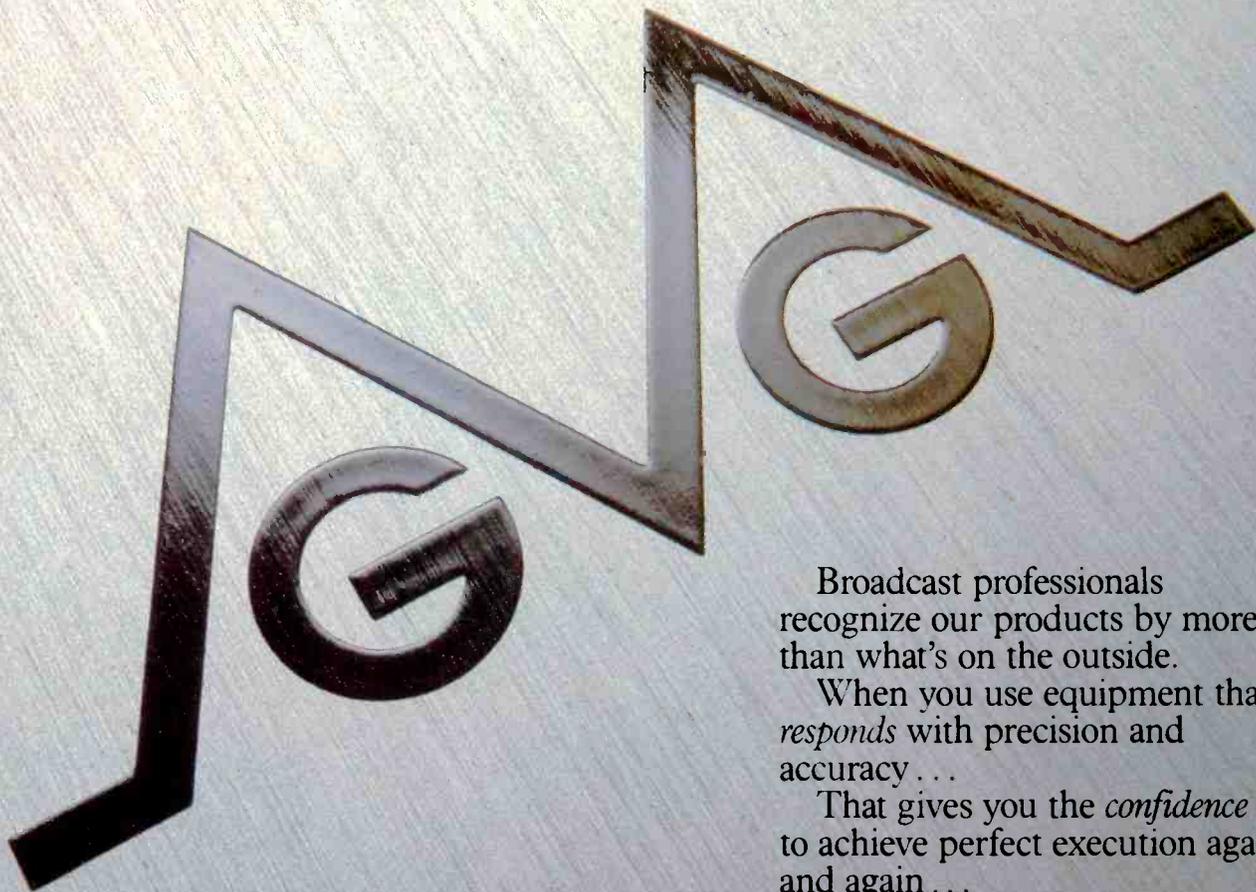


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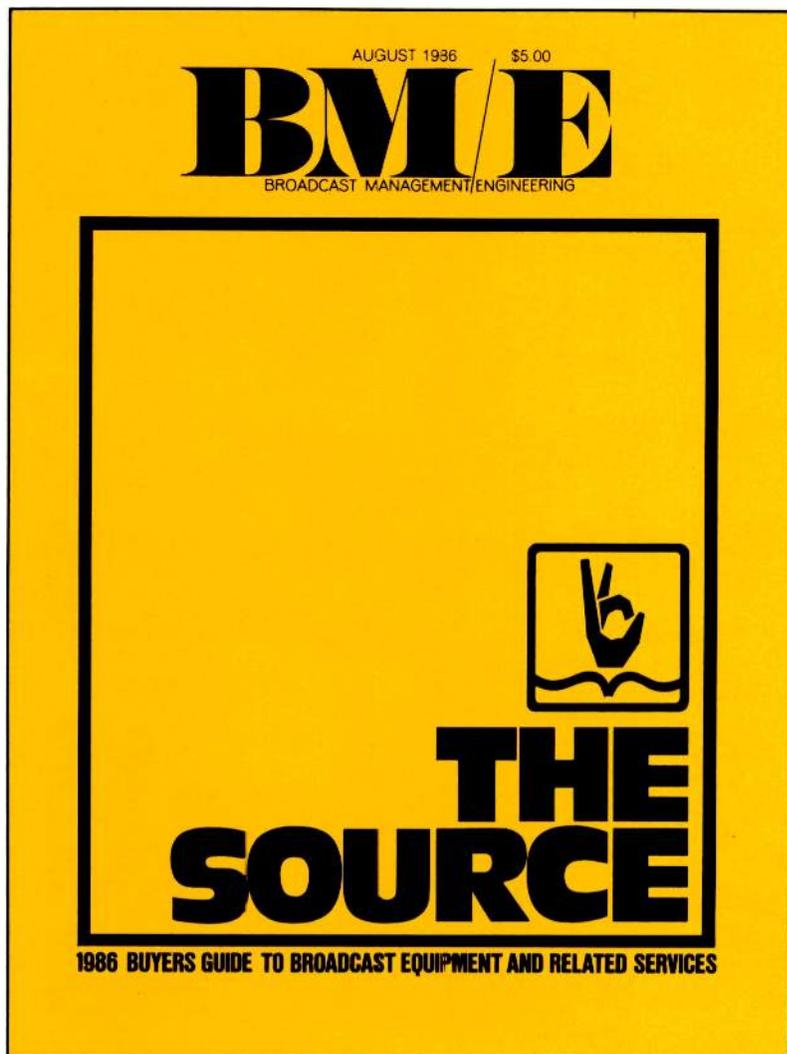
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BM/E

BROADCAST MANAGEMENT/ENGINEERING



AUGUST 1986

VOLUME 22/NUMBER 8

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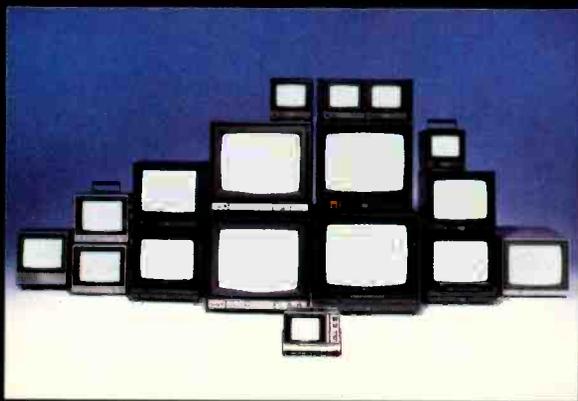


FROM THE NEWSROOM TO THE BOARDROOM TO THE OPERATING ROOM. PANASONIC[®] MONITORS.

Video. More and more it's playing a larger role in entertainment, industry, education, even medicine. That's why, no matter what your special application, all you need are the monitors in the Panasonic BT, CT and MT Series.

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Perhaps the most versatile of the BT Series are the 7" monitors. There's one that operates on both AC and DC so it's perfect for field use. Another model includes switchable line inputs, external sync terminals and is



available as a single unit or in a dual rack.

Our CT monitors also come in a wide variety of configurations. You can choose from our 19" models. One comes with a tuner, and one can be used internationally because it lets you switch between NTSC, PAL and SECAM. The CT Series 13" and 14" monitors include

models with a built-in tuner, NTSC composite and RGB inputs for use with computer graphics. And when light weight and portability are important, there's the CT Series 5" monitor receiver.

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By now it should be clear, no matter what your special application, the monitors in the BT, CT and MT Series have the right qualifications. Monitor pictures simulated.

For more information, call your nearest Panasonic regional office. Northeast: (201) 348-7620. Midwest: (312) 981-4826. Southeast: (404) 925-6835. Southwest: (214) 257-0763. West: (714) 895-7200. Northwest: (206) 251-5209.

Panasonic
Industrial Company

Station Trading Hurts

'It's the wrong kind of climate—it [station flipping] creates turmoil in the industry and forces the broadcaster to serve a heavy debt instead of the public interest.'

In recent years, the broadcast industry has come under the same aggressive attacks as many other sectors of our economy: corporate takeovers. This has led to what is being termed "station trading," with the implication that the broadcast property has become merely another commodity to be purchased, quickly exploited, and turned over for enormous profits. All in less than a year, sometimes even six months. In a conversation with *BM/E*, FCC Commissioner James Quello stated, "It's the wrong kind of climate—it [station flipping] creates turmoil in the industry and forces the broadcaster to serve a heavy debt instead of the public interest." Naturally, this chain of events leads to an influx of number crunchers, none of whom have a sincere interest in operating a broadcasting property.

An example of this shift in the "personality" of the industry: In the first half of 1985 over 400 radio stations were sold and 114 television stations were traded. Both these figures exceed the totals for the entire year of 1984!

Yet, the difference between the broadcast business and those other industries affected by takeovers is that, through the FCC, broadcasters can do something about it. Al Swift, a democratic congressman from Washington, is calling for a return to the three-year rule, which provides that a license be held for at least three years before it can be traded. Though Swift says it doesn't have to be three years, we believe that anything less would not be effective. In addition to the loss of the three-year rule, there are three other factors that have contributed to rapid trading of broadcast properties: the trustee concept for hostile takeovers (which in the words of Quello can cause the net result to be something akin to greenmail), the 12-12-12 rule, and the requirement that one only needs to certify oneself as capable of meeting the financial requirements for operating a station rather than the old standard of having to prove one's economic stability.

The 12-12-12 rule is not going to change, but all other considerations mentioned here can and should be changed. Broadcast property owners, employees, equipment suppliers, program producers, and all tangential businesses to the broadcast industry would benefit by the long-range planning and stability that would be created with a return to (at least) the three-year rule.



Tim Wetmore
Editor

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FP42



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FP31



FP16



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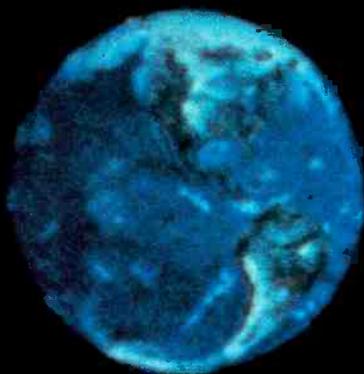
For more information on the entire FP line, call or write Shure Brothers Inc., 222 Hartrey Avenue, Evanston, IL 60202-3696. (312) 866-2553.

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For a demonstration of the HL-95 and other Ikegami cameras and monitors, contact us or visit your local Ikegami dealer.





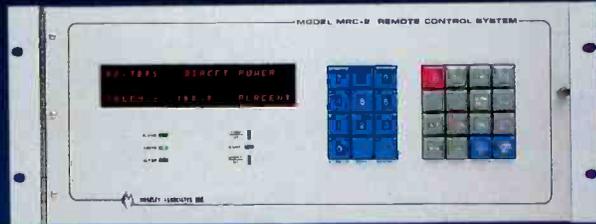
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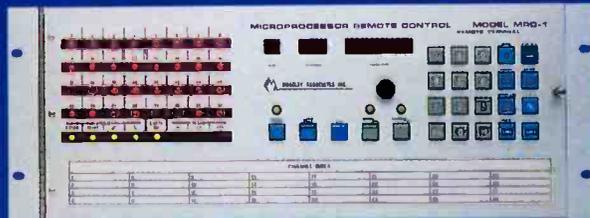
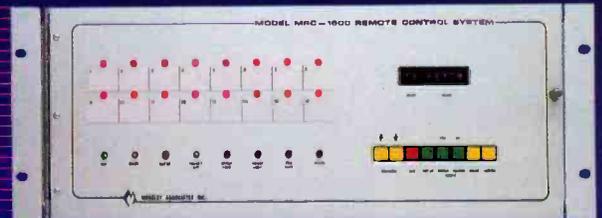
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When Quality is Everything...



MRC-2

MRC-1600



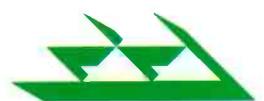
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BROADCAST MANAGEMENT/ENGINEERING



THE SOURCE

1986 BUYERS GUIDE TO BROADCAST EQUIPMENT AND RELATED SERVICES

1986 BUYERS GUIDE

Contains listings for manufacturers of audio, video, lighting and transmitting equipment, as well as test and measurement, components, hardware, and services for the broadcast marketplace.

HOW TO USE IT

INSTANT SOURCE LOCATOR

P. 23

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

LISTING OF MANUFACTURERS

P. 53

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 (b) means

the listing is verified. Also, be sure to note the page number of the manufacturer's advertisement for more product information.

BROADCAST EQUIPMENT REPS

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Reps throughout the country are listed in the *Broadcast Equipment Reps section*, arranged alphabetically in five geographical zones.

READER SERVICE CARD

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To get even more information about the products and services that are advertised in *THE SOURCE*, use the *Reader Service Card* on page 153. 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!

Mobile Satellite News Systems

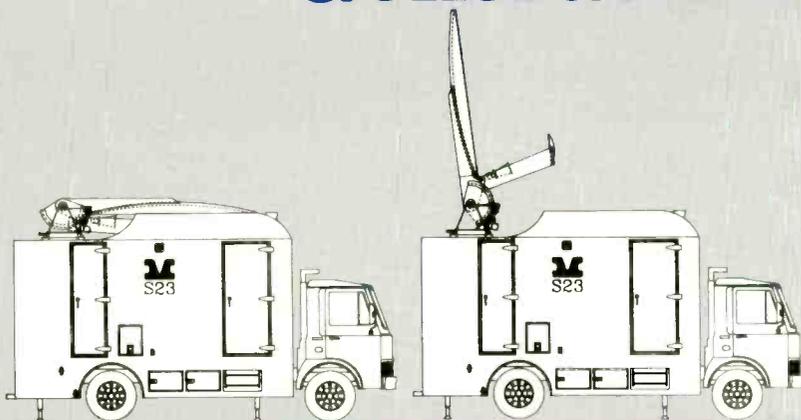


— The Second Generation

At the 1986 NAB Show in Dallas, Midwest ushered in the SECOND GENERATION of Mobile Satellite News Systems, the S18... featuring the new Vertex 1.8M, Dual Reflector, Off-set Ku Antenna, specifically designed for this new service.

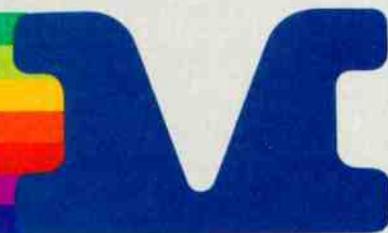
At the 1986 RTNDA Show in Salt Lake City, yet another Midwest innovation, the S-23, will be introduced, featuring a 2.6M version of the Vertex Antenna, with 50 dbi Gain and 35db of Cross Polar Isolation.

For more information on this remarkable new antenna technology, Midwest's modular TWT Power Amplifier Systems, and other SECOND GENERATION innovations, call us at 800-543-1584.



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Cleveland, OH 216-447-9745	Detroit, MI 313-689-9730	Charleston, WV 304-768-1252	St. Louis, MO 314-569-2240	Richmond, VA 804-262-5788	Greenville, S.C. 803-226-9259	Jacksonville, FL 904-642-8368	Seattle, WA 206-232-3550



MIDWEST
Communications Corp.

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Edgewood, KY 41017

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INSTANT SOURCE LOCATOR

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- G. Other T&M, logging, timing equipment

6. COMPONENTS, HARDWARE

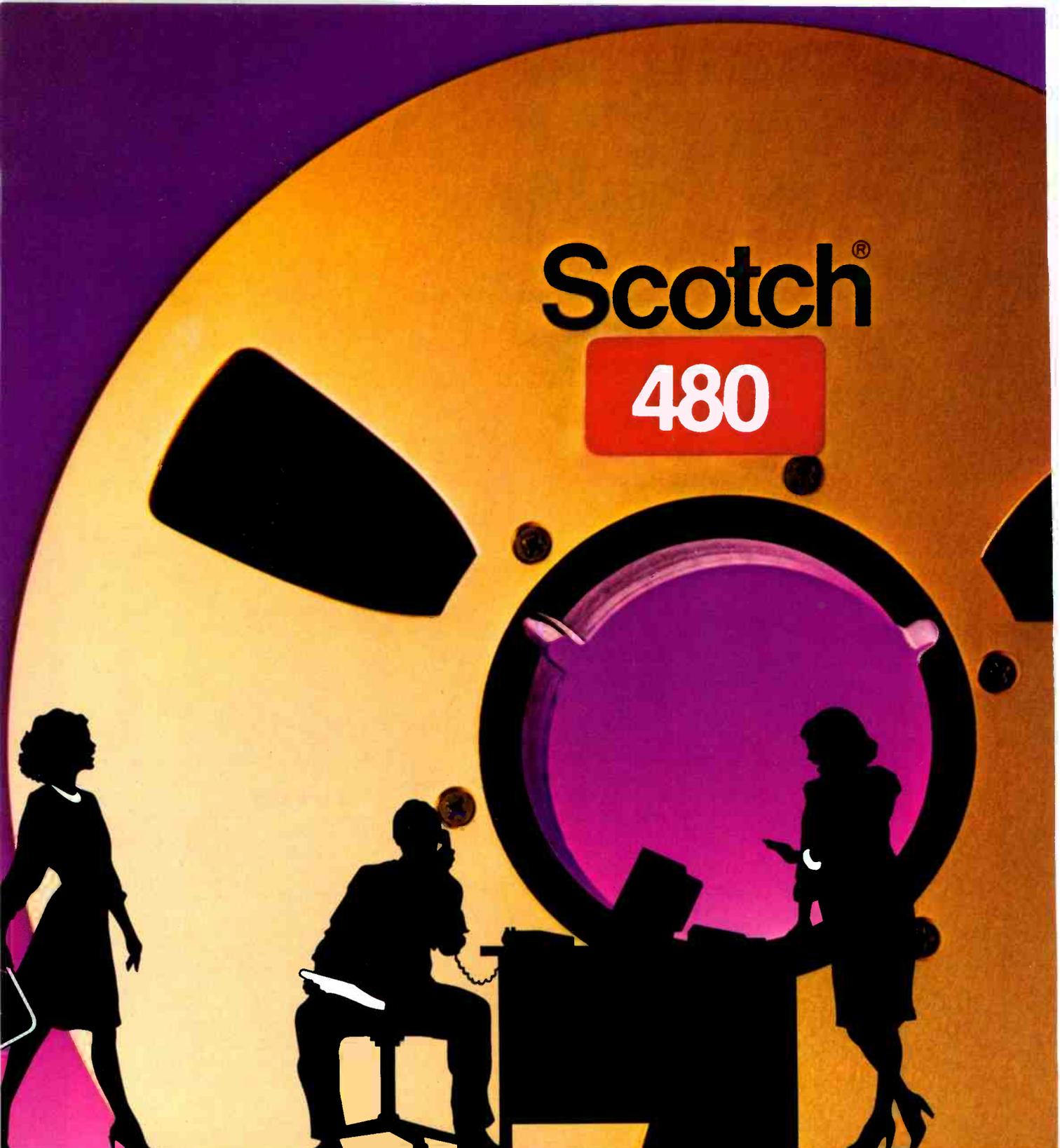
43

- A. Wire, cable, connectors
- B. Tools
- C. Vacuum tubes
- D. Solid-state components
- E. Rectifiers
- F. Capacitors
- G. Transformers
- H. Surge protectors
- I. Hum bucking coils
- J. Quartz crystals
- K. Other components, hardware

7. SERVICES

44

- A. Video production facilities (stage/studio rental)
- B. Mobile production facilities rental
- C. Video post-production facilities
- D. Recording studios
- E. Audio post-production facilities
- F. Equipment rental services
- G. Facilities design and engineering services
- H. Set/studio design services
- I. Engineering consultants
- J. Financial consultants
- K. Earth station site selection
- L. Mobile vehicle construction
- M. Satellite time brokers
- N. Music libraries
- O. Video/film stock shot library
- P. Syndicated radio programming
- Q. Other services

The background of the advertisement is a large, stylized graphic of a videotape reel. The reel is shown in a cross-section, with a large circular opening in the center. The interior of the reel is a vibrant purple, while the outer shell is a warm orange. Silhouettes of three people are positioned around the reel: a woman on the left, a man in the center sitting at a desk and talking on a telephone, and another woman on the right. The overall aesthetic is retro and professional.

Scotch[®]

480

One Tape for True Picture and Sound.

To all those who have to get it on the air without fail, you need a tape you can turn to without fear. 3M 480 1" Videotape. Designed to deliver exceedingly low video dropout levels—and extremely high audio fidelity. To give you a true picture—and true sound.

TO THOSE WHO ARE ON THE LINE TO GET IT ON THE AIR, ONE TAPE IS TRUE.



One Tape Stands True.

Getting you on the air without fail...that's what we've been doing since we invented videotape 30 years ago.

That's why we stand by you—with the largest support force in the field.

And we stand behind you—with some of the most advanced research in the industry. All to keep our standing—as number one in the world of the pro.

Scotch[™]
MAGNETIC MEDIA

NUMBER ONE IN THE WORLD OF THE PRO

3M

Dealers' choice!



JVC's CR-850U Editing VCR. It's the one video dealers choose when selecting VCRs for $\frac{3}{4}$ " editing.

On-line systems. A-B roll systems. Off-line systems. Remote vans. Rental departments. Newsroom editing. Computer graphics. Animation systems... Just a few of the applications where customers need the best, and dealers choose the CR-850U to make sure they get it.

Why the CR-850U? Excellent picture quality: the result of an increased S/N ratio, Y-688 dubbing, special noise reduction circuitry. Fast, accurate editing: the benefit reaped from the direct drive tape transport system and the separate SMPTE time code address track.

The new front load, rack-mount design with parallel and serial remote control capability allow easy interface with existing and new edit systems. Built-in self

diagnostic circuits with front panel test points speed maintenance and adjustments.

Dealers' choice, yes! But the odds are always in your favor, whatever your application, with the JVC CR-850U.

See your JVC Professional Video Dealer today or, for literature call toll-free:

1-800-JVC-5825

JVC COMPANY OF AMERICA
Professional Video
Communications Division
41 Slater Drive
Elmwood Park, NJ 07407
JVC CANADA,
Scarborough, Ontario



INSTANT SOURCE LOCATOR

1. 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 (3-7); AF Assoc. (6); ATI (1-4); Allen & Heath Brenell (2-4); Amek (2,4-7); Arrakis (1-4); Audio Design Calrec (2,4-6); Audio Kinetics (5); Audio-Technica (1,2); Auditronics (4,6); Autogram (3-6); Beyer (1); Biamp Systems (2,4); Broadcast Audio (4,6); Broadcast Electronics (1-4); Carvin (3,4); Central Dynamics (2); Coherent Comms (2); Comrex (2); Connectronics (2,4); dbx (1); Droid Works (6); Dyma Eng (1,2); Enertec (1-4,6); ESL (1); Electric Works (7); Fostex (1,2); Gotham (2,4-6); Graham-Patten (6); Grass Valley Group (6); HM Electronics (1,2); Hallikainen (6); Harrison Systems (2,4-7); Howe Audio (2,4,6); Industrial Research Pdc'ts (1); Integrated Sound (4); JVC (2,4); Klark-Teknik (1,4,6); LPB (1,3,4,6); Logitek (2-6); McCurdy (1,3,4,6); McMartin (1,3,4); Micro-Trak (1-3,6); NEI (1,4); Neve (2,4-6); Opamp (2,3,6); Orion (6); Pacific Recorders & Eng (2-4); Paltext (2-4,6); Portland Inst. (1,2); Protech (1); Quad Eight (4-6); Quantum Audio (2-4,6); Radio Systems (4); Ramko (1-4); Ramsa (1-4,6); Richmond (1-6); Russco (3); Schafer (1-5); Sescor (1); Shure (1,2); Solid State Logic (1-7); Sony Pro Audio (1,2,4-7); Sound Workshop (4-7); Soundcraft (4,6); Spectra Sonics (1-3); Studer Revox (2-4,6); TOA (2); TTC (3,4); Tangent (1,2,4); Tascam (1,2,4,6); Telfax Comms. (1,2); Temtron (1); Trident (4,5); Ultra Audio (1-4,6); Valley People (5); Ward-Beck (1-4,6); Wheatstone (3,4,6); Yamaha (1,2,4)

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:

Audi-Cord (1,2,4); Broadcast Electronics (1-4); Continental Elec. (1); Enertec (1,2); Fidelipac (1,2,5); IGM (3); Int'l Tapetronics (1,2); Otari (1); Pacific Recorders (1); Radio Systems (1); Ramko (1,5); Schafer (3); TTC (1,2); Ultra Audio (1,3)

1.C. AUDIO CASSETTE PLAYER/RECORDERS

SUPPLIERS:

Fostex; Koss; Nakamichi; Old Dominion; SAE; Sansui; Sony Pro Audio; Studer Revox; Tandberg; Tape-Athon; Tascam; Technics; 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 Corp. (2,3); Enertec (1,2); Fostex (2,3); Nagra (1); Otari (1-3);

Scully (2); Sony Pro Audio (1-3); Soundcraft (3); Studer Revox (1-3); TTC (2,3); Tandberg (2); Tascam (2,3); Technics (2); Uher (1)

1.E. DIGITAL AUDIO RECORDERS

SUPPLIERS:

Adv. Music Systems; Audio Design Calrec; CompuSonics; Digital Broadcast Systems; For-A; Lexicon; MEI Electronics; Mitsubishi Pro Audio; Nakamichi; Optical Disc Corp.; Otari; Sansui; Sony Pro Audio; Studer Revox; Wide Range Electronics

1.F. TAPE DUPLICATORS

SUPPLIERS:

Accurate Sound; AEG Corp.; Cetec Gauss; Electro-Sound; Enertec; Garner; Otari; RKO; Telex Comms.

1.G. MAGNETIC FILM DUBBERS

SUPPLIERS:

Magna-Tech; Rank Cintel. Wide Range Electronics

1.H. AUDIO HEADS/HEAD ACCESSORIES

TYPES:

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

SUPPLIERS:

AVSC (1,3); Allsop (3); Annis (3); Audi-Cord (1); Garner (3); Int'l Electro-Magnetics (1); JRF Magnetic Sciences (1,2); Marathon (3); Microtran (3); Nagra (1); Northern Magnetics (1-4); Nortronics (1); Old Dominion (2); Pacific Recorders & Eng (1); Protech (3); Saki (1); Sprague (1-4); TDK (3); Tentel (4); Texwipe (3); Tuber (1); Ultra Audio (1,4); VIF (3,4); Wide Range Electronics (1,3)

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:

AVSC (1,3); Allsop (3); Annis (3); Audi-Cord (1); Broadcast Electronics (7,9); Enertec (1,2,6,9); Garner (3); Int'l Electro-Magnetics (1); JRF Magnetic Sciences (1,2); Marathon (3); Microtran (3); Nagra (1); Northern Magnetics (1-4); Nortronics (1); Old Dominion (2); Pacific Recorders & Eng (1); Protech (3); Saki (1); Sprague (1-4); TDK (3); Tentel (4); Texwipe (3); Tuber (8,9); Ultra Audio (1,4); VIF (3,4); Wide Range Electronics (1,3)

1.J. AUDIO EDITORS/SYNCHRONIZERS

TYPES:

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

SUPPLIERS:

AEG Corp. (2,3); Adams-Smith (2,3); Adv. Music Systems (2,4); Allsop (6); Alpha Audio (2,4); Audio Kinetics (2,3); CMX (2,4); Cipher Digital (2,3); Droid Works (2); Editron Australia (2-4); Electric Works (2,3); Evertz (3); Fostex (2); JVC (4); Lexicon (4); Marathon (1); New England Digital (3,4); Northern Magnetics (1); Shintron (3); Sony Pro Audio (4); Sprague (1); Studer Revox (2,3)

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:

AEG Corp. (2); AKG (4,6); Acoustic Research (2); Allied Broadcast (1); Audio-Technica (1); Broadcast Electrics (2); Gotham (1-5); Integrated Sound (2,5); JVC (2); LPB (2,3); McCurdy (2); McMartin (5); Micro-Trak (3,5); Pacific Recorders & Eng (5); Russco (2,3); SAE (1); Sansui (1); Schafer (1-3); Shure (1,4); Sono-Mag (1); Sony Pro Audio (1); Sprague (6); Stanton (4,6); Straight Wire Audio (1); Studer Revox (1); Tandberg (1); Technics (1-3); Teledyne (2)

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:

Audichron (6); Automated Bdcst. Controls (5); Broadcast Electronics (3,4); CAT Systems (3,4); Conex (4); Electric Works (2,3); Gotham (3,5,6); IGM (3-5); MEI Electronics (3-5); Mid-America Automation (3); Monroe Electronics (4); ROH (6); Richmond (3,5); Schafer (1-6); Sentry (3-5); Sono-Mag (2-6); Tape-Athon (5); Ultra Audio (5); VIF (1); Videomedia (3,5)

1.M. RADIO BUSINESS/NEWSROOM AUTOMATION

TYPES:

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

SUPPLIERS:

Applelog (1); Automated Bdcst. Controls (2); Basys (3); CBSI (1,2); Columbine (1-3); Data Comms. (1-3); Dynatech (3); Ficon (1); Generic Computer (1); Jefferson Pilot (1-3); Kaman (1,2); The Management (1); Media Computing (3); Nordic (1,2); Radio Computing (1); Register Data (1,2); Schafer (1,2); Summit Software (1); Telesource (3); Terminal Systems (1,3); Texscan (1,2); Vidcom (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:

AEG Corp. (7); ANT Telecomm. (7); ART (5); ATI (1-4); Adv. Music Systems (6); Altec (5); Aphex (1-3); Ashly Audio (2-5); Audio Design Calrec (1-3,4,5,7); Audio Kinetics (6); Audio Technology (7); Audioarts (2-5); Barcus-Berry (1-7); Biamp Systems (1,4,5); Bogen (5); Broadcast Audio (1-3); Broadcast Electrics (1-3); Circuit Research (1-3,7); dbx (1-5,7); Dolby (7); Dorrrough (2,3); Elcom Bauer (1-3); Electro-Voice (5); Fostex (2,3,5); Gotham (1-5,7); Industrial Research Pdcnts (4); Inovonics (1-3); Integrated Sound (5); Klark-Teknik (2,3,5,6); LPB (2,3); Leaming (3); Lexicon (6); Logitek (1); Marcom (3); Marti (2,3); McCurdy (2,4); McMartin (1-3); Meyer Sound (4); Modular Audio (2,5); Modulation Sciences (3); Moseley Assocs (2,3); NEI (4,5); Opamp (7); Orban (1-4); Pacific Recorders & Eng (2-4)

Protech (1-3); ROH (1); Ramko (2,7); Ramsa (5); Richmond (1,5); SAE (4); SCV (3-5); Sansui (5); Sescom (1,4,5); Spectra Sonics (1-6); Symetrix (2-4,7); Technics (4); Valley People (1-4,7); Ward-Beck (4); White Instruments (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); ART (1-3); Adv. Music Systems (1-3); Audio Design Calrec (4); Audio/Digital (2); Biamp Systems (4); Connectronics (4); Eventide (1-3); Fairlight (5); For-A (1); Fostex (4); Gotham (1,2); Industrial Research Pdcnts (2); Integrated Sound (3); Klark-Teknik (1,2,4); Koss (2); Lexicon (1-3); Marshall Electronic (1-3); Moog (5); NEI (4); Orban (4); SCV (4); Sony Pro Audio (1); Studio Tech. (4,5); Tascam (1); Yamaha (1,2,5)

1.P. AUDIO MONITORS

TYPES:

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

SUPPLIERS:

AKG (2); Acoustic Research (1); Altec (1); Anchor Audio (1); Atlas Sound (1); Auernheimer (1); Auratone (1); BES (1); BGW (1); Beyer (2); Bogen (1); Carvin (1); Choice Electronics (1); Clear-Com (2); David Clark (2); Electro-Voice (1); Fostex (1,2); Gotham (1); Integrated Sound (1); Koss (2); Logitek (1); Microlab (1); Meyer Sound (1); Philips Television (1); R-Columbia (2); ROH (1,2); Ramsa (1); Sennheiser (2); Setcom (2); Sony Pro Audio (1); Soundolier (1); Spectra Sonics (1); Studer Revox (1); Tannoy (1); Technical Projects (1); Technics (1); Telectro (1); Teledyne (1); Television Eqpt. Assocs. (2); Westlake Audio (1); Yamaha (1)

1.Q. INTERCOM SYSTEMS

TYPES:

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

SUPPLIERS:

AF Assoc. (1); Anchor Audio (1); Arus (1); Bogen (1); Cetec Vega (2); Clear-Com (1); Comrex (2); Comtek (2); David Clark (1); Enertec (1); Fartronics (1); Fisher (1); Gentner Eng (1); HM Electronics (1,2); McCurdy (1); McMartin (2); Motorola C&E (2); Nady (2); Old Dominion (1); Pesa America (1); Protech (1); R. Columbia (1,2); ROH (1); RTS (1); Reach (2); Setcom (1); Soundolier (1); Swintek (2); TVI (1,2); Telectro (1); Television Eqpt. Assocs. (1); Telex Comms. (1); Video Aids (1); Ward-Beck (1)

1.R. MICROPHONES

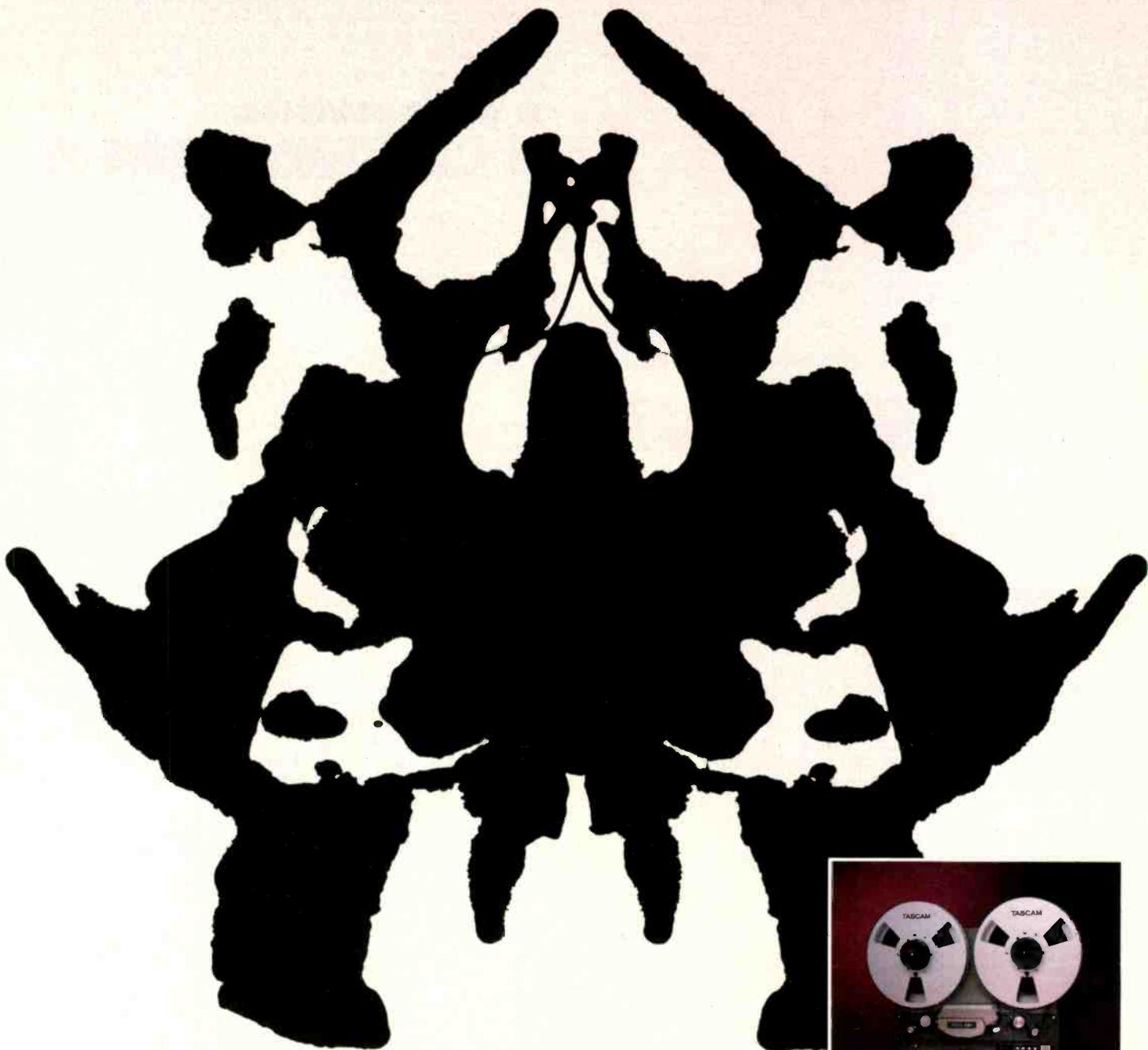
TYPES:

- | | |
|------------------------|---------------------------------|
| (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:

ACO Pacific (2); AKG (1,2,5-10); Alan Gordon (5,10); Allied Broadcast (10); Altec (1,2,6); Anchor Audio (1); Atlas Sound (10); Audio Design Calrec (2,8,9); Audio-Technica (1,2,6,7,10); Beyer (1-8,10); Bogen (1,2,6); Bruel & Kjaer (2,9); Carvin (1); Cetec Vega (5); Coherent Comms (5,6); Comprehensive Video (1,2,6,7,10); Comtek (5); Countryman (2,4-6,9); Crown (2,4,6); Eddor (5); Electro-Voice (1,2,6,7); Fostex (1,3,9); Gotham (2,7,9,10); HM Electronics (1,2,5,6); Integrated Sound (1,2,7); JVC (7); Lectrosynics (5); Marti (1); Micron Audio (2,5,6,10); Nady (5); Ramsa (1,2,5,6); R. Columbia (1,2,5,6); (1,2); RF Technology (5); Samson (5); Sennheiser (1,2,5,7,8); Sharp (1); Shure (1,2,4,6,7,10); Sony Pro Audio (1,2,5-7); Spectra Sonics (6); Stanton (1); Swintek (5); Tascam (2); Telex Comms. (1,2,5,6); Yamaha (1)

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42B 2-Track Recorder/Reproducer



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Tascam's new 42B 2-channel, 2-speed, 2-track recorder/reproducer will take your day-in, day-out, all-

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Telephone: (213) 726-0303

1.S. AUDIO AMPLIFIERS

TYPES:

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

SUPPLIERS:

ACO Pacific (1,4); ATI (1-4); Altec (1-3); Ashly Audio (3); Audio Design Calrec (1-3); Audio Technology (2); Auditronics (1,2); BGW (3); Beyer (1-4); Biamp Systems (3); Bogen (1-3); Bonneville Media (2); Broadcast Audio (1-3); Bryston (1-3); Carvin (3); Central Dynamics (2); Conex (3); Connectronics (3); Crown (1,3); Datatek (1,2); Digimax (1); Edcor (2,3); Enertec (2-4); Fostex (2,3); Gotham (1,2); Howe Audio (1,3); ITI Electronics (2-4); Industrial Research Pdcnts (3); Int'l Nuclear (1,2); Integrated Sound (3); Jensen Transformers (1-3); Lectrosonics (3); Lenco (3); Logitek (1-3); Marti (2,3); McCurdy (2-4); McMartin (1-3); Micro-Trak (1,3); Modular Audio (1-4); Modulation Sciences (2); Monroe Electronics (2); NEI (3); Pacific Recorders & Eng (1); Panasonic (3,4); Protech (1-4); QSC (3); ROH (1-4); RTS (1,2); Radio Systems (1-4); Ramko (1-3); Ramsa (4); Richmond (1-4); RTS (3); Russco (1,3); SAE (1,3); SCV (1,3,4); Sansui (1,2); Scientific Systems (1-3); Sescom (1-3); Shure (1,2); Sony Pro Audio (3); Spectra Sonics (1-4); Stanton (1); Straight Wire Audio (1,2,4); Studer Revox (3); Symetrix (3); Tandberg (1,3); Tannoy (3); Tape-Athon (2,3); Tascam (2); Technics (1,3); Telectro (4); Tuber (3); VIF (3); Valley People (1); Ward-Beck (1-4); World Video (3); 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 Telecomm (3,4); ADM (1-3); AEG Corp. (4); AF Assoc. (3); ATI (1,2,5); Adv. Micro-Dynamics (1); Allied Broadcast (1); Arrakis (2); Audio Accessories (3); Audio Design Calrec (1); Auditronics (1,3); BSM (1,2); Bonneville Media (1); Bosch (1,2); Broadcast Audio (1); Broadcast Electronics (1,4); Channelmatic (1); Choice Electronics (3); Comrex (4); Conex (2); Connectronics (3); Datatek (1,2); Di-Tech (1,2); Dyma Eng (1-3,5); Dynair (1,2); ESE (1,4); ESL (4); Editron Australia (2); Enertec (1-3); Farrtronics (1,3); Gentner Eng (1-4); Gotham (2); Graham-Patten (1); Grass Valley Group (1,2); Hedco (1,2); Howe Audio (4); IMS (2); ITI Electronics (3); Int'l Nuclear (1,2); Intergroup Video (1); James Grunder (2); Leitch Video (1,2); Lenco (1); Logitek (1,2); Marcom (2); Micro-Trak (1); Modular Audio (1,2); Modulation Sciences (1); Monroe Electronics (4); Moseley Assocs (2); Mycomp Tech (1); Neve (1); Normex (4); Old Dominion (4); Omicron (1); Opamp (1,2); Orion (1,2); Pacific Recorders & Eng (1-3); Pesa America (1); Portland Inst. (1); R-Columbia (4); ROH (1-5); RTS (1,4); Radio Systems (1); Ramko (1,2); Richmond (1,2); Russco (1,4); SCV (4,5); Scientific Systems (1); Sescom (1,3,5); Shintron (1,2); Shure (5); Sierra Video (2); Sigma (1,2); Straight Wire Audio (1); Studer Revox (4); Switchcraft (3); Symetrix (4); Tascam (3); Telemet (1); Telfax Comms. (2,4); Texscan (1); Trompeter (3); Utah Scientific (1,2); Video Aids (1); Videotek (1); Ward-Beck (1-3)

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:

ACO Pacific (9); ADC Telecomm (9); AKG (9); ATI (3-5); AVSC (9); Aphex (9); Audio Accessories (9); Audio Technology (3-5); Audio/Digital (9); Auditronics (4); B&B Systems (3,4); BGW (9); Barcus-Berry (9); Biamp Systems (9); Broadcast Audio (1-3); Bryston (5); Comrex (9); Conex (9); Dorrugh (5); Duncan Elec-

tronics (2); ESE (3,5,8); Emergency Alert Receiver (8); Enertec (9); Farrtronics (3); For-A (9); Gorman-Redlich (8,9); Gotham (1-6); Graham-Patten (4); HM Electronics (9); Howe Audio (9); IMS (9); Inovonics (4,6); Int'l Nuclear (8); Jensen Transformers (9); Kay Elemetrics (1); Kintek (9); Lexicon (9); Logitek (5,9); McMartin (1,2,8); Mikrolab (3,9); Modular Audio (3-5); Modulation Sciences (9); Moseley Assocs (9); Motorola C&E (3,5); Nady (9); Pacific Recorders & Eng (3,4,9); Penny & Giles (1,2,9); Protech (2,5); R. Columbia (9); ROH (3,4); RTS (9); Radio Systems (5); Ramko (3-5); Real World (3,4,6); Roscor (9); Selco (3,4); Sescom (5); Shallco (1,2); Shure (9); Spectra Sonics (2,3,5); Straight Wire Audio (9); Studio Tech. (9); TFT (8); TTC (1,2); Tandberg (9); Terminal Systems (9); Valley People (9); Videotek (9); Ward-Beck (3,4)

2. 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:

Alan Gordon (10); Ampex AVSD (3,6,7); Arriflex (10); Bosch (1-4,7); Cinema Products (10); Comtrex (9); EEV (9); Forox (10); Harris Broadcast Div. (1,3); Hitachi (1,3,5,6,9); Ikegami (1-3,6-9); JVC (2-5,7); Javelin (6); NEC America (6); Nisus (4-6); Panasonic (1-7,9); Panavision (10); Philips TV (1-3,7); Redlake (10); Sharp (3,5,7); Sony Broadcast (1,2,5,6-8); Sony Video (2,3,6,7,9); Temtron (5); Thomson Broadcast (2,3,7); 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:

Alan Gordon (1); AmpereX (4); Angenieux (1); Anton/Bauer (5); Arriflex (1); Belden (3); Calvert (4); Canon (1); Century Precision (1,2); Cinema Products (1); EEV (4); Film/Video Equip. (1); Fujinon (1,6); J-Lab (5); Javelin (1); Panasonic (4); Panavision (1); Photo and Video (1); RCA New Products (4); Redlake (1); Schneider (1,3,6); Schwem (1); Tamron (2); Telemetrics (5,6); Temtron (4); Thomson Tubes (4); Tiffen (3); Warren R. Smith (1); Zellan (1)

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:

Alpha Video (3); Ampex AVSD (2,4,9); Asaca (9); Bosch (1,2,8); Channelmatic (9); Eigen (3); Hitachi (2); Hubbard (9); JVC (3); Lake Systems (9); Merlin (1-3,5,7); Odetics (9); PEP (7); Panasonic (3,5,7,9); Sansui (7); Sharp (7); Sony Broadcast (2-4,9); Sony Video (3,6); Thomson Broadcast (4)

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:

AVSC (3,5); Allsop (3); Ampex AVSD (1,2,5); Annis (3); CMC Tech. (1,2); Comprehensive Video (3); Intl. Electro-Magnetics (1,2); Microtran (3); Saki (1); Spin Physics (1,5); Sprague (1-3); TDK (3); Taber (1,3); Tentel (4)

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2.E. VIDEOTAPE, FILM/TAPE ACCESSORIES

TYPES:

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

SUPPLIERS:

3M Magnetic (1-4,6); AVSC (9); Agfa-Gevaert (3,4); Allsop (8); Ampex/Mag. Tape (1-4,6); Annis (9); Asaca (8); Audico (7,8); BASF (4); CMC Tech. (9); Calico Video (1); Comprehensive Video (3,4,9); Eastman Kodak (2-5); Elcon (8); Fuji Photo (2-4); Garner (9); JVC (4); King Instr. (7,8); Lipsner-Smith (10); Maxell (2-4); Maxima (4); Microtran (9); National Video Svce. (1,3,4); Neumade (6,10); Nova (8); Panasonic (3,4); Plastic Reel (6); Research Tech. Intl. (6,8-10); Smith-Victor (4); Sonar (9); Sony Magnetic (2-4,6,8); Studio Film (2-5); TDK (4); Television Equip. Assoc. (8); Wide Range (9)

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); Alan Gordon (5); Alias Research (5); Ampex AVSD (1); Apert-Herzog (1,5); Artronics (1,5); Computer Graphics Labs (5); DSC (1,5); Eigen (4); Elicon (6); For-A (1); Forox (5,6); Harris Video Sys. (1); Interand (1); Lyon Lamb (5); NTL (1); Oktel (1,2); Panasonic (3); Precision Echo (3,5); Quantel (1); Rank Cintel (1); Scientific-Atlanta (1); Shintron (1); Sony Broadcast (4); Sony Video (1,3); TSM (6); Videomedia (5); Warren R. Smith (6); Woolley (5,6)

2.G. TELECINE/FILM EQUIPMENT

TYPES:

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

SUPPLIERS:

AF Assoc. (1); Apert-Herzog (7); BHP (6); Bosch (1); Broadcast Video Systems (6); Buhl (5); Corp. Comm. Consultants (6,7); Dubner (6); Editron (7); Electric Works (7); Hubbard (1,2); Ikegami (1,2); Kalart Victor (3); Knox Video (6); L-W (3,5); Laird Telemedia (3-5); Magna-Tech (3); Magnasync (3); Multi-Track (1,3); Nytone (3,5,6); Panasonic (2); Photo and Video (4); Radmar (3); Rangertone (1-5,7); Rank Cintel (1,6,7); Steenbeck (1); Thomson Broadcast (1,6); Videoplex (5); Zei-Mark (3-6)

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 Broadcasting (1-3,7); Alias Research (3,4,10); Ampex AVSD (2-4); Artronics (3,4); Aston (2); Aurora (2-5); Bosch (2-5); Choice Elec. (1); Chyron (2,3); ColorGraphics (2-4); Computer Graphics Labs (2,3); Cubicomp (3,4); Dubner (2-4); EEG (9); Elicon (2,4,6); Evertz (1); For-A (1,5); Forox (10); Grass Valley Group (1-5); Harris Video Sys. (3); Inovion (3); Integrated Tech. (2-6); Interand (2,5); JVC (2); Knox Video (1,2); Laird Telemedia (1,2); MPB (2); Media Comput-ing (2); Mindset (1,2); Multidyne (1); Mycro-Tek (1,2); Norpak

(2,3,5,7,9); Panasonic (1,9); Pesa (2); Quanta (1-4); Quantel (2,3); Sansui (1); Sony Video (2,6,7); Symtec (1-3,6,7); Texscan (1,9); Thomson Broadcast (2-4); Vectrix (3); Video Aids (3); Video Data (9); Wavefront (3); Xiphias (3)

2.I. WEATHER SYSTEMS

TYPES:

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

SUPPLIERS:

3M Stormscope (6); ADC (1,3,5); Accu-Weather (1-3,7); Advanced Designs (1,3,5); Alden (1-3); ColorGraphics (1,5); Dubner (1); Enterprise Elec. (1-3); Environmental Sat. Data (1-6); Grass Valley Group (5); Integrated Tech. (1-3,5); Kavouras (1-5); RScan (2,6); Register Data (3); Technology Svce. (1-3); Texscan (1); Thomson Broadcast (1); WeatherBank (1,2)

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:

Alta (1,4); Ampex AVSD (3,4); Asaca (1,2); Beaveronics (2); Bosch (2-5); Central Dynamics (1-4); Crosspoint Latch (2-4); DSC (4); Echolab (1,2,4); For-A (4,5); Grass Valley Group (2-5); InterGroup (1-4); Kaitronics (2); Lang (1); Listec (2); Matrix (3); Panasonic (1,2); QSI (2); Ross Video (1-4); Shintron (2,4,5); Sony Video (1); Technov (1); Thomson Broadcast (2); Toshiba (2); Universal Elecon (5); Viscount (2); Vital (2,3)

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); Broadcast Video Systems (5,7-9); Central Dynamics (2-8); Chyron (1); Computer Graphics Labs (1); Comtrec (7); DSC (1); Echolab (1); For-A (1,2,5,6,8); GML (1); Graham-Patten (8); Grass Valley Group (1); Harris Broadcast Div. (1,2); Harris Video Sys. (1); Image Video (8); Inovion (1); InterGroup (1,4-6,8); Intl. Nuclear (8); JVC (3,5); James Grunder (1,2); Knox Video (4,7-9); Listec (8); Microtime (1-3); NEC America (1); Panasonic (3,5,7); Precision Echo (2); Prime Image (1); Quantel (1); Shintron (1,2,4-6,8); Sierra (5,7,8); Sony Video (3,8); Telemet (5,6); Ultimate (5,8); Universal Elecon (7); Viscount (1); Vital (1,3,5,7)

2.L. MASTER CONTROL SWITCHERS

TYPES:

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

SUPPLIERS:

Alamar (1,3); Ampex AVSD (2); Bosch (1,2); CCI (1-3); Central Dynamics (1-3); Grass Valley Group (1,2); Image Video (1); InterGroup (1,2); Intl. Nuclear (1); Kaitronics (1); Omicron (1); Panasonic (1); Utah Scientific (1-3); Viscount (1); Vital (1-3)

2.M. VIDEO ROUTING SWITCHERS

TYPES:

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

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SUPPLIERS:

3M Broadcasting (1,2); ABP (1); Amtel (1,2); BSM (1,2); Bosch (1,2); CCI (1,2); Central Dynamics (1,2); Channelmatic (1); Datatek (1,2); Dyma (1,2); Grass Valley Group (1); Hedco (1,2); Image Video (1,2); InterGroup (1,2); Intl. Nuclear (1); James Grunder (2); Kaitronics (1,2); Leitch (1,2); Lenco (1,2); Matrix (1,2); Mycomp (1,2); Omicron (1); Orion (2); Shintron (1,2); Sierra (2); Telemet (1); Universal Elecon (1,2); Utah Scientific (2); Vital (2)

2.N. MACHINE CONTROL/TECHNICAL AUTOMATION

TYPES:

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

SUPPLIERS:

3M Broadcasting (1-3); Alamar (1,2); Auburn (1); Audio Kinetics (1,2); Bosch (1-3); CCI (1-3); Cat Systems (1,2); Channelmatic (1,2); Commercial Comm. (3); Electric Works (3); Grass Valley Group (1); Grumman (1,2); Image Video (1,2); Lake Systems (1-3); Merlin (1-3); NES (1,2); Norpak (3); Orion (3); Tech Electronics (1,2); Texscan (1); United Media (1-3); Utah Scientific (2); Videomedia (1-3)

2.O. TV BUSINESS/NEWSROOM AUTOMATION

TYPES:

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

SUPPLIERS:

Basys (3); CCI (1,2); Columbine (1-3); Comtrex (1); Data Comm. Corp. (1-3); Dynatech (3); Jefferson Pilot (1-3); Kaman (1,2); Media Computing (3); Norpak (1); Orion (2); Summit (1); TUI (1); Telesource (3); Terminal (3); Texscan (1,2); Utah Scientific (1,2); VariCom (1); Vidcom Intl. (1,2); Videomedia (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:

Acquis (2-5); Adams-Smith (1-6); Amherst (2); Ampex AVSD (4); Amtel (1,5,6); BHP (2-4); CMX (3,4); Calaway (3); Cipher Digital (1,2,5); Coherent Comm. (5); Convergence (2-5); Datum (5,6); Droid Works (4); EECO (2-6); EEG (5); ESE (2,5); Editron (1,4); Electric Works (2,3,5,6); Evertz (1,5,6); For-A (5,6); Grass Valley Group (2,4); Gray Engineering (5,6); JVC (2); Magna-Tech (5); Multi-Track (1,5); Multidyne (5); Paltex (2-4); Panasonic (2-5); Research Tech. Intl. (6); Shintron (1,5,6); Skotel (5,6); Sony Broadcast (2-4,6); Sony Video (3); Technov (2); Telcom (5,6); United Media (1-5); Universal Elecon (4,5); Videomedia (1-6); Vital (1,5); Wide Range (5)

2.O. VIDEO SYNC AND SIGNAL GENERATORS (ALSO SEE TEST AND MEASUREMENT SECTION)

TYPES:

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

SUPPLIERS:

3M Broadcasting (1-3); Adams-Smith (1); Amtel (6); Asaca (1-3); Bosch (1); Broadcast Video Systems (3,5); CCI (1); Colorado Video (1); Crosspoint Latch (1-3); Datatek (4); Datum (4); Dyma (1-3,6); EEG (4); Evertz (6); Grass Valley Group (1); Gray Engineering (5); Intl. Nuclear (2); J-Lab (5); Javelin (4); Lang (4); Leader (1-3); Leitch (1-3,5); Lenco (1-3,5); Listec (1-3,5); Multidyne (1-6); Newton (1,3)

Omicron (1-3); Optical Disc (3); Philips T&M (1,3); Philips TV (1); QSI (2-4,6); Real World (5); Rohde & Schwarz/Polarad (1,3); Shintron (2); Sierra (3); Sigma (1-6); Technov (1,2); Tektronix (1-3); Telemet (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); Amherst (1); Ampex AVSD (1); Apert-Herzog (1,4); Applied Digital Tech. (8); Bosch (6); Broadcast Video Systems (8); Colorado Video (4,6); Comtrex (10); Crosspoint Latch (1); Eigen (4,7); Faroudja (6-8); For-A (1,3-5,8); Fortel (1-8); GML (5); Harris Broadcast Div. (1,3-6); Harris Video Sys. (1,3,5,6); James Grunder (1-8,10); Leitch (3,11); Lenco (1); Merlin (10); Microtime (1,3,5,7); NEC America (3); nova (1,5); Oki (10); Prime Image (1,3); Quality Video (9); Quantel (3,10); Rank Cintel (4); Scientific-Atlanta (1,3-5); Shintron (3,5,10); Sony Broadcast (1); Tektronix (1-5); Thomson Broadcast (8); Toshiba (3,11); Universal Elecon (3); Video Intl. (10)

2.5. 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); Alta (6); Andersen Labs. (4); Asaca (1,2); Barco (2,3); Bosch (1); Broadcast Video Systems (1,4,5); Coastcom (5); Di-Tech (7); Dynair (7); Electrohome (2); Faroudja (1-3); For-A (1,2); Grass Valley Group (7); Integrated Tech. (1); Interand (2); Leitch (3,4,7); Lenco (1-4,6,7); Listec (1); Lyon Lamb (1); Microwave Filter (5); Multidyne (7); Quante (1); TTE (5); Technov (2); Tektronix (2,3); Telemet (2,3,7); Television Equip. Assoc. (4,5,7); UHF (5); Videotek (7)

2.T. VIDEO AMPLIFIERS

TYPES:

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

SUPPLIERS:

3M Broadcasting (1,2); Apert-Herzog (2); BSM (2); Bosch (2-4); Central Dynamics (1-4); Datatek (1-4); Di-Tech (2,3); Dyma (1-4); Dynair (2-4); ESE (2); For-A (2); Graham-Patten (2-4); Grass Valley Group (1-3); Hedco (2-4); Image Video (2); InterGroup (2-4); Intl. Microwave (3,4); Intl. Nuclear (2,3); Javelin (2); Knox Video (1); Leitch (1-4); Lenco (1-4); Multidyne (2-4); Mycomp (2); Omicron (2-4); Opamp (2,3); Panasonic (2); QSI (2); Shintron (2,4); Sierra (2); Sigma (1-4); Technov (2); Telemet (2,3); Television Equip. Assoc. (2); Texscan (2); Utah Scientific (2); Videotek (2-4); Vital (2,3)

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:

Amtron (3,4); Asaca (2,3,6,8); Barco (1-6); Bosch (2,3); Conrac (1-4); ac (1-4); Elector (2,4,7); Electrohome (1-4,7); GE (7); Hitachi (1); Ikegami (1-6); Image Amplification (7); JVC (1-4); James Grunder (2,3,4); Javelin (1,2); Leader (6); Lenco (1,2); Listec (1); Norpak (3); Panasonic (1,2,6,7); Pesa (2,4); Sansui (2); Sharp (2-4,7); Sony



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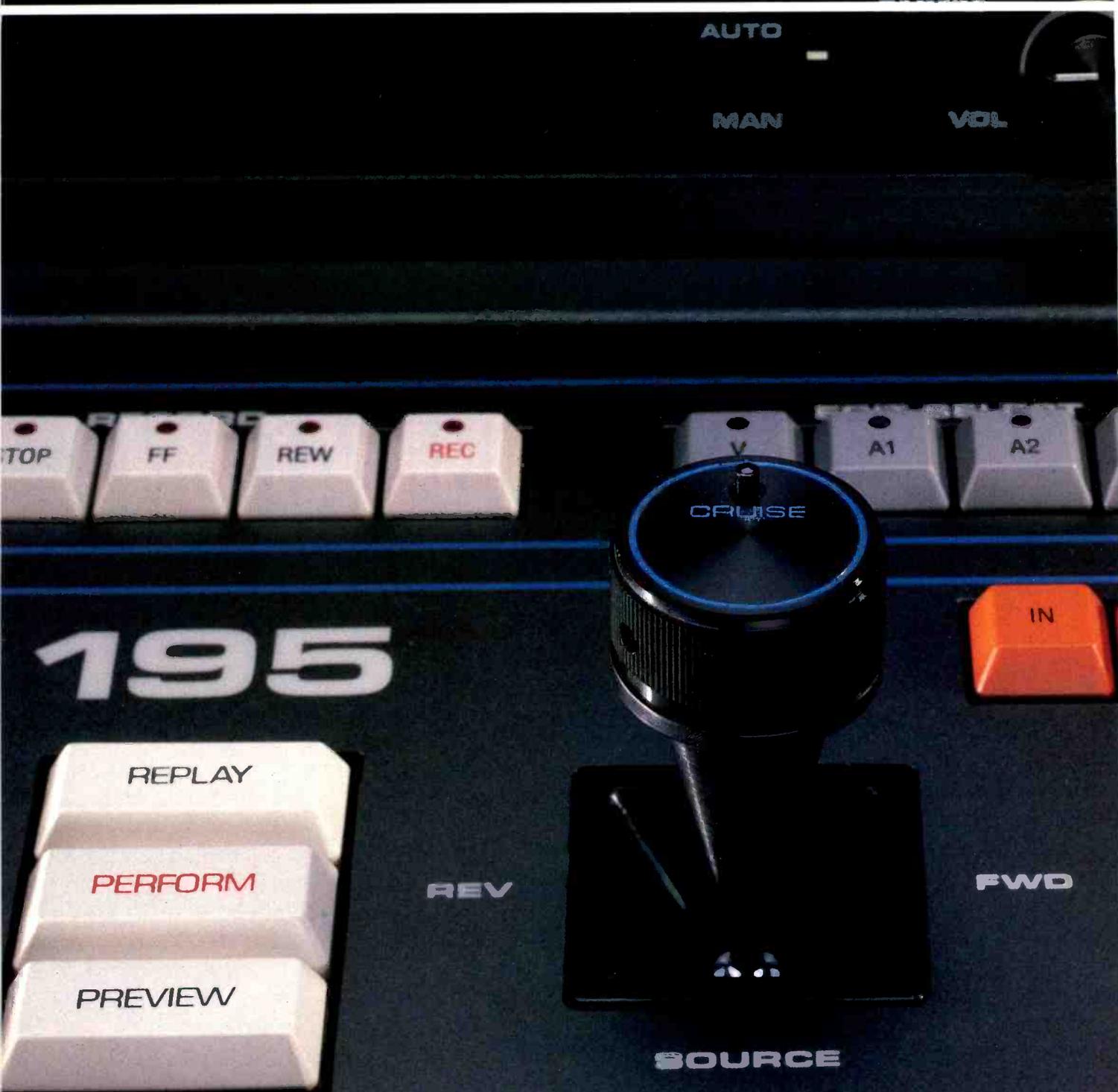
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2.V. OTHER VIDEO EQUIPMENT

SUPPLIERS:

AF Assoc.; Abekas; Broadcast Video Systems; Buhl; Cavendish; Central Dynamics; Choice Elec.; Digimax; EECO; Electrohome; Farrtronics; Grumman; Image Video; J-Lab; Jem-Fab; Leitch; Lenco; Listec; Mycomp; Norpak; Optical Disc; Penny & Giles; Pioneer Electronics; Quantel; Rank Cintel; Roscor; Sansui; Sierra; Sony Broadcast; Sony Video; Tech Electronics; Technov; Tektronix; Terminal; Vid Video; VideoLab

3. 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); BW Lighting (1,3,4); Barbizon (1-8); Bardwell (3-6); Belden (5); Bogen (6); Cine 60 (3); Cinemills (1,2,5); Colortran (2,3,4,6-8); Comprehensive Video (1,5,6,8); Cool-Lux (1-3,6,8); Desisti (1-4,6,8); Dyma (1,4,7,8); Electro Controls (1,8); Electronics Diversified (7,8); Frezzolini (1,3,6); GE (1); GTE (1); Great American Market (1-7); Keylite (1-8); Klark-Teknik (6-8); Kliegl (2-4,7,8); LTM (2,6,8); Lighting Methods (1-8); Lowel-Light (3,6); Matthews Studio (5,6); Mole-Richardson (1-8); North American Philips (1,3); Olesen (1,2,5-8); Osram (2); PAG (2); Packaged Lighting (1,3-8); Perrott (3); Phoebus (2,3); Polites (7); Pro Battery (1,2,5,6); Rainbo (5,7); Rosco (5); SLD (1,3-8); Smith-Victor (1,3,5,6); Strand Lighting (1-8); TBA (2,7); Teatronics (1,3,4,6-8); Temtron (3); Theatre Service (1-8); Ultimate Support (6); Union (7,8)

3.B. POWER SUPPLIES

TYPES:

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

SUPPLIERS:

Alan Gordon (1); Alexander (1); Anton/Bauer (1,2,5); Cine 60 (1); Comprehensive Video (1,3); Cool-Lux (1-3); Desisti (6); Digimax (1); Film/Video Eqpt. (1,3); Frezzolini (1,3,7); Great American Market (3,6); Kay Industries (4); LTM (6); Mole-Richardson (1,3,4,6,7); Motorola C&E (1,4); Norac (4); North Wind (3,4,7); Onan (4); PAG (1); PEP (1); Pacific Power (4); Paco (1); Perrott (1-3); Portable Energy (1,3); Pro Battery (1,3,6); Redlake (3); Teledyne Energy (4); Universal Elecon (1); 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:

Alan Gordon (1,4,5); Arben (4,5); Arriflex (5,6); Bardwell (1); Birns (1); Bogen (1,4); Cine 60 (3); Cinema Products (1,6,8); Comprehensive Video (1,4); Davis & Sanford (1,2,4); Dyma (1,4); ENG Corp. (8); ENG Heli (7); Elicon (8); Innovative TV Equip. (1,4,8); Javelin (8); Karl Heitz (1,4); Matthews Studio (4,5,8); Miller Pro. (1,4); Nurad (2,8); O'Connor (1,4); Quick Set (1,2,4,8); Redlake (1); Sachtler (1-4); Skyworks (8); Smith-Victor (1); TSM (6,8); Telemetrics (5,8); Tyler (6,7); Vinten (1-5,8); Zellan (4,7)

3.D. TELEPROMPTERS

TYPES:

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

SUPPLIERS:

Choice (1); Cinema Products (2,4); Compu = prompt (1-4); Computer Prompting (1,3); Listec (1-4); Media Computing (1,3); Q-TV (1-4); Tekstil (1-4); Telescript (1)

3.E. TRANSPORTATION CASES

TYPES:

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

SUPPLIERS:

ABP (1-4); Anvil (1,3); Bal (1); Calzone (1,3,4); Comprehensive Video (1,3); Cool-Lux (1); Dyma (1,3,4); Emcor (3); Environmental Container (1,3); Excalibur (1-4); Fiberbilt (1,3); Hardigg (1,3); Innovative TV Equip. (1); Jensen (1); K&H (2); Kangaroo (2); Mobile-Cam (2); Mole-Richardson (1); O'Connor (1); Porta-Brace (2); Star Case (1,3); Telepak (2); Thermodyne (1,3); Viking (1,3,4)

3.F. SET DESIGN

TYPES:

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

SUPPLIERS:

Arben (1,2,4,5); BW Lighting (3,4); Fantasee (5); Fiorentino (4,5); Graphic Express (1-5); Grinnan (5); Grosh (2,3); Janson (3); Jem-Fab (1); Rosco (4); Syracuse Scenery (3); Theatre Service (2-4); Uni-Set (1,5)

3.G. STUDIO FURNITURE

SUPPLIERS:

ABP; Arrakis; Broadcast Systems; Comprehensive Video; Delcom; Graphic Express; Jem-Fab; Micro-Trak; Omnimount; Pacific Recorders; Radio Systems; Ram Bdcst.; Ruslang; Winsted

3.H. CABINETS

SUPPLIERS:

A&S Case; ABP; Amco; Brefford; Broadcast Systems; Comprehensive Video; Delcom; Emcor; Enclosure; Graphic Express; Grinnan; Jem-Fab; Micro-Trak; Mobile-Cam; Neumade; Optima; Pacific Recorders; Ram Bdcst.; Scientific-Atlanta; Soundolier; Stantron; Storeel; Wallach; Wilson; Winsted

3.I. STUDIO CONSOLES

SUPPLIERS:

A&S Case; Allied Broadcast; Arrakis; Broadcast Supply West; Dyma; Fidelipac; Micro-Trak; Neumade; Pacific Recorders; Plastic Reel; Ram Bdcst.; Ruslang; Stantron; Storeel; Wallach; Wilson; Winsted

3.J. EQUIPMENT RACKS

SUPPLIERS:

A&S Case; ABP; Avcom; Broadcast Systems; dbx; Delcom; Electronics Diversified; Emcor; Enclosure; Jem-Fab; Micro-Trak; Mobile-Cam; Optima; Pacific Recorders; Packaged Lighting; Plastic Reel; Ram Bdcst.; Roscor; Ruslang; Scientific-Atlanta; Soundolier; Spectra Sonics; Stantron; Viking; Wallach; Winsted

3.K. CART/TAPE STORAGE

SUPPLIERS:

A&S Case; Allied Broadcast; Arrakis; Broadcast Supply West; Dyma; Fidelipac; Micro-Trak; Neumade; Pacific Recorders; Plastic Reel; Ram Bdcst.; Ruslang; Stantron; Storeel; Wallach; Wilson; Winsted

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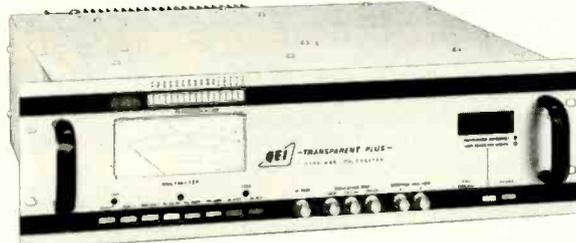
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4. TRANSMITTING/RECEIVING EQUIPMENT; SATELLITE SYSTEMS; ANTENNAS and TOWERS

4.A. TRANSMITTERS

TYPES:

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

SUPPLIERS:

AEG Bayly (1); Acrodyne (3-5,7); Broadcast Electronics (2); CSI (1,2); Comark (1-4); Continental (1,2); Continental Elec. (5); Elcom (1,2); Emcee (3-7); Harris Broadcast (1-4); ITS (4,6); Information Trans. (4-6); Intl. Teletronics (2); Itelco (2-5); Larcas (2,3,7); MCL (2-5); McMartin (1-4); Micro Controls (1,2); NEC America (2-4); Nautel (1); Pesa (5,7); Philips TV (2-4); QEI (2); Radio Sys. (1); Rohde & Schwarz/Polarad (1-4); Tepco (7); Thomson-LGT (2-5,7); Townsend (3-7)

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:

AEG Bayly (3); Acrodyne (4); Blonder-Tongue (8); Broadcast Electronics (2,3,5); Broadcast Microwave (6,7); CSI (5); Catel (5,8); Circuit Research (5); Coastcom (6); Comark (4,6-8); Continental (3,6); DX (8); Delta (2); Dielectric (6,7); Drake (8); Elcom (3,6,7); Harris Broadcast (1-5); ITS (4); Information Trans. (4); Inovonics (5); Intl. Microwave (6,8); Intl. Teletronics (3,5); Itelco (3-6,8); Javelin (8); Kahn (2); LNR (3); Larcas (3,4,6); Learning (5,6); M/A-Com Tele. (8); Magnavox (2); Marcom (5); McMartin (1,3,5,8); Micro Comm. (6,7); Modulation Assoc. (6-8); Modulation Sciences (5); Moseley (5); Motorola AM (2); Orban (5); Pesa (8); Philips TV (3,4); Power Pak (3,5); QEI (3,5); RF Specialty (6); Rohde & Schwarz/Polarad (3,4,8); Scientific-Atlanta (5,8); Shively (6,7); Singer (3,5); TFT (2); Tectan (6,7); Telemet (8); Thomson-LGT (3,4,6,7); Townsend (4-7); UHF (8); Universal Elecon (5,8); Vector (6); 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 (1,7); Acrodyne (1); Altronic (6); Andersen (5); Avcom (1); Bird (3,5-7); Blonder-Tongue (1,3-5); Broadcast Electronics (1); Broadcast Microwave (1,3,5); Calvert (1,2); Catel (1,4); Coaxial (6); Comark (1-7); Continental (6); DX (1,3,4); Dielectric (5-7); EEV (1,2); Econco (2); Electro Impulse (3,6); Harris Broadcast (1,6,7); ITT (7); Intl. Microwave (1,4,5,7); Itelco (1,4,5,7); Jampro (5); Kay Elemetrics (3,7); MCL (1,7); McMartin (1,5); Micro Comm. (5-7); Microwave Filter (5); Motorola C&E (1-3); Mu-Del (1,3-5); Power Pak (1); RCA New Prod. (1,2); RF Specialty (5-7); SWR (7); Shively (5-7); Temtron (2); Tepco (1,5); Thomson Tubes (2); Townsend (1,2,5-7); UHF (5); Universal Elecon (4); Vacuum Tube (2); Varian Microwave Equip. (2); Varian Microwave Tube (2); Varian/Eimac (1,2); Vector (6,7); Video Aids (1); Wavetek (3,6); Wide Band (1)

4.D. FIBEROPTIC SYSTEMS

SUPPLIERS:

Anritsu; Artel; Catel; GTE; Richard Hirschmann; Quante; RCA New Prod.; RE Instr.; Siecor; Telemet

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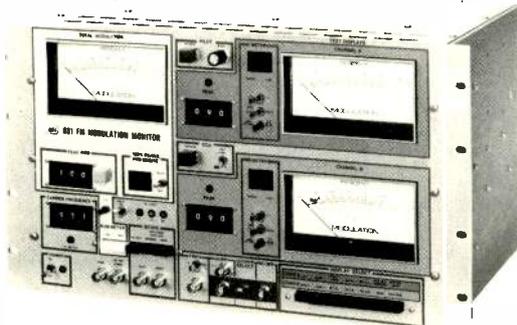
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4.E. SATELLITE SYSTEMS

TYPES:

- | | |
|-------------------------------------|-----------------------------------|
| (1) Transmit/receive earth stations | (5) LNAs |
| (2) Receive-only earth stations | (6) Encryption systems |
| (3) Transportable earth stations | (7) MAC systems |
| (4) Upconverters, downconverters | (8) Satellite network controllers |

SUPPLIERS:

Dahl; EEV; TTC

4.F. MICROWAVE SYSTEMS

TYPES:

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

SUPPLIERS:

Andrew (1,2,5); Broadcast Microwave (1-4); Comark (1); DX (5); Electrohome (5); E-N-G (6); GTE (1); Harris Broadcast (1-5); Harris Broadcast Microwave (1-4); Ikegami (2); Intl. Microwave (1-4); Itelco (2); M/A-Com MAC (1-4); Marti (1-4); Motorola C&E (1); NEC America (2); Nurad (1-4); Osborne (6); RF Tech. (1-4); Raycom (1,2); Scientific-Atlanta (5); TFT (1); TMD (6); Wegener (1)

4.G. ANTENNAS

TYPES:

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

SUPPLIERS:

Alford (2,3); Andrew (3-5); Avcom (5); Blonder-Tongue (3); Bogner (3-5); Cablewave (2,5); Celwave (5); Comark (2-4,6); Continental (2); DX (5); Dielectric (1-4); Dyma (2); Elcom (6); Gabriel (5); Harris Broadcast (2-4); Harris Satellite (5); Intl. Microwave (5); Itelco (2); Jampro (2-4); Larcam (2-4); LeBlanc & Dick (1-4); Mark (5); Marti (5); Micro Comm. (2-5); Motorola C&E (5); Old Dominion (6); RF Specialty (6); Radiation Sys. (5); SWR (2-4,6); Shively (2-6); Tennaplex (2,3); Thomson-LGT (2-4); Townsend (3,4); Vector (6)

4.H. TRANSMISSION LINE

TYPES:

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

SUPPLIERS:

Alpha Wire (2,3); Andrew (1-3,5); Avcom (4,5); Bird (5); Cablewave (1-3,5); Celwave (2-5); Coaxial (5); Comark (3-5); Dielectric (1,3-5); Dyma (1-3); Gabriel (1-3); LeBlanc & Dick (1); Mark (2,3,5); Marti (2,3,5); Micro Comm. (4,5); Motorola C&E (1-3); Pinzone (1-4); RF Specialty (4,5); SWR (1); Scientific-Atlanta (1-5); Shively (1,3-5); Thomson-LGT (4); Times Fiber (1-3); Townsend (1-5); Trompeter (3,5)

4.I. TOWERS

TYPES:

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

SUPPLIERS:

Allied Tower (1-3); Andrew (1-3); Comark (1-3); EG&G (3); Express (1); Flash (3); Hughey (3); Kline (1); L&R (1,2); LeBlanc & Dick (1-3); Magnum (1-3); Microlect (1-3); Moore (1-3); Motorola C&E (1); N-Pro (1); Nudd (1-3); RF Specialty (3); Rohn (1-3); Stainless (1); Swager (1-3); Transmission Structures (1-3); Tri-Ex (1-3); United Rope. (2); Utility (1-3); World Tower (1)

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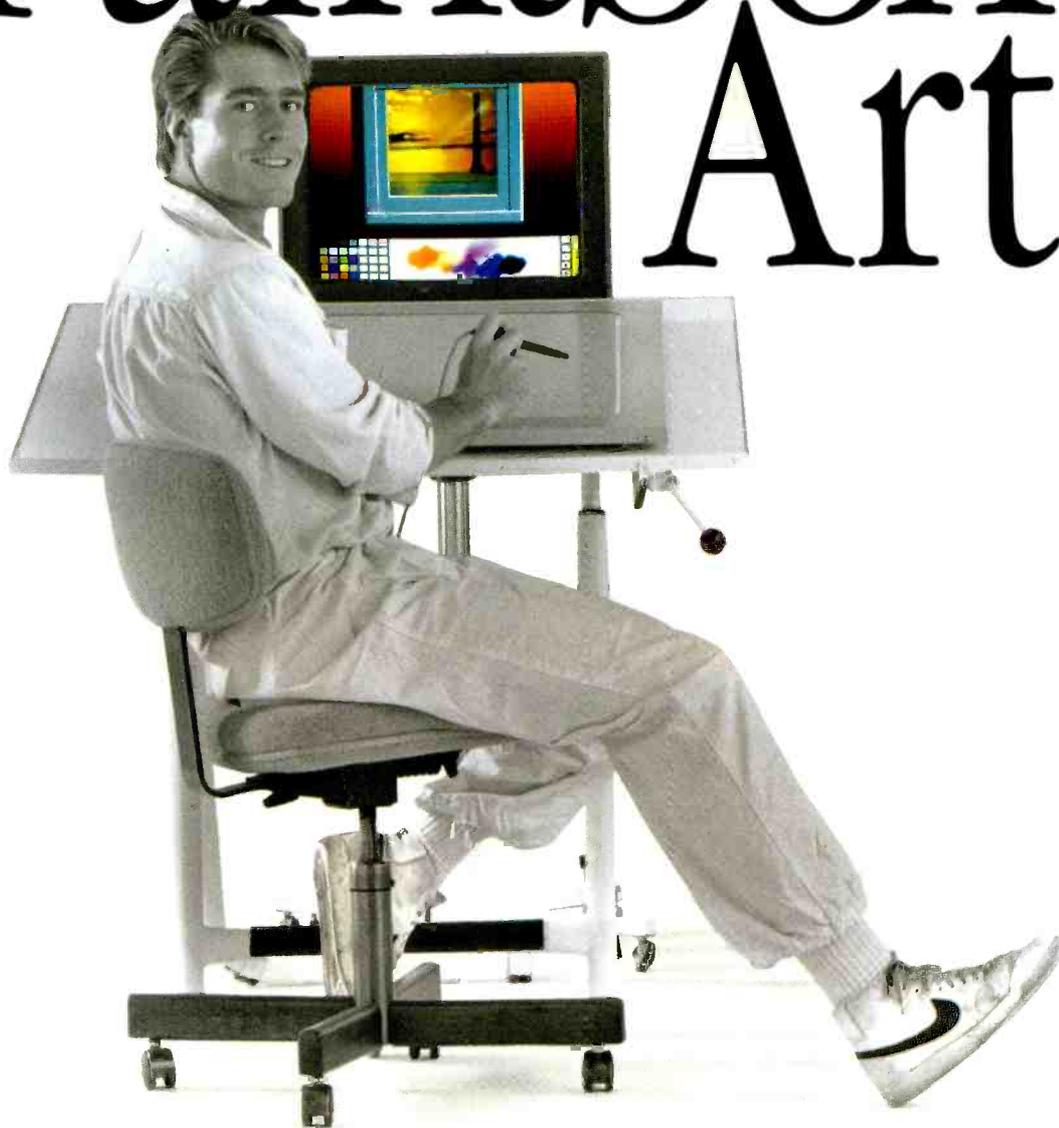
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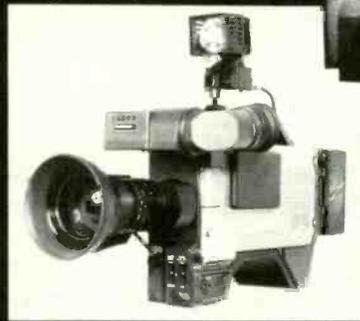
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THE PROBLEMS...

1. Spare bulbs break in their cardboard boxes or while being installed.
2. The best shot of the day can be lost in the time it takes to replace a burned out bulb.
3. The practice of using all-purpose high wattage bulbs greatly reduces battery run time and in most cases burns out the subject leaving a dark and murky background.

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4.J. TRANSMITTER REMOTE CONTROL SYSTEMS

SUPPLIERS:

Advanced Micro-Dynamics; Cat; Coastcom; Comark; Delta; Gentner Engineering; Gentner RF; Intl. Teletronics; Marti; Micro Controls; Monroe; Moseley; Nurad; Old Dominion; Potomac; Rohde & Schwarz/Polarad; Soll; TFT; Townsend

4.K. STLS, TSLS

SUPPLIERS:

Andrew; Broadcast Microwave; Comark; dbx; GTE; Harris Broadcast Microwave; Marti; Micro Controls; Moseley; Motorola C&E; Nurad; TFT; Townsend; Wegener

4.L. SCA EQUIPMENT

TYPES:

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

SUPPLIERS:

AEG Bayly (1); American Diversified (1); Broadcast Electronics (1,3); Circuit Research (1); Emergency (1); Intl. Microwave (1,2); Intl. Teletronics (1); Iteico (1); Kahn (2); Marti (1,3); Micro Controls (1); Modulation Sciences (1,3); Moseley (1); Orban (3); Philips TV (1); Radio Sys. (1); Reach (1,4); Singer (1,2); TFT (1-3)

4.M. SLOW-SCAN TRANSMITTERS/RECEIVERS

SUPPLIERS:

NEC America;

4.N. TWO-WAY RADIO COMMUNICATIONS

SUPPLIERS:

Clark; Intl. Microwave; Marti; Motorola C&E; Swintek; Wavetek

4.O. REMOTE PICKUP EQUIPMENT

SUPPLIERS:

Marti; Moseley; Motorola C&E; Nurad; Old Dominion; Swintek

4.P. OTHER RF EQUIPMENT

SUPPLIERS:

AEG Bayly; Bally; Broadcast Electronics; Conifer; Continental; Emcee; Enterprise; Harris Satellite; Hipotronics; ITS; Innovative TV; Kavouras; Marti; Microlect; Moseley; Motorola C&E; RF Specialty; Register; Shively; Teletech; Universal Elecon; Varian Microwave Tube; Vector; Wavetek

5. TEST & MEASUREMENT, LOGGING, TIMING

5.A. AUDIO T&M

TYPES:

(1) Audio test signal generators	(5) Real-time analyzers
(2) Harmonic distortion meters	(6) Wow & flutter meters
(3) IM meters	(7) MTS test equipment
(4) Spectrum analyzers	(8) Other audio T&M equipment

SUPPLIERS:

ACO (8); Amber (1-4); Anritsu (4,8); Arus (8); Asaca (1,2); Audio Precision (1-3,6); Avcom (4); B&K (6,7); Boonton (1,2); Bruel & Kjaer (1-6); Cetec Ivie (1,4,5); Comprehensive Video (6); Crown (4); Eventide (4); Gotham (6); HM Elec. (8); Hewlett Packard (1,2); ISS (4); Jasoni (1,8); Kay (1,4,5); Kintek (8); Klark-Teknik (5); Leader (1,2,6,7); MEI (1); Marconi (4); Modular Audio (1); NEI (5); Panasonic (1), Potomac (1-6); RE Instruments (7,8); Ram (8); Roh (1,7); Rohde & Schwarz/Polarad (4); Sencore (1); Shure (1); Sound Technology (1-4,6-8); TFT (7); Technocal Projects (1-3,6); Techtron (1,4); Tektronix (1,2,4,7); Telemet (4); Universal Elecon (1,7); Ward-Beck (1); White (5)

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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:

AF Assoc. (5); Anritsu (1,2,7,9-11); Asaca (1,9,10); B&K (1-3); Broadcast Video Sys. (2-4); Comprehensive Video (2,3); Data Precision (2); Grass Valley (8); Harris Bdcst. Microwave (11); Leader (1-3); Leitch (1,8,11); Lenco (1,8,9); Magni (1-4,6-8,11); Marconi (1,11); Minolta (11); Multidyne (1); NTI (1); Newton (1); Norpak (11); Optical Disc (1); Panasonic (1); Pesa (6,8); Philips T&M (1-3,10); Porta-Pattern (11); Real World (5); Research Tech. Intl. (11); Rohde & Schwarz/Polarad (1,2,7,9,10); Scientific-Atlanta (1); Sencore (1); Sigma (1); Tektronix (1-6); Telemet (1,7); Temtron (1-3,6); Videotek (2,3); Visual Info. Inst. (1); Wavetek (1); World Video (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 (4,6,8-10,12); Avcom (9); B&K (9); Belar (1,2,8); Bird (4,6-8,12); Boonton (2,6,7,9,10); Bruel & Kjaer (11); Coaxial Dynamics (6,8); Comark (1-11); Continental (1); Delta (2,3,6,8-10,12); Digimax (8); Electro Impulse (6,7); Fluke (8,9); Gorman-Redlich (3,11); Hewlett Packard (1,2,9); Itelco (9); Kay (9); Leader (4,8-10); Marcom (1,2); Marconi (9); McMartin (2,4); Modulation Sciences (1); Motorola AM (2); Newton (1,9); Nurad (1,3); Philips T&M (1,9); Potomac (1,3,4,9,12); QEI (2); RE Instruments (9); Rohde & Schwarz/Polarad (1,2,4-6,9,10); Sadelco (12); Sencore (4,10); Sennheiser (10); Systron (8); TFT (2,8,12); Tektronix (1,2); Telemet (1,5); Video Aids (11); Videotek (1); Wide Band (10); Wiltron (9,10,12)

5.D. GENERAL T&M

TYPES:

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

SUPPLIERS:

Amber (5); Anritsu (6); Audio Tech. (5); B&K (1-4); Boonton (3); Bruel & Kjaer (3); Comark (1,2); Comprehensive Video (1,3,4); Data Precision (3,4); Fluke (3-5); Hipotronics (3,7); Jasoni (7); Leader (1-5); Marconi (3); Panasonic (1,6); Philips T&M (1,6); Rohde & Schwarz/Polarad (1,3,4,6); Sadelco (7); Sencore (1,4,5); Tektronix (1-7); Wavetek (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 |

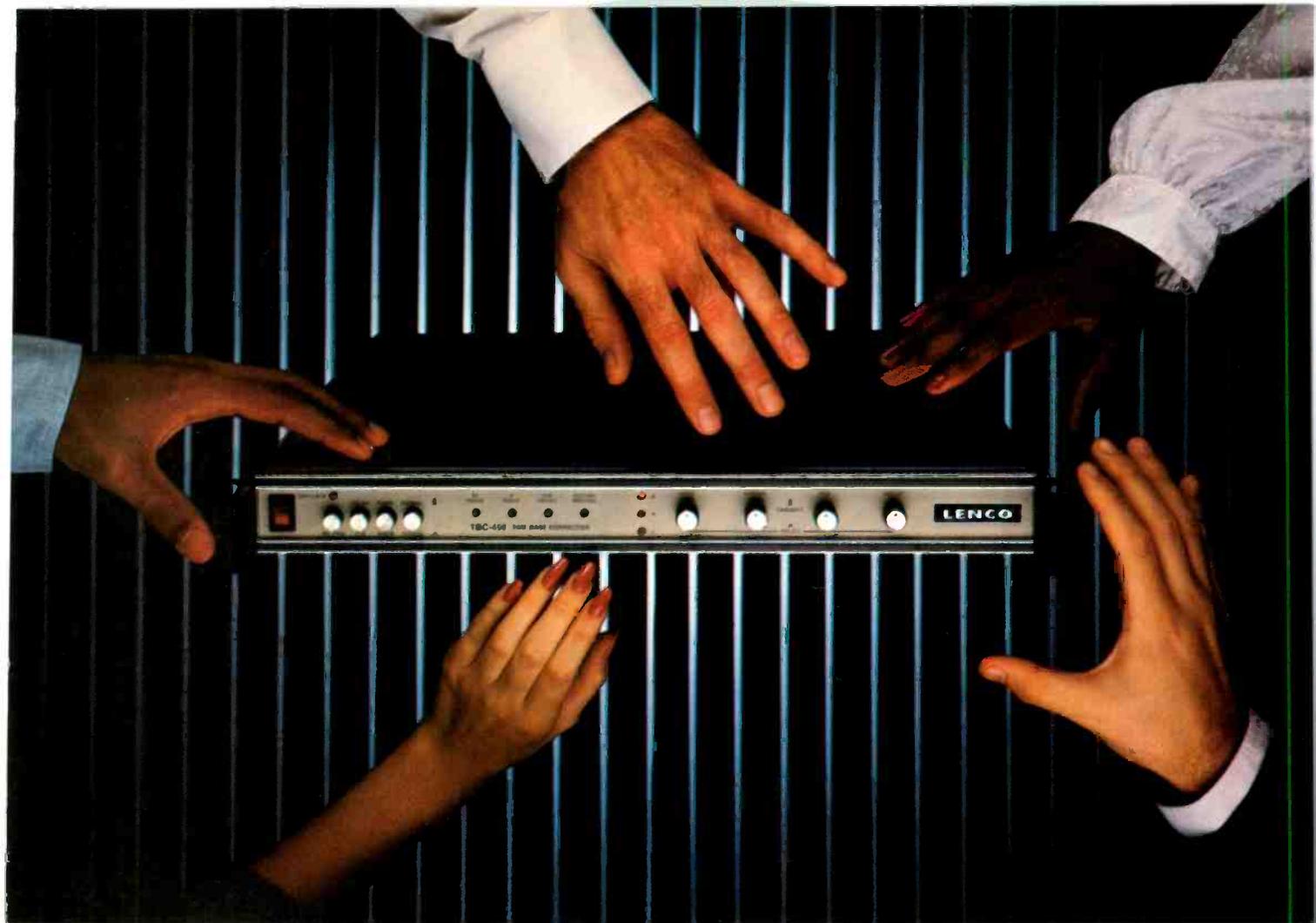
SUPPLIERS:

Cat (2,6); Dictaphone (1); Hallikainen (2,4,6); Magnasync (1); Minneapolis Magnetics (1,3,5,6); Rohde & Schwarz/Polarad (4-6); Tandberg (1); Telectro (1); Telex (1).

5.F. CLOCKS, TIMING

TYPES:

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



NO COMPROMISE

**When you reach for Lenco's 400 Series Digital TBC
you don't have to trade quality
for a competitive price.**

The new Lenco 400 Series TBC. It sets new standards of quality and dependability in time base correction for Heterodyne VTRs. At a price far below what you'd expect to pay for a TBC with a fraction of the 400 Series' features.

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Circle 125 on Reader Service Card

How to keep your mixing board from holding you back.

Today's technological revolution is a battle fought on two fronts: quality and cost. Recent advances in recording equipment let you do more than you ever could before — And for less money. But what about your mixing console? Can it keep pace with recent giant steps such as the significant advances in the quality of analog and digital recording equipment? Without sacrificing your budget?



Program Mix Control

If you're mixing on a RAMSA WR-T800 series console, the answer is yes. RAMSA's 8-buss consoles are a smart choice for 8 or 16-track recording. They offer the *quality* you need to bring your recording chain up to today's demanding specs.

RAMSA's T-Series consoles save you time, too. Each input channel simultaneously accepts Mic, Line and Tape signals. A time-saving feature, the Program Mix

control and stereo Solo switches let you choose the signal source you want without re-patching. So you get from basic tracks to final mix in record time.

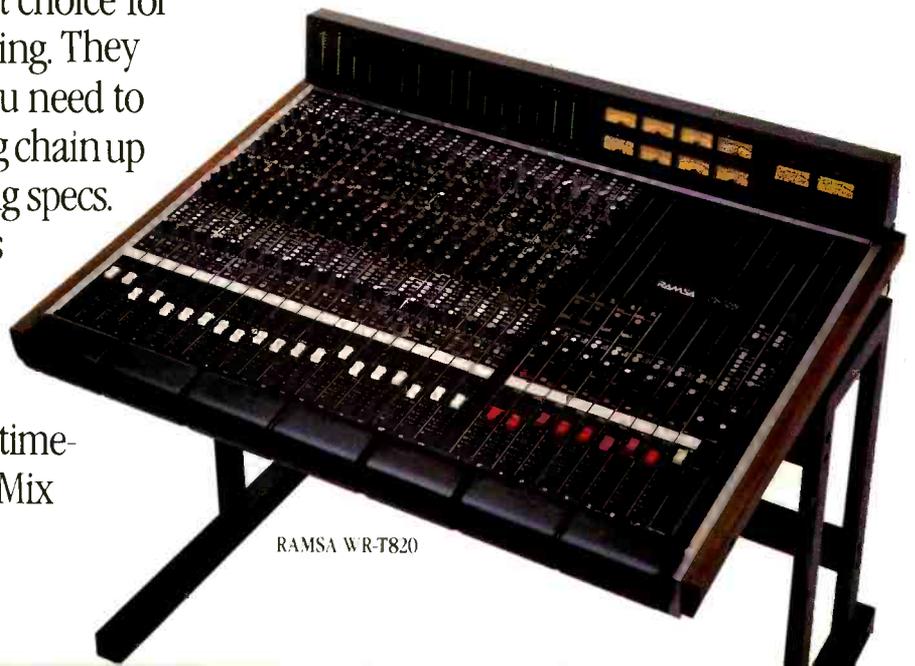
Because with the RAMSA T-Series, you get a mixing board that does much more for less without holding anything back.



Pushbutton Input Selection

RAMSA

Panasonic
Industrial Company
Circle 126 on Reader Service Card



RAMSA WR-T820

SUPPLIERS:

Autogram (1,2); Beaveronics (3); Broadcast Aids (1,2); Channelmatic (1); Chrono-Log (1-3); ESE (1-3); Evertz (1-3); Kinometrics (1,3); Leitch (1,3); Logitek (2); Mallory (2); NES (1,2); Old Dominion (2); Pacific Recorders (1,2); Radio Systems (2); Sansui (1,2); Torpey (1-3)

5.G. OTHER T&M, LOGGING, TIMING EQUIPMENT**SUPPLIERS:**

Chrono-Log; Hallikainen; Marconi; Potomac; Sprague; Torpey

6. 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 Telecomm. (5); AF Assoc. (5); AMP Special (4); Alpha Wire (1-5); Anton/Bauer (2-4); Audio Accessories (5); BIW (1-4); BR Intec (1-4); Belden (1,2,4); Calvert (1,2); Canare (1,2,4,5); Chester Cable (1,2); Choice (5); Comprehensive Video (1,2,4); Connect-Air (2,4); Connectronics (1,2,5); Daburn (1-4); Dynatech (5); Farrtronics (5); Gentner Engineering (5); Gotham (1); Hudson (1,2); Image Video (5); Kings Elec. (4,5); Lemo (4,5); Olesen (3,4); Pacific Recorders (5); Perrott (3,4); Roh (1,5); Switchcraft (1,2,4,5); TVI (3,5); Tandberg (1); Tascam (1,2,5); Times Fiber (2); Trompeter (2,4,5); Union Connector (3-5)

6.B. TOOLS**SUPPLIERS:**

Comprehensive Video

6.C. VACUUM TUBES**SUPPLIERS:**

Ceco Comm.; EEV; Freeland; Thomson Tubes; Vacuum Tube; Varian/Eimac; Westinghouse

6.D. SOLID STATE COMPONENTS**SUPPLIERS:**

Frequency Devices; International Microwave

6.E. RECTIFIERS**SUPPLIERS:**

Dahl; EEV; TTC

6.F. CAPACITORS**SUPPLIERS:**

EEV; ITT; Inmark; Panasonic; Surcom; Vector

6.G. TRANSFORMERS**SUPPLIERS:**

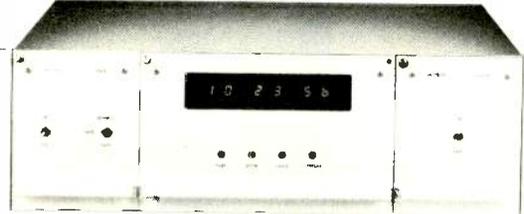
Dahl; ESC; Eddor; Hipotronics; Jensen; Microtran; Protech; Soundolier; Superior; TTE

6.H. SURGE PROTECTORS**SUPPLIERS:**

Control Concepts; Dahl; EEV; LEA Dynatech; Lightning Elimination; MCG; Superior; TTC

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6.I. HUM BUCKING COILS

SUPPLIERS:

ADC Telecomm.; Allen Avionics; Audio-Video Engineering; Broadcast Video Sys.; Edcor

6.J. QUARTZ CRYSTALS

SUPPLIERS:

Eidson; Marti; Perrott

6.K. OTHER COMPONENTS, HARDWARE

SUPPLIERS:

ADC Telecomm.; EEV; International Microwave; Iteico; Perrott; Selco; Sprague; Superior; Surcom; Torpey; Varian/Eimac

7. SERVICES

7.A. VIDEO PRODUCTION FACILITIES (STAGE/STUDIO RENTAL)

SUPPLIERS:

Action Video; Airfax; American Video; Arben; Atlantic Video; Burbank Studios; Captured Live; Carleton; Ceco Intl.; Center City; Century III; Communications Altatec; Creative Tech.; Creative Video; Devlin; Digital Video Prod.; ESPN; Eagle; Editel; Editel/NY; Fax; Film & Video Assoc.; FitzCo; GBH Prod.; Golden Apple; Golden Gate Prod.; Grace & Wild; HBO; Houston Intl.; Image Devices; Interface Vid.; Intl. Production Ctr.; KQED; KVIE; Kluge; LRP; Louisville; MPCS; Manhattan Transfer; Matrix Video; Mobile Video Svcs.; Modern Telecomm.; National Vid. Centery; National Video Ind.; Netcom; Northwest Teleprod.; One Pass; Opryland; Pacific Coast; Pacific Video; Palmer; Polycom; Production Masters; Pyramid; Reeves; Scene Three; Skaggs; Solid Elec.; Starfax; Sullivan Assoc.; Sundance; TPC Comm.; TVC; Tektronix; Tele-Image; Telemation Prod.; Television Assoc.; Third Coast; Today Video; Trans-American; Unitel; VCA; Vidcom; Video Planning; Video Post; Video West; VideoWorks; Visnews; WGN; WPHL; WXXI; Washburn; Windsor; Yes Prod.

7.B. MOBILE PRODUCTION FACILITIES RENTAL

SUPPLIERS:

Airfax; All Mobile; Arben; Atlantic Video; Bay Area; CCR Video; Captured Live; Carleton; Center City; Communications Altatec; Compact Video; Creative Tech.; Creative Video; Crowe Prod.; Devlin; Digital Video Corp.; Digital Video Prod.; ESPN; Editel/NY; Fax; Film & Video Assoc.; FitzCo; GBH Prod.; Grace & Wild; Image Devices; Interface Vid.; KQED; KVIE; LRP; Louisville; Manhattan Transfer; Matrix Video; Medallion; Mobile Video Svcs.; Modern Telecomm.; National Vid. Centery; National Video Ind.; Northeast Prod.; Northwest Teleprod.; One Pass; Opryland; Optimus; Pacific Video; Palmer; Polycom; Production Masters; Reeves; Scene Three; Skaggs; Solid Elec.; Southwest Teleprod.; Starfax; Sullivan Assoc.; Sundance; TBS Field Ops; TPC Comm.; Tele-Image; Telemation Prod.; Television Assoc.; Third Coast; Unitel; VCA; Varitel; Vidcom; Video Planning; Video West; WGN; WPHL; WXXI; Windsor; Yes Prod.

7.C. VIDEO POST-PRODUCTION FACILITIES

SUPPLIERS:

Action Video; Airfax; Allied—WBS; Atlantic Video; Broadway Video; CCR Video; Captured Live; Carleton; Carob; Center City; Century III; Color Film; Columbia A/V; Communications Altatec; Compact Video; Creative Tech.; Creative Video; Devlin; Digital Video Corp.; Digital Video Prod.; Du Art; ESPN; Eagle; Editel; Editel/NY; Empire Video; Fax; FitzCo; GBH Prod.; Golden Apple; Golden Gate Prod.; Grace & Wild; HBO; Horizontal Editing; Hudson A/V; Image Devices; Image Transform; Intercontinental; Interface Vid.; Intl. Production Ctr.; JSL; KQED; KVIE; Kluge; LRP; Louisville; MPCS; Manhattan Transfer; Matrix Video; Media Concepts; Mobile Video Svcs.; Modern Telecomm.; National Vid. Centery; National Video Ind.; Nexus; Northeast Prod.; Northwest Teleprod.; One Pass; Opryland; Optimus; Pacific Coast; Polycom; Posi-

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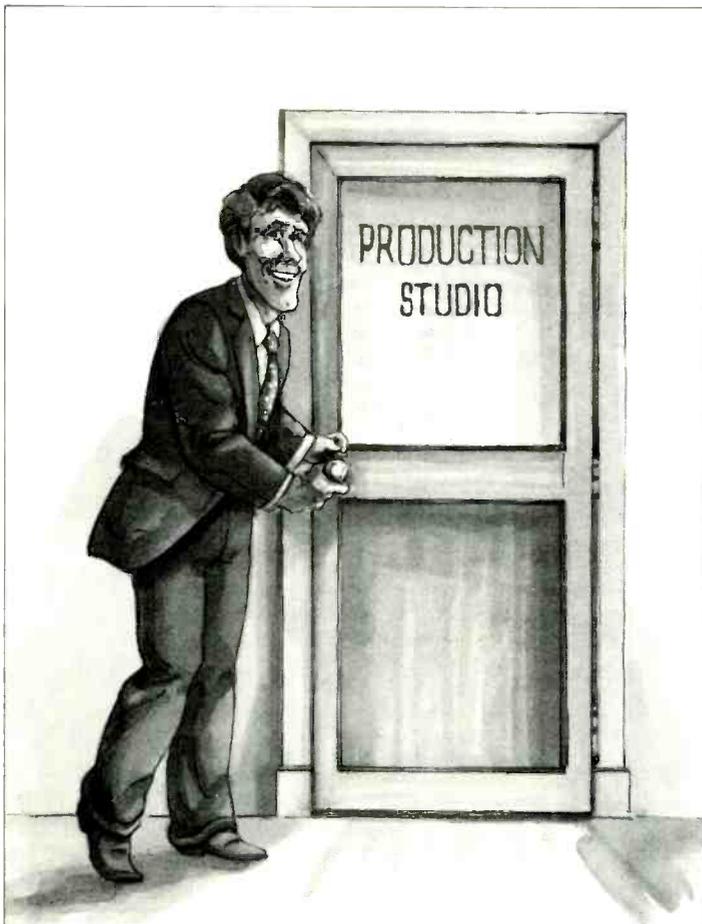
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7.D. RECORDING STUDIOS

SUPPLIERS:

Allied—WBS; Alpha Audio; American Image; Carleton; Century 21; Continental Record.; Cromwell; Devlin; FitzCo; Golden Apple; Interface Vid.; Kluge; MPCS; MixMasters; National Vid. Centery; Omnimusic; One Pass; Peters; Polycorn; Production Masters; Scene Three; Sullivan Assoc.; Unitel; Windsor

7.E. AUDIO POST-PRODUCTION FACILITIES

SUPPLIERS:

Allied—WBS; Alpha Audio; American Image; CCR Video; Compact Video; Continental Record.; Creative Tech.; Devlin; Du Art; Editel; FitzCo; GBH Prod.; Golden Apple; Horizontal Editing; Interface Vid.; Kluge; MPCS; McCurdy; MixMasters; National Video Ind.; Peters; Production Masters; Starfax; TVC; VCA; Vidcom; Windsor; Yes Prod

7.F. EQUIPMENT RENTAL SERVICES

SUPPLIERS:

A/T Scharff; Action Video; Aerial Video; All Mobile; Arben; Birns & Sawyer; Black's; Broadcast Systems; Camera Mart; Carleton; Ceco Intl.; Columbia A/V; Communications Altatec; Creative Video; Digital Video Corp.; ENG Heli.; Eagle; Elicon; Film & Video Assoc.; FitzCo; General TV Net.; Glentronix; Gordon Enterprises; Green Broadcast; Houston Intl.; Hudson A/V; Image Devices; Intercontinental; Interface Vid.; KVIE; L. Matthew Miller; Laumic; Leasametric; MPCS; MZB; Manhattan Transfer; Marcus Sat.; Media Concepts; Midwest; Netcom; One Pass; Performance; Polycorn; Production Masters; Roscor; Solid Elec.; Starfax; Sullivan Assoc.; Swiderski; TVI; Telemation Prod.; Television Assoc.; Terminal Sys.; Tyler Camera; Victor Duncan; Vidcom; Video Hi-Tech; Videomedia; Windsor

7.G. FACILITIES DESIGN AND ENGINEERING SERVICES

SUPPLIERS:

Acoustic Sys.; Arben; Atlantic Video; Broadcast Systems; Carleton; Centro; Chips Davis; Creative Tech.; Delcom; Devlin; Dyma; East Coast Vid.; Editel; Fiorentino; GBH Prod.; Golden Apple; MZB; Pacific Recorders; Performance; Radio Systems; Radiotechniques; Sullivan Assoc.; Syracuse; TVI; Windsor

7.H. SET/STUDIO DESIGN SERVICES

SUPPLIERS:

Acoustic Sys.; Arben; Atlantic Video; Broadcast Systems; Carleton; Centro; Chips Davis; Creative Tech.; Delcom; Devlin; Dyma; East Coast Vid.; Editel; Fiorentino; GBH Prod.; Golden Apple; MZB; Pacific Recorders; Performance; Radio Systems; Radiotechniques; Sullivan Assoc.; Syracuse; TVI Windsor

7.I. ENGINEERING CONSULTANTS

SUPPLIERS:

A.F. Assoc.; AT&T Comm.; Antenna Tech.; Atlantic Research; Black's; Bowen; Broadcast Systems; Cat; Centro; Channelmatic; Chips Davis; Dalsat; Delcom; Dyma; East Coast Vid.; Electric Works; Fiorentino; FitzCo; General TV Net.; Golden Apple; Gray Comm.; Grinnan; Houston Intl.; Jem-Fab; L. Matthew Miller; Lake Sys.; Lightning Elim.; Lines Video; MPCS; MZB; McManus; Micro Comm.; Netcom; Nissen; Norpak; Old Dominion; Pacific Recorders; Peirce-Phelps; Performance; Radiotechniques; Roscor; Rosner; SWR; Satellite Consult.; Schiller Assoc.; Soll; Sound Genesis; Spectrum Plan.; Sullivan Assoc.; Swiderski; Teletech; Turner Eng.; VCA; Video Hi-Tech; Video Post; Windsor

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A detailed view of the Ikegami HK-322 broadcast studio camera system. The camera is mounted on a tripod and features a large, silver Canon P18x15B IE lens assembly. The camera body is white with a red top section. The background is a dark, starry space scene with a bright red starburst effect in the upper center.

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Randy Orbaker, WNYR, Rochester, NY

Loud and solid but *very* smooth—doing a great job!

Gary Smith, KWEB, Rochester, MN

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Tom Snyder, WKSH, Pewaukee, WI

Sounds great; superior support services.

Lee McCormick, KGW, Portland, OR

Orban is the most sensible choice for a demanding classical format. I've used the 9100A OPTIMOD-AM since WQXR-AM went AM Stereo—listeners and engineers alike prove this to be one of the best choices a station can make. Some listeners even say they would rather listen to the AM Stereo than to the FM.

Zaven "Doc" Masoomian, WQXR, New York, NY

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Marvin Fiedler, KCOR, San Antonio, TX

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Jim Phillips, KLOK, San Jose, CA

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Ron Simpson, WTTM, Trenton, NJ

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Ed Anglin, WGCR, Brevard, NC



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7.J. FINANCIAL CONSULTANTS

SUPPLIERS:

ABP Sys.; Broadcast Systems; Chips Davis; Cromwell; MZB; Sussex

7.K. EARTH STATION SITE SELECTION

SUPPLIERS:

Antenna Tech.; Broadcast Systems; Dalsat; Ethereum; Houston Intl.; Marcus Sat.; New England Sat.; Polycorn; Radiotechniques; Rosner; Satellite Consult.; Spectrum Plan.; Videostar

7.L. MOBILE VEHICLE CONSTRUCTION

SUPPLIERS:

Airfax; All Mobile; Arben; Atlantic Video; Bay Area; CCR Video; Captured Live; Carleton; Center City; Communications Altatec; Compact Video; Creative Tech.; Creative Video; Crowe Prod.; Devlin; Digital Video Corp.; Digital Video Prod.; ESPN; Editel/NY; Fax; Film & Video Assoc.; FitzCo; GBH Prod.; Grace & Wild; Image Devices; Interface Vid.; KQED; KVIE; LRP; Louisville; Manhattan Transfer; Matrix Video; Medallion; Mobile Video Svcs.; Modern Telecomm.; National Vid. Centery; National Video Ind.; Northeast Prod.; Northwest Teleprod.; One Pass; Opryland; Optimus; Pacific Video; Palmer; Polycorn; Production Masters; Reeves; Scene Three; Skaggs; Solid Elec.; Southwest Teleprod.; Startax; Sullivan Assoc.; Sundance; TBS Field Ops; TPC Comm.; Tele-Image; Telemation Prod.; Television Assoc.; Third Coast; Unitel; VCA; Varitel; Vidcom; Video Planning; Video West; WGN; WPHL; WXXI; Windsor; Yes Prod.

7.M. SATELLITE TIME BROKERS/SERVICES

SUPPLIERS:

Bonneville Satellite; Comsat; Conus; Ethereum; Houston Intl.; Netcom; Satelelease; Satellite Consult.; Videostar

7.N. MUSIC LIBRARIES

SUPPLIERS:

Action Video; American Image; Associated Prod. Music; Carleton; Century 21; De Wolfe; Firstcom; Interface Vid.; Jam; Kalamusic; Kluge; Media General; Music Director; Musicworks; National Vid. Centery; Network Prod.; Omnimusic; Otis Conner; Palmer; Production Masters; RPM; Soper; Tanner; Valentino; Windsor

7.O. VIDEO/FILM STOCK SHOT LIBRARY

SUPPLIERS:

Action Video; Carleton; Golden Gate Prod.; Interface Vid.; Picture Mgmt.; Rosebush; Sullivan Assoc.

7.P. SYNDICATED RADIO PROGRAMMING

SUPPLIERS:

Associated Press; BPI; Bonneville Bdcst.; Broadcast Music; Century 21; Concept Prod.; Firstcom; Houston Intl.; Kalamusic; Media General; Music Director; Musicworks; Otis Conner; Peters; RPM; Radio Arts; Real Radio; Satellite Music; United Press I.

7.Q. OTHER SERVICES

SUPPLIERS:

Accu-Weather; Airfax; Allied Film & Video; Allied—WBS; Associated Press; Audio Plus Video; Bonneville Satellite; Bowen; Broadcast Cartridge; Calico Video; Carleton; Cat; Ceco; Ceco Comm.; Century 21; Color Film; Columbia AV; Compact Video; Continental Record.; Conus; Creative Tech.; Cromwell; Dataworld; Delcom; Devlin; Digital Video Corp.; Diner—Allied; Drake-Chenault; DuArt; Dyma; Emcee; Film & Video Assoc.; Fiorentino; Hudson AV; Image Transform; Intercontinental; Interface Vid.; Intl. Production Ctr.; JRF; Jam; Janson; Jem-Fab; Kluge; LRP; Louisville; Marcus Sat.; Maxima; Media Concepts; National Vid. Centery; National Video Svce.; Netcom; Network Prod.; New England Sat.; Norpak; Northeast Prod.; Pacific Video; Palmer; Peirce-Phelps; Polycorn; Production Masters; RCA Americom; RJW; Rosebush; Sadelco; Satelelease; Satellite Consult.; Sea-Cam; Solid Elec.; Soll; Sprague; Starfax; Sussex; TVC; Teleprompters Are; Video Tape; Videostar; Visnews; WSI; Washburn

A BROADCAST OPERATIONS SECRET YOUR HARDWARE HASN'T TOLD YOU:

It's ready and able to be automated, now...
if it has channels that can write and read
SMPTE/EBU time code, or even if it's only
remote-controllable via GPI commands. You
simply integrate it into a customized LA-KART
Broadcast Automation System.

LA-KART Systems are different... assembled
from broadcast-standard hardware, and
run by field-proven "AI" software developed
for Adaptive Interactive control of on-air
operations. And both software and hardware
are adaptable and expandable to meet your
future operations needs. Add your choice of
new CAV and digital video and audio cassette
tape and disk formats only when you're ready.
The biggest expense to equip your station for
automated operation is already behind you.

Now's the time to finish the job; call on
LA-KART to run it.

So now you know your hardware's secret:

IT'S ALREADY READY FOR AUTOMATING.

LA-KART

The Adaptive Interactive Automation Solution

LAKE

The Systems Company

55 Chapel Street, Newton, MA 02160 (617) 244-6881

Relax! We didn't meddle with a great format. But now that Ampex is delivering Beta-cam,[™] you get a lot of things that make this great format even better, and your job a lot easier.

Our field service people will solve your problems *fast* wherever you are in the world. Reach us in the U.S.

via our technical support hotline.

Our spare parts operation makes sure you get the right parts for your needs, and will advise you of any upgrades available.

Besides parts and fast service, Ampex offers pre-packaged repair kits. These simplify maintenance, insure peak performance,

and reduce down-time. You can get kits and parts from 14 regional warehouses designed as a worldwide network, close to you wherever you are.

And if you need help in the training department, classes are taught by experienced Ampex instructors at reasonable rates.

It also is comforting to

Ampex gives you



know that when one of those real tough problems that crop up now and then comes along, you can reach right into the heart of Ampex and talk to our product specialists and product managers.

So look into *our* line of CCD and tube-type camcorders, portable recorders/players, and studio editing

VTRs. Because now you've got the best of both worlds—a reliable format that makes quality pictures, and a supplier who has a reputation for customer service and product support second-to-none. And while you're looking, you'll want to check on our complete line of NEWS-oriented products, like graphics systems, editors, ADO opti-

cal effects, "C" format recorders, and a full line of production switchers.

Ampex International
Europe, Africa & Middle East
Reading, England
(0734) 875200 Telex 847611
Americas & Far East
Redwood City, CA, USA
(415) 367-2688 Telex 348464

AMPEX

Circle 134 on Reader Service Card



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Betacam is a registered trademark of Sony Corporation

The Abekas A53-D Digital Special Effects System

The innovative tradition of Abekas continues with the A53-D—the most cost-effective, high-quality three-dimensional effects system available today.

In single or dual channel configuration, the A53-D gives you a full array of three-dimensional features. These include: perspective and 3D rotation, variable rotation axes and 3D locate, field/frame freeze and full manipulation of frozen pictures, variable border and background, crop and aspect change, A/B switch-

ing and GPI control, and smooth linear motion and trajectory with variable tension.

The A53-D makes good sense for both live broadcast and post-production applications. For broadcasting, the A53-D offers a simple-to-use control panel with fast access to 24 on-line effects. For post-production, the system's extensive programming features and precise control let you create intricate effects limited only by your imagination.

You can digitally interface the A53-D to the highly acclaimed Abekas A62 digital disk recorder.

This unique duo gives you the ability to composite unlimited layers of manipulated video without generation loss.

Let the A53-D add a whole new dimension to your bottom line, with unmatched price and performance. For details, contact: Abekas Video Systems, Inc., 353A Vintage Park Drive, Foster City, CA 94404 (415) 571-1711.

Abekas

Video Systems, Inc.

Now Anything is Possible

Circle 135 on Reader Service Card

ADD NEW DIMENSION TO YOUR BOTTOM LINE



ALPHABETICAL LISTING OF MANUFACTURERS

b MEANS
IT'S VERIFIED

ABEKAS VIDEO SYSTEMS **b**

353A Vintage Park Dr., Foster City, CA 94404

415 571-1711

Digital still stores; digital efx generators; digital video disk recorder.

Field Offices:

CA, Mark Pinkel, 17435 Sarita Ave., Canyon Country 91351 805 251-6626

NY Art Shifrin, 73-42 192 St., Fresh Meadows 11366 718 465-0800

See ad on pg. 52.

Circle No. 135.

ABP SYSTEMS

400 Roosevelt Ave., Freeport, NY 11520
516 546-4985

Transportation cases: foam insert, padded nylon, rack configuration. Editing/production consoles. Studio furniture, cabinets; studio consoles; equipment racks. Custom machine work. Facilities design and engineering services; mobile vehicle construction; financial consultants. Telecine control systems. Parallel interface video routing switchers.

ACCURATE SOUND CORP. **b**

3515 Edison Way, Menlo Park, CA 94025
415 365-2843

Audio tape duplicators. Mic booms, dollies. Tape-based loggers.

ACCU-WEATHER **b**

619 W. College Ave., State College, PA 16801

814 234-9601

Weather forecasting services for radio and television; weather graphics displays for television; Accu-Data weather database system; Siscorp receive-only earth stations.

ACO PACIFIC **b**

2604 Read Ave., Belmont, CA 94002
415 595-8588

"Alternative" family of electret/condenser mics; audio preamps, amp power supplies; "The Ghost" portable phantom power supply. Measurement microphone system.

ACOUSTIC RESEARCH

330 Turnpike St., Canton, MA 02021
617 821-2300

Monitor speakers; turntables.

ACOUSTIC SYSTEMS **b**

Box 3610, Austin, TX 78764
800 531-5412/512 444-1961

Modular broadcast & recording studios; acoustic booths.

See ad on pg. 130.

Circle No. 191.

ACRODYNE INDUSTRIES **b**

516 Township Line Rd., Blue Bell, PA 19422

215 542-7000

UHF, VHF & LPTV transmitters & translators. TV excitors. RF amps.

See ad on pg. 44.

Circle No. 128.

ACQUIS LTD. **b**

1641 McGaw, Irvine, CA 92714

714 250-1641

International marketing arm for Convergence Corp. video editing products.

ACTION VIDEO PRODUCTIONS

2900 Yellow Goose Rd., Lancaster, PA 17601

717 898-7385

Video production & post-production facilities; equipment rental services; music libraries; video/film stock shot library.

ADAMS-SMITH **b**

34 Tower St., Hudson, MA 01749

617 562-3801

Electronic audio editors; SMPTE time code synchronizers. Two-machine video editor/controllers, A/B-roll editors, multisource editors, SMPTE time code generator/readers, VITC reader/generators. Sync generators.

ADC TELECOMMUNICATIONS **b**

4900 W. 78 St., Minneapolis, MN 55435

612 835-6800

Audio patch panels, jackfields; telco termination blocks; S.A.I.L.S. kits. Video ProPatchpatching equipment, coax jacks, coax patch cords, V.A.M.P. video/audio modular patch bay. Cable connectors; hum bucking coils.

ADM TECHNOLOGY **b**

1626 E. Big Beaver Rd., Troy, MI 48084

313 524-2100

ST Series stereo studio audio consoles; BCS & STV Series audio-for-TV consoles. Audio DAs; audio patch panels & jackfields.

Field Offices:

MI Rick Fisher, 1611 Playsted, Union Lake 48085 313 360-1477

NM Robert Brewer, Box 75237, Albuquerque 87194 505 831-5210

TX Gordon Peters, Box 912, Arlington 76010 817 478-0050

ADVANCED DESIGNS CORP. **b**

924 W. 17 St., Ste. 3, Bloomington, IN 47401

812 333-1922

Doprad I & II weather graphics & radar displays; Doprad II weather-based art/paint system; RCD-1000 weather radar display.

ADVANCED MICRO-DYNAMICS **b**

80 Bolton Rd., Box 150, Harvard, MA 01451

617 456-3570

TC-8 transmitter remote control system. Audio DAs.

ADVANCED MUSIC SYSTEMS **b**

AMS Industries Park, Billington Rd., Burnley, Lancashire BB11 5ES, UK.

(0282) 57011/Telex 63108 AMS G

Audiofile digital audio recorders, electronic audio editors, editors for digital audio; audio/video sync delay; digital audio efx, reverb, digidigital delay, Timeflex time compression/expansion.

AEG BAYLY **b**

167 Hunt St., Ajax, Ont., Canada L1S 1P6
416 683-8200

FM transmitters; FM excitors; RF amplifiers & switches. FM SCA equipment; RF coaxial changeover system. RF power meters, wattmeters, dummy loads. Multitrack & 2-/4-track studio ATRs; tape duplicators; splicing blocks & tape, electronic audio editors, SMPTE time code synchronizers; turntables, complete disc consoles; audio noise reduction; telco interface equipment.

AEG CORP. **b**

Box 3800, Somerville, NJ 08876-1269
201 722-9800

Multitrack & 2-/4-track studio ATRs; tape duplicators; electronic audio editors, SMPTE time code synchronizers; turntables.

See ad on pg. 54.

Circle No. 136.

AERIAL VIDEO SYSTEMS

801 S. Main St., Burbank, CA 91506

818 954-8842

Rentals of microwave equipment, helicopter production packages & video production equipment.

A.F. ASSOCIATES **b**

100 Stonehurst Ct., Northvale, NJ 07647
201 767-1000

Facilities design & engineering services; engineering consultants; mobile vehicle construction. Marconi solid state telecine systems, comb filter decoders, ENG cameras, one-inch VTRs. Audix audio-for-TV consoles & hardwired intercom systems; AFA audio patch panels, jackfields. AVS standards converters. Pegasus commercial compilation system. AFA blanking width meters, displays.

See ad on pg. 59.

Circle No. 138.

See ad on pg. 145.

Circle No. 239.



Microprocessor control, amorphous metal core heads, and superior performance . . . technology that's typically AEG.

Chances are that the M-21 Professional Audio Tape Recorder from AEG will outperform whatever 2-Track you're currently using or considering for future purchase. No other machine is built to such exacting standards, no other machine handles tape as gently yet rapidly, and no other machine is presently available with Amorphous Metal Butterfly Core Heads. (Ours are standard equipment; ask about our exclusive head warranty.)

The M-21 is microprocessor controlled and user-programmable for any 2 of 4 speeds. It is a totally

self-contained package with no external power supplies or cabling, and access to all components for maintenance and alignment is quick and easy. The performance specifications are unexcelled.

It's only natural that the M-21 should be such a fine machine. After all, we invented the modern tape recorder over 50 years ago. To arrange for a free demonstration at your facility, or for information on any of our other high technology products, please give us a call.

In Canada:
AEG BAYLY INC.
167 Hunt Street
Ajax, Ontario L1S 1P6
(416) 683-8200

In U.S.A.:
AEG Corporation
Route 22 — Orr Drive
P.O. Box 3800
Somerville, NJ
08876-1269
(201) 722-9800

AEG

AGFA-GEVAERT

275 North St., Teterboro, NJ 07608
201 288-4100

Audio mastering tapes, cassettes. Broadcast Plus U-Matic videocassettes; half-inch Beta/VHS videocassettes, one-inch C videotape

Field Offices:

CA Century Park Plaza, 1801 Century Pk. E., Los Angeles 90067 213 552-9622
CA 1633 Old Bayshore Hwy., Burlingame 94010 415 692-2432
GA 380 Interstate North #200, Atlanta 30339 404 955-4326
IL 2803 Butterfield Rd. #200, Oak Brook 60521 312 242-1951
MA 33 Hayden Ave #304N, Lexington 02173 617 861-6740
NY Twin Bridge Plaza, 24 Meadowland Pky. #300, Secaucus 07094 201 330-1800
TX 4225 Wingren Rd. #201 Las Colinas, Irving 75062 214 255-0505

AIRFAX VIDEO

727 N. Hudson, Chicago, IL 60610
312 944-5577

Video production & post-production facilities; mobile production facilities rental; videodisc design & consulting services.

AKG ACOUSTICS

77 Selleck St., Stamford, CT 06902
203 348-2121

Phono cartridges, record cleaning & care; digital efx & reverb, digital delay, analog efx & reverb; headphones. Mics: dynamic, electret/condenser, RF, shotgun, lavalier, stereo, modular & capsule; mic booms & dollies. Microphone stands stereo processor.

ALAMAR ELECTRONICS

36 Railway Ave., Campbell, CA 95008
408 866-9373

Parallel & serial interface machine control/technical automation; complete station automation system.

ALDEN ELECTRONICS

40 Washington St., Westboro, MA 01581
617 366-8851

Weather satellite displays, radar displays, graphics displays.

ALEXANDER MFG. CO.

1511 S. Garfield Pl., Mason City, IA 50401
515 423-8955

Nicad batteries, chargers.

ALFORD MFG. CO.

32 Sixth Rd., Woburn, MA 01801
617 935-8611

Antennas: FM, TV HP.

ALIAS RESEARCH

111 Queen St. E., Ste. 500, Toronto, Ont. 416 362-9181

Alias/1 digital art/paint systems, 3D modeling & manipulation, Matrix CQR film recorders; Lyon Lamb video animation controllers.

ALLEN AVIONICS

224 E. Second St., Box 350, Mineola, NY 11501

516 248-8080

Video delay lines, filters, video/cable equalizers. Hum bucking coils.

See ad on pg. 63.

Circle No. 140.

ALLEN & HEATH BRENELL USA

5 Connair Rd., Orange, CT 06477
203 795-3594

Consoles: portable, mono & stereo studio.

ALLIED BROADCAST EQUIPMENT

Box 1487, Richmond, IN 47375
317 962-8596

A-Line Studio Atmosphere control console furnishings, audio cart racks, equipment racks. Architectural Series on-air warning lights; Strobe Series on-air and telephone warning lights. AM & FM transmitters. CD players; DAs; phono preamps; mic booms; studio timers; lighted inspection lenses; cart labels; dub centers; turntable isolation mounts.

Field Offices:

CA Tony Mezzi, 3808 Riverside Dr. #303, Burbank 91505 818 843-5052
GA Mark Drummond, Shannon Towers #314, 4405 Mail 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

ALLIED FILM & VIDEO

7375 Woodward Ave., Detroit, MI 48202
313 871-2222

Film-to-tape & tape-to-film transfers; videotape duplication services; motion picture lab.

Field Offices:

CA Roy Diner/Denise Guillon, 620 Third St., San Francisco 94107 415 777-1700
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
TX Charles Floyd/Jack Dean, 6305 N. O'Connor Rd. #111, Irving 75039 214 869-0100

ALLIED TOWER CO.

12450 Old Galveston Rd., Webster, TX 77598

713 486-7691

Tower masts, rigging, hardware, lighting.

ALL MOBILE VIDEO

630 Ninth Ave., New York, NY 10036
212 757-8919

Mobile production & post-production facilities rental; equipment rental services.

ALLSOP

Box 23, Bellingham, WA 98227
206 734-9090

Allsop 3 audio and video head cleaners, degaussers; tape cleaners, evaluators; record cleaning, care products.

ALPHA AUDIO

2049 W. Broad St., Richmond, VA 23220
804 358-3852

Electronic audio editors, editors for digital audio. Sonex soundproofing material Recording studios; audio post-production facilities.

See ad on pg. 148.

Circle No. 243.

ALPHA VIDEO & ELECTRONICS

28 East Mall Plaza, Carnegie, PA 15106
412 923-2070

Alphatized modified Sony ¾-inch VCRs.

ALPHA WIRE CORP.

711 Lidgerwood Ave., Elizabeth, NJ 07207

201 925-8000

Transmission line: foam dielectric, coaxial. Audio, video & lighting/ac cable; cable connectors; jackfields, patch panels. Heat shrinkable & non-heatshrink insulation; custom cable designs.

ALTA GROUP

535 Race St. #230, San Jose, CA 95126
408 297-2582

Pyxis portable video switcher, digital efx generator & TBC. Cygnus video colorizer, TBC, field synchronizer/framestore & dropout compensator.

See ad on pg. 110.

Circle No. 174.

ALTEC LANSING

10500 W. Reno, Oklahoma City, OK 73128
405 324-5311

Graphic equalizers. Monitor speakers. Mics: dynamic, electret condenser, lavalier. Preamps, line amps, monitor/power amps.

ALTRONIC RESEARCH

Box 249, Yellville, AR 72687
501 449-4093

Omegaline RF loads.

AMBER ELECTRO DESIGN

4810 Jean Talon W., Montreal, Que., Canada H4P 2N5
514 735-4105

Audio test signal generators, harmonic distortion meters, IM meters, spectrum analyzers; dB meters.

See ad on pg. 104.

Circle No. 169.

AMCO ENGINEERING CO.

3801 N. Rose St., Schiller Pk, IL 60176
312 671-6670

Cabinets.

AMEK CONSOLES

10815 Burbank Blvd., N. Hollywood, CA 91601

818 508-9788

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

AMERICAN DIVERSIFIED

3200 Park Center, Costa Mesa, CA 92626
714 241-7800

Cue FM SCA equipment.

See ad on pg. 151.

Circle No. 250.

AMERICAN IMAGE PRODUCTIONS

1708 Grand Ave., Nashville, TN 37212
800 251-2058

Recording studios; audio post-production facilities; music libraries.

AMERICAN LASER SYSTEMS

106 Fowler Rd., Goleta, CA 93117
805 967-0423

Optical infrared (atmospheric) video transmission system.

AMERICAN VIDEO FACTORY

4150 Glencoe Ave., Marina del Rey, CA 90291

213 823-8622

Video production facilities.

AMHERST ELECTRONIC INSTRUMENTS

Box 201, Haydenville, MA 01039
413 268-7204

Amicon intelligent image processor/edit controller.

AVCOM EQUIPMENT DELIVERS

SCPC, AUDIO SUBCARRIER, AND VIDEO RECEPTION TO THE BROADCAST INDUSTRY.



PSA-35 PORTABLE SPECTRUM ANALYZER \$1965

AVCOM's PSA-35 Portable Spectrum Analyzer is the solution to your satellite communication equipment installation and service problems. The PSA-35 is light weight, portable, and has an internal gel-cel power supply that makes it ideal for field test situations. The PSA-35 also operates from 115 VAC (220 or 240 VAC available). The frequency coverage of the PSA-35 is from less than 10 to over 1500 MHz (special order to over 1800 MHz), and from 3.7 to 4.2 GHz, in six bands. An internal DC power block supplies +18 VDC to LNA's and BDC's and is controlled by a front panel switch.

The PSA-35 Portable Spectrum Analyzer will accurately measure the amplitude of wideband signals commonly used in the satellite communications industry. Your PSA-35 will be indispensable for accurate and rapid testing, alignment of satellite equipment, measuring and documenting system performance, and fast precise Terrestrial Interference identification.

Many helpful and unique accessories are available for the PSA-35, such as the TISH-40 Terrestrial Interference Survey Horn, the SSC-70 Signal Sampler and Calibrator, the WCA-4 Waveguide to Coax Adapter, and the QRM-35 Quick Release



AEM-123 AUDIO EXPANDOR MODULE \$479

The AVCOM Audio Expander Module is adaptable to many broadcast and industrial applications. Standard equipment in the AVCOM SCPC-2000C, the AEM-123 is now available separately. The AVCOM Audio Expander Module is a cost effective means of obtaining versatile preset 1-to-2 or 1-to-3 expansion with a choice of 0, 25, 50, or 75 microsecond deemphasis. Other features

include on-board output driver stage for speaker or low impedance earphones, selectable low pass 15, 7.5, or 5 kHz audio filters. Available with custom power supply or without packaging for OEM applications.



COM-20T HIGH STABILITY SATELLITE RECEIVER \$597

AVCOM's COM-20T Professional Satellite Receiver and RDC-20 / RDC-21 Remote Downconverters are the answer to your need for a high stability, low cost, reliable receiver for cable, private cable, radio stations, TV stations, and other dedicated channel applications. The highly stable COM-20T can be factory or field adjusted to a particular transponder and will remain on frequency. Front panel selection for two preset downconverters is standard, the additional downconverter is optional. The COM-20T is

Rack Mount which allows you to slip your PSA in or out of a rack in seconds. U.S. and Foreign patent protection for the PSA-35 and certain unique and proprietary circuits therein is pending.



SCPC-2000C LOW PHASE NOISE / HIGH STABILITY RECEIVER \$1875

AVCOM's SCPC-2000C Single Channel Per Carrier receiver has been developed for the reception of SCPC signals from satellites operating in the 3.7 to 4.2 GHz band. The SCPC-2000C is a complete receiver and can tune specific audio channels from a given transponder and adapt to a variety of deemphasis and companding requirements.

At the heart of the SCPC-2000C is a sophisticated phase locked microwave oscillator and multiplier system that enables the SCPC-2000C to exhibit exceptional stability. The frequency accuracy and low phase noise of the phase locked cavity oscillator make the use of smaller antennas possible. You can obtain very high audio signal to noise ratios with an AVCOM SCPC-2000C. No other equipment at a comparable price can offer the performance of the SCPC-2000C Receiver.

Included in the SCPC-2000C Receiver is AVCOM's Audio Expander Module, AEM-123. The AEM-123 is a cost effective means of obtaining versatile preset 1-to-2 or 1-to-3 expansion with a choice of 0, 25, 50, or 75 microsecond deemphasis. Other features include selectable low pass 15, 7.5, or 5 kHz audio filters, and an on-board output driver stage for speaker or low impedance microphones. The SCPC-2000C comes in a standard 3 1/2" rack mount cabinet.

Radio stations, information services, data networks, music and news distributors, and educational broadcasting systems will find AVCOM's SCPC-2000C Low Phase Noise / High Stability Professional Receiver one of the most reliable and cost effective values in the industry today.

normally supplied with a remote downconverter and tunable audio.



COM-66T SATELLITE RECEIVER \$939

AVCOM's COM-66T Professional Receiver is the answer for cost effective multi-receiver installations. The 66T is a block downconversion receiver system that offers commercial quality with double conversion and high stability. The flexible downconverter allows the use of any degree or brand LNA. Features include automatic polarization control, unclamped video jack for decoders, standard 3 1/2" rack mount, tunable audio with triple IF filters (optional). The COM-66T is designed to be used with AVCOM's dual conversion BDC-60 Block downconverter or other 270 to 770 MHz BDC's. International reception options are available for the COM-66T and COM-20T.

AVCOM 500 SOUTHLAKE BOULEVARD
RICHMOND, VIRGINIA 23236
TELEPHONE (804) 794-2500

TOLL FREE ORDER LINE: 1-800-446-2500 — TELEX: 701 545

Terms and specifications subject to change without notice.

Circle 137 on Reader Service Card

AMP SPECIAL INDS.

Box 1776, Southeastern, PA 19399
215 647-1000

BNC, taper pin, pin & socket connectors.

AMPEREX ELECTRONIC CORP.

Providence Pike, Slatersville, RI 02876
401 762-3800

Plumbicon camera pickup tubes.

Field Offices:

CA Kent Holston, 3000 Scott Blvd. #107,
Santa Clara 95054 408 727-6132

CA Tom Laury, 3760 Cahuenga Blvd., N.
Hollywood 91604 818 980-4212

GA Lee Nowell, 3731 N. Crest Rd. #7, At-
lanta 30340 404 458-2519

IL Greg Smith, 360 Beinoris Dr., Wood Dale
60191 312 860-7373

NY Ed Cirri, 230 Duffy Ave., Hicksville
11802 516 931-6200

TX Greg Gambill, 13773 N. Central Exy.
#1228, Dallas 75243 214 231-3481

AMPEX CORP., AVSD

401 Broadway, Redwood City, CA 94063
415 367-2296

One-inch C & Betacam VTRs; composite
digital multicassette decks. Replacement &
rebuilt video heads, VTR refurbishing & re-
building. Digital still stores, digital art/paint
systems, character generator/graphics sys-
tems; PictureMaker 3D modeling & manipu-
lation systems. Production & post-product-
ion switchers. Digital efx generators. Auto-
mated master control switchers. Multisource
video editors. TBCs. ENG cameras. CCD
cameras, recorder/cameras.

Field Offices:

CA Roger Miller, 500 Rodier Dr., Glendale
91201-2331 818 247-2771

GA Paul Hansil, 1872 Montreal Rd., Tucker
30084-5709 404 491-7112

IL Dick Coomes, 719 W. Algonquin Rd.,
Arlington Heights 60005-4448

MD Rollin Stanford, 10215 Fernwood Rd.,
Bethesda 20817-1198 301 530-8800

NJ Frank Rush, 5 Pearl Ct., Allendale
07401-1678 201 825-9600

TX Frank Nault, 3353 Earhart Dr., Carrollton
75006-5026 214 960-1162

See ad on pg. 50 - 51. Circle No. 134.

AMPEX CORP., MAGNETIC

401 Broadway, MS 22-02, Redwood City,
CA 94063
415 367-3809

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

See ad on pg. 6 - 7. Circle No. 104.

AMTEL SYSTEMS

33 Main St. #303, Nashua, NH 03060
603 880-9011

Evertz time code synchronizers & VITC
reader/generators. AMTEL SMPTE time
code generator/readers. Video slate board/
countdown generators. Video routing
switchers.

AMTRON CORP.

2260 De La Cruz Blvd., Santa Clara, CA
95050

408 688-4445

Ultra high-resolution RGB color monitors

ANCHOR AUDIO

913 W. 223 St., Torrance, CA 90502
800 262-4671

Monitor speakers; hardwired intercoms.
Battery-powered field playback audio
systems.

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 & transporta-
ble satellite earth stations; satellite network
controllers. Intercity & portable ENG micro-
wave systems. SMATV systems. Trasar TV
HP & CP antennas; communications anten-
nas. Rigid transmission line; Helix foam die-
lectric & coaxial transmission line, RF
connectors. Grasis tower masts, rrging,
hardware, lighting. STLs, TSLs. Field installa-
tion & program management services.

Field Offices:

CA 1037 W. 9 St., Upland 91786
714 946-7777

CA 805 Veteran's Blvd. #226, Redwood
City 94063 415 368-3131

CO 451 E. 58 Ave. #2585, Denver 80216
303 295-1042

GA 6205 Barfield Rd. N.E. #245, Atlanta
30328 404 256-0881

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 76201
817 566-2400

TX 1500 W. Plano Pky., Plano 75075
214 578-0078

VA 1481 Chain Bridge Rd. #102, Box
1277, McLean 22101 703 442-8771

ANGENIEUX

7700 N. Kendall Dr. #303, Miami, FL 33156
305 595-1144

Camera lenses.
See ad on pg. 138. Circle No. 235.

R.B. ANNIS CO.

1101 N. Delaware St., Indianapolis, IN
46202

317 637-9282

Magnetic field indicators. Audio & video
head cleaners, degaussers, tape erasers,
tape degaussers.

ANRITSU AMERICA

128 Bauer Dr., Oakland, NJ 07436
201 337-1111

Fiberoptic systems. Audio signal analyzers,
spectrum analyzers. Video test signal gener-
ators, waveform monitors, diff. phase/gain
meters, video noise meters, automatic VITS
analyzers, automatic video analyzers. Field
intensity meters, RF power meters, wattme-
ters, RF test signal generators, impedance
bridges, MSA microwave system analyzers.
Microwave & millimeter power meters. Logic
analyzers, signal generators, frequency
counters.

Field Offices:

CA 50 W. Brokaw Rd. #209, San Jose
95110 408 287-0705

IN 537 Turtle Creek S. Dr. #146,
Indianapolis 46227 317 787-0761

ANT TELECOMMUNICATIONS

211 Perry Pky. #4, Gaithersburg, MD
20877

301 670-9778

Telcom audio noise reduction.

ANTENNA TECHNOLOGY CORP.

8711 Pinnacle Peak Rd. #C-103,
Scottsdale, AZ 85255

602 264-7275/800 264-7275

Simulstat receive-only satellite earth stations
& multibeam antennas; LNAs. Turnkey earth
station installations & engineering.

ANTON/BAUER

1 Controls Dr., Shelton, CT 06484
203 929-1100

Micro Control CCU. Lamps. Nicad batteries,
chargers belts; silver-zinc batteries, char-
gers; ac power dividers. MicroControl
standalone CCUs. Video & lighting/ac cable;
cable connectors.

See ad on pg. 39.

Circle No. 123.

ANVIL CASES

4128 Temple City Blvd., Rosemead, CA
91770

800 423-4297/in CA 800 242-4466

Foam insert & rack configuration transporta-
tion cases.

APERT-HERZOG CORP.

7007 Realm Dr., San Jose, CA 95119
408 225-1425

Digital still stores, video animation control-
lers. Telecine control systems. TBCs, field/
framestores. Video DAs.

APHEX SYSTEMS

13340 Saticoy St., N. Hollywood, CA 91605
213 765-2212

Aphex Aural Exciter psychoacoustic enhan-
cer. Compellor intelligent compressor/
leveller/peak limiter; Dominator AM & FM
compressor/limiter.

APPLELOG

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

Radio business automation software.

APPLIED DIGITAL TECHNOLOGY

39 W. 14 St., New York, NY 10011
212 929-2360

Relecon color correcting & video processing
computer system.

APPLIED RESEARCH & TECHNOLOGY/ART

See ART

ARBEN DESIGN

600 W. Roosevelt, West Chicago, IL 60555
312 231-5077

Star camera dolly; "Candy's Crane," Bertha
crane. Lebenset modular news. studio sets;
custom scenery construction, props & mate-
rials. set design services. Video production
facilities, lighting & grip truck rental, equip-
ment rental services.

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.

See ad on pg. 129.

Circle No. 226.

ARRAKIS

204 N. Link Ln. #3, Fort Collins, CO 80524
303 224-2248

Mic mixers; portable, mono & stereo studio consoles. Audio routing switchers. Studio furniture; cart/tape storage.

ARRIFLEX CORP.

500 Rte. 303, Blauvelt, NY 10913
914 353-1400

Cine cameras. Zeiss motion picture lenses. HMI fixtures; Arrilites quartz fixtures. CineJib crane; camera stabilizing systems.

ART/APPLIED RESEARCH & TECHNOLOGY

215 Tremont St., Rochester, NY 14608
716 436-2720

Graphic equalizers; digital audio efx & reverb, digital delay, time compression/expansion.

See ad on pg. 134. Circle No. 229.

ARTEL COMMUNICATIONS CORP.

Box 100, West Side Sta., Worcester, MA 01602
617 752-5690

Fiberoptic video/audio/data transmission systems. Fiberoptic graphics communication systems.

CA Rich Stucky, 1420 Cristo Rey Dr., Los Altos 94022 415 966-1919

CA Ron Pretelac, Box 6956, Westlake Village 91359 805 495-4883

PA Bob Rosenbaum, 137 N. 22 St., Philadelphia 19103 215 557-7993

TX Mark Harding, 4001 Airport Fwy. #500, Bedford 76021 817 540-2051

ARTRONICS

300 Corporate Ct., Box 408, S. Plainfield, NJ 07080
201 756-6888

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

ARUS CORP.

1305 Conkling Ave., Utica, NY 13501
315 793-8500

Hardwired teleconferencing system. Tie Line audio test equipment.

ASACA/SHIBASOKU CORP.

12509 Beatrice St., Los Angeles, CA 90066
213 827-7144

Videotape cleaners, evaluators. Portable & compact studio/mobile production switchers. Sync, black burst, color bar & multiburst generators. NTSC encoders. Video monitors: NTSC, RGB, battery-powered portable, monitor calibrators. Audio test signal generators, harmonic distortion meters. Video test signal generators, video noise meters, automatic VITS analyzers. Image pickup system; automatic video cart system; color decoders.

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.



MEANS IT'S VERIFIED

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.

Field Office:

CA John Osiecki, 6255 Sunset Blvd. #724, Hollywood 90028 213 461-3211

ASTON ELECTRONICS

346 N. Lindenwood Dr., Olathe, KS 66062
913 782-4007

Aston 3 & Aston 4 character generator/graphics systems.

ATI-AUDIO TECHNOLOGIES

328 Maple Ave., Horsham, PA. 19044
215 443-0330

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 pg. 146. Circle No. 242.

ATLANTIC RESEARCH CORP.

5390 Cherokee Ave., Alexandria, VA 22312
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 SOUND

10 Pomeroy Rd., Parsippany, NJ 07054
201 887-7800

Audio monitor speakers; mic booms & dollies.

A/T SCHARFF RENTALS

1619 Broadway, New York, NY 10019
212 582-7360

Audio equipment rental services.

AT&T COMMUNICATIONS

Rte. 202-206, Bedminster, NJ 07921
201 234-7546

Transmit/receive & receive-only satellite earth stations; satellite system design services; engineering consultants.

AUBURN INSTRUMENTS

107 Church St., Watertown, MA 02172
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 & video tape loaders, timers, rewinders. Videotape cleaners, evaluators.

AUDI-CORD CORP.

1845 W. Hovey Ave., Normal, IL 61761
309 452-9461

Audio cart player/recorders: single-deck, dual/triple deck, time delay. Replacement audio heads.

AUDIO ACCESSORIES

Mill St., Marlow, NH 03456
603 446-3335

Audioline audio patch panels; prewired jackfields. Video jack panels. Miniature & full-size patch cords.

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

Box 786, Bremerton, WA 98310
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.

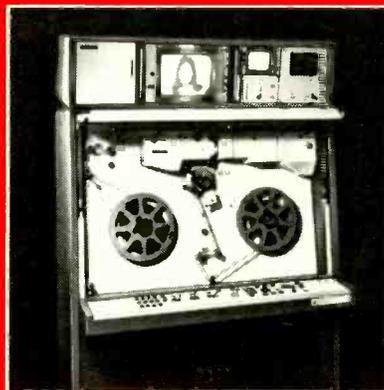
AUDIO KINETICS

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.

AUDIO METRICS**See RADIO SYSTEMS**

Before You Buy A Rank Cintel, You'd Better Take A Look At The New Marconi B3410.



Since we've added three options—vari-speed, X-Y zoom and still frame color correction—we believe, and a great many professionals agree—the Marconi B3410 is now the outstanding telecine for both post-production and broadcast markets.

For one thing, its fully-digital processing and CCD image sensors deliver the best video picture in the business. And because it is fully digital, it does not require time-consuming tweaking, day-to-day adjustments and set-up arrangements that rob you of valuable hours of productive work. Because of this repeatability, two minutes is all it takes to start up.

In addition, there is no registration drift and no tubes to deteriorate or replace. It interfaces with all available color correctors, switches to all international standards and, by its very digital nature, is designed to have an exceptionally long life.

The fact is, the New Kid on the Block has it all over the Old Guy. The Marconi B3410. Now unquestionably the best!

The Marconi Line Array Telecine B3410

Exclusive North American Sales and Service by



A.F. ASSOCIATES INC.

ADVANCED SYSTEMS AND PRODUCTS
FOR THE VIDEO INDUSTRY.

100 STONEHURST COURT, NORTHVALE, NJ 07647 (201) 767-1000 IN THE WEST: (213) 856-0152

AUDIO PLUS VIDEO INTL.

1438 N. Gower St., Hollywood, CA 90028
213 856-0152

Digital standards conversion service.

AUDIO PRECISION

Box 2290, Beaverton, OR 97075
503 297-4837

System One audio test & measurement system: audio test signal generator, harmonic distortion meter, IM meter, wow & flutter meter.

AUDIO-TECHNICA U.S.

1221 Commerce Dr., Stow, OH 44224
216 686-2600

Mic mixers, portable audio consoles. CD/DAD players. Dynamic & lavalier mics; mic booms & dollies.

AUDIO TECHNOLOGY

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, Menands, NY 12204
518 449-7213

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

AUDIO-VIDEO ENGINEERING CO.

65 Nancy Blvd., Merrick, NY 11566
516 546-4239

Hum bucking coils.

AUDISAR

Box 1561, Bellevue, WA 98009
206 454-2040

One-output mic mixers; portable consoles. Monitor speakers. Dynamic & electret/condenser mics. Preamps, line amps, monitor/power amps; amp power supplies. Audio DAs; telco interface equipment; audio multi boxes, splitters. Audio test signal generators. Transformers. Sound projector interface.

AUDITRONICS

3750 Old Getwell Rd., Memphis, TN 38118
901 362-1350

Stereo studio & audio-for-TV consoles. Preamps, line amps. Audio DAs; audio patch panels, jackfields. RTW PPM meters.

See ad on pg. 4. Circle No. 102.

AUERNHEIMER LABS & CO.

4561 E. Florence Ave., Fresno, CA 93725
209 442-1048

Monitor speakers.

AURATONE CORP.

Box 698, Coronado, CA 92118
619 297-2820

Monitor speakers; speaker rack ears, mounting brackets.

AURORA SYSTEMS

185 Berry St., San Francisco, CA 94107
415 777-2288

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

AUTOGRAM CORP.

1500 Capital, Plano, TX 75074
214 424-8585

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

AUTOMATED BROADCAST CONTROLS

9155 Brookville Rd., Silver Spring, MD 20910
301 587-3505

Complete program automation systems. Radio business automation hardware.

AVANTEK

481 Cottonwood Dr., Milpitas, CA 95035
408 943-7803

Transmit/receive & receive-only satellite earth stations; upconverters & downconverters, LNAs.

AVCOM OF VIRGINIA

500 Southlake Blvd., Richmond, VA 23236
804 794-2500

Receive-only satellite earth stations, downconverters, LNAs. RF amps. Communications antennas. Power dividers, RF connectors. Spectrum analyzers; RF test signal generators.

See ad on pg. 56. Circle No. 137.

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.

228 Essex St., Salem, MA 01970
617 744-1505

SNV mobile satellite vehicles, conventional & hub-mounted.

WILLIAM BAL CORP.

Box 875, 947 Newark Ave., Elizabeth, NJ 07207
201 354-9625

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

BALD MOUNTAIN LAB

230 Bellevue Rd., Troy, NY 12180
518 279-9753

BML Audio step generator; digital dB meters.

BALLY ENGINEERED STRUCTURES

Box 98, Bally, PA 19503
215 845-2311

Remote equipment shelters.

BARBIZON

426 W. 55 St., New York, NY 10019
212 586-1620

Lighting equipment rentals including lamps, HMI & quartz fixtures, lighting stands, connectors, dimmers; rentals of nicad power equipment, generators, HMI ballasts. Distributor of Mole-Richard lighting equipment.

BARCO INDUSTRIES

170 Knowles Dr. #212, Los Gatos, CA 95030
408 370-3721

NTSC decoders, comb filter decoders. Video monitors: monochrome, NTSC, RGB, high resolution, wide aspect ratio, battery-powered portable.

Field Offices:

NC 2211B Executive St., Charlotte 28208
704 392-9371

NH 472 Amherst St. #10, Nashua 03063
603 880-1430

See ad on pg. 61.

Circle No. 139.

BARCUS-BERRY ELECTRONICS

5500 Bolsa Ave. #245, Huntington Beach, CA 92649
714 897-6766

Audio signal processor.

BARDWELL & McALLISTER

7051 Santa Monica Blvd., Hollywood, CA 90038
213 466-9361

Quartz lighting fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging. Camera tripods, heads.

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

900 Stierlin Rd., Mountain View, CA 94043
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

VU & PPM meters.

BEAVERONICS

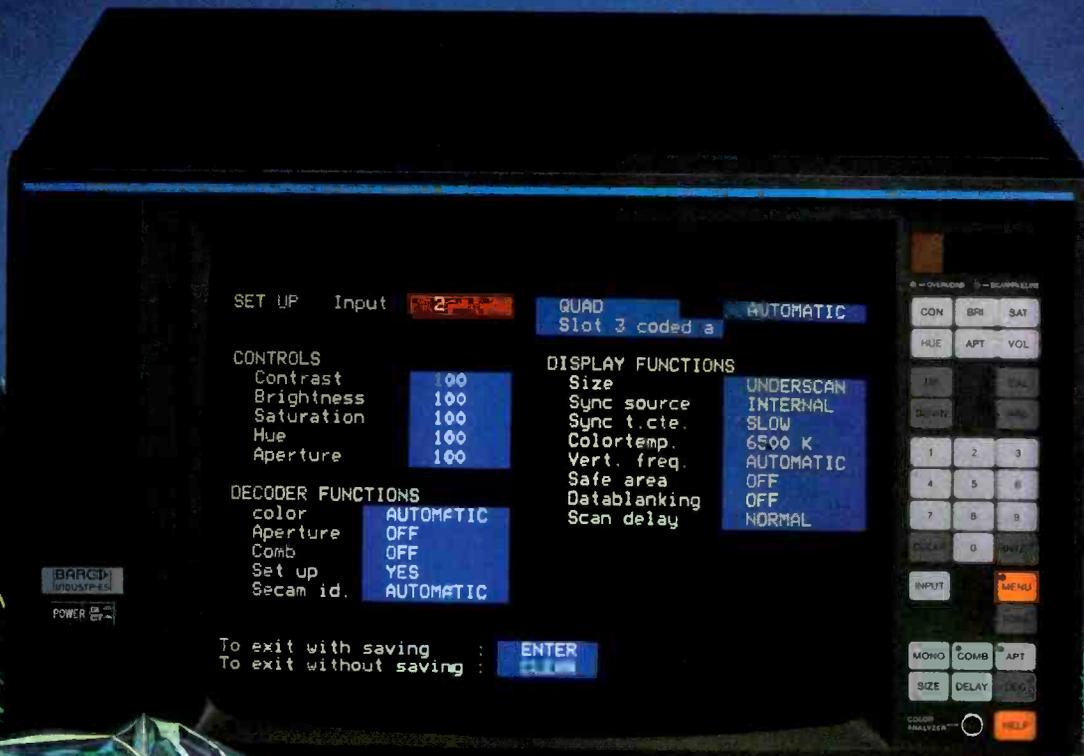
8 Haven Ave., Port Washington, NY 11050
516 883-4414

Compact studio/mobile production switchers. RGB chromakeyers, title keyers, downstream keyers. Favag clock/timing systems.

BELAR ELECTRONICS LABORATORY

119 Lancaster Ave. Box 76, Devon, PA 19333
215 687-5550

THE FIRST INTELLIGENT BROADCAST COLOR MONITOR



BARCO INDUSTRIES new CV5 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 CV5 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 CV5 has Automatic Kinescope Biasing (AKB) to maintain color and black level stability.

The CV5 also generates more internal test patterns than any other monitor. They include white field, cross hatch and color bars.

The CV5 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.
Circle 139 on Reader Service Card

Demodulators, modulation monitors, frequency monitors & controllers.
See ad on pg. 119. Circle No. 200.

BELDEN COMMUNICATIONS
534 W. 25 St., New York, NY 10001
212 691-1910
Lee resin & polyester camera filters.

BELDEN ELECTRONIC WIRE & CABLE
Box 1980, Richmond, IN 47375
317 983-5200
Audio & video cable; cable connectors.

BELL HELICOPTER/TEXTRON
Box 482, Ft. Worth, TX 76101
817 280-8200
Helicopters.

B.E.S.
12753 Moore St., Cerritos, CA 90701
800 592-4644
Monitor speakers.

BEYER DYNAMIC
5-05 Burns Ave., Hicksville, NY 11801
516 935-8000

Mic mixers. Headphones. Mics: dynamic, electret/condenser, ribbon, PZM, RF, lavali-er, shotgun, modular & capsule systems; mic booms, dollies. Preamps, line amps, monitor/power amps, amp power supplies.

BGW SYSTEMS
13130 S. Yukon, Hawthorne, CA 90250
213 973-8090
Monitor speakers. Power amps. Crossovers.

BHP
1800 Winnemac Ave., Chicago, IL 60640
312 989-2140
Telecine color correctors. Two-machine editor/controllers, A/B-roll editors, multisource video editors.

BIAMP SYSTEMS
Box 2160, Portland, OR 97208
503 641-7287
Mic mixers, portable consoles, stereo studio consoles. ALC & AGC amps, parametric & graphic equalizers. Analog efx & reverb. Monitor/power amps; crossovers.

BIRD ELECTRONIC CORP.
30303 Aurora Rd., Cleveland (Solon), OH 44139
216 248-1200
Termline RF attenuators, RF filters, Termaline & Econoload RF loads; Coaxwitch RF switches. RF connectors, adapters, coupling kits. Thru-line RF power meters & wattmeters; Termaline RF calorimeters; RF Power Analy-yst; Wattcher RF power monitor/alarm.

BIRNS & SAWYER
1026 N. Highland Ave., Hollywood, CA 90038
213 466-8211
Tripods, lens adapters. Sales & rentals of 16 & 35 mm film equipment.

BIW CABLE SYSTEMS
65 Bay St., Boston, MA 02125
617 265-2102
Audio, video, lighting/ac, fiberoptic & triax cable; cable connectors.

B&K PRECISION/DYNASCAN
6460 W. Cortland, Chicago, IL 60635
312 889-8870

Wow & flutter meters; MTS test equipment. Video test signal generators, waveform moni-tors, vectorscopes. RF test signal genera-tors. Oscilloscopes, delayed sweepscopes, voltmeters, multimeters.

BLACK'S COMMUNICATIONS CONSULTANTS
120 W. Picacho, Las Cruces, NM 88005
505 524-9681
Broadcast equipment computer database; equipment rental services; facilities design & engineering services; engineering consultants.

BLONDER-TONGUE LABS
1 Jake Brown Rd., Old Bridge, NJ 08857
201 679-4000
RF amps, attenuators, converters, filters. Modulators. Receive-only satellite earth sta-tions, upconverters, downconverters, LNAs. TV HP antennas.

BOGEN, A LEAR SIEGLER CO.
50 Spring St., Box 575, Ramsey, NJ 07446
201 934-8500

Bogen & Hi-Tek graphic equalizers. Monitor speakers. Hardwired intercoms. Dynamic, electret/condenser & lavalier mics. Bogen & Hi-Tek Preamps & monitor/power amps; line amps.

BOGEN PHOTO CORP.
17-20 Willow St., Fair Lawn, NJ 07410
201 794-6500
Lighting stands & rigging. Tripods, heads, dollies.

BOGNER BROADCAST EQUIPMENT
401 Railroad Ave., Westbury, NY 11590
516 997-7800
TV HP & CP antennas; communications antennas.

BONNEVILLE BDCST. CONSULTANTS
274 County Rd., Tennafly, NJ 07670
800 631-1600
Syndicated radio programming.

BONNEVILLE MEDIA COMMUNICATIONS
130 Social Hall Ave., Salt Lake City, UT 84111 801 237-2400
Audio line amps & DAs.

BONNEVILLE SATELLITE CORP.
19 West S. Temple, Salt Lake City, UT 84101
801 534-8031
Turnkey conferencing services; mobile & fixed satellite uplinking.

BOONTON ELECTRONICS CORP.
791 Rte. 10, Randolph, NJ 07869
201 584-1077
Modulation monitors, RF power meters, watt-meters, RF test signal generators, imped-ance bridges. Voltmeters.

ROBERT BOSCH CORP., VIDEO EQUIPMENT DIV.
Box 30816, Salt Lake City, UT 84130
801 972-8000
Audio DAs, audio routing switchers. Studio, field, ENG & lightweight video cameras; recorder/cameras. One-inch B and C VTRs. Quartercam quarter-inch VCRs. Solid state telecine systems. Character generator/graphics systems, digital art/paint systems, 3D modeling & manipulation, "draw-on-

screen" systems. Compact studio/mobile & large automated production switchers; post-production switchers; component switchers. Manual & automated master control switch-ers. Parallel & serial interface video routing switchers. Parallel & serial interface machine control/technical automation; vertical inter-val systems. Sync generators. Video noise reducers. NTSC encoders. Video DAs, pulse amps, subcarrier amps. NTSC & RGB video monitors.

Field Offices:
CA 3391 Robertson Pl., Los Angeles 90034
213 559-5631
GA 6095 Boatrock Blvd., Atlanta 30336
404 344-5649
IA 1421 W. 1 St., Pella 50219
515 628-1717
IL 3436 N. Kennicott Dr. #110, Arlington Heights 60004
312 577-9780
MD 1502 Pine Bluff Way, Arnold 21012
301 757-7200
NJ Park 80 W., Plaza 1, Saddle Brook 07662
201 843-2500

BOWEN BROADCAST SERVICE
8343 Lynn Haven Ave., El Paso, TX 79907
915 598-5556
Teleho computerized equipment mainte-nance assistance system. TCR-100 refurb-ishing, maintenance.

BPI/BROADCAST PROGRAMMING INTL.
2211 Fifth Ave., Seattle, WA 98121
206 728-2741
Syndicated radio programming; program consultants.

BRADLEY BROADCAST SALES
15555-L Frederick Rd., Rockville, MD 20855
301 762-9222/800 732-7665
Distributor of audio, RF, T&M equipment, cases, cable

BRETFORD MANUFACTURING
9715 Soreng Ave., Schiller Park, IL 60176
312 678-2545
Video projectors. Studio furniture, cabinets.

WALTER S. BREWER CO.
4717F S. Mingo Rd., Tulsa, OK 74146
918 665-6820
Lighting, studio & remote facilities design & installation services. Distributor of full line lighting & grip equipment.

BRINTEC CORP.
1600 W. Main St., Willimantic, CT 06226-1128
203 456-8000
Audio, video & lighting/ac cable; cable connectors.

BROADCAST AIDS
20 Red Rose Dr., Levittown, PA 19056
215 547-7133
Digital clocks; timers. Electronic mainte-nance; equipment customizing.

BROADCAST AUDIO CORP.
11306 Sunco Dr., Rancho Cordova, CA 95670
916 635-1048
Stereo studio & audio for TV consoles. ALC & AGC amps. AM & FM compressor/limiters. Preamps, line amps, monitor/power amps. Audio DAs. Rotary & slide attenuators; VU meters.

See ad on pg. 29. See ad on pg. 115.

BROADCAST CARTRIDGE SERVICE
15131 Triton Ln. #108, Huntington Beach,
CA 92649
714 898-7224

Audio cartridge reloading service. Simpact
cart/tape storage. Distributor of open-reel
audio tape, carts, cassettes, empty reels &
carts.

BROADCAST ELECTRONICS
Box 3606, Quincy, IL 62301
217 224-9600

Mic mixers; portable, mono & stereo studio
audio consoles. Cart players: single-deck,
dual/triple-deck, multi-deck, time delay
decks. Audio tape loaders, timers,
rewinders; tape erasers, degaussers. Turn-
tables. Computer automation controllers, au-
tomatic satellite switchers, complete
program automation systems. ALC & AGC
amps, AM & FM compressor/limiters.
Preamps, line amps, monitor/power amps.
Audio DAs, telco interface equipment.

FM transmitters. AM stereo & FM exciters.
stereo generators. RF amps. FM & TV SCA
equipment. TV stereo generators & SAP
generators.

**BROADCAST MICROWAVE
SERVICES**

7322 Convoy Ct., San Diego, CA 92111
619 560-8601

Microwave systems: intercity, portable ENG,
airborne, central receivers. STLs, TSLs.
Duplexers, multiplexers. RF amps, attenu-
ators, filters. Receive-only & transportable sat-
ellite earth stations. Auto trackers; van &
news-car microwave systems.

BROADCAST MUSIC/BMI
320 W. 57 St., New York, NY 10019
212 586-2000

Syndicated radio programming, music
licensing.

BROADCAST SUPPLY WEST
7012 27 St. W., Tacoma, WA 98466
800 426-8434/206 565-2301

ProRax cart & CD storage racks. Distributor
of full line broadcast equipment.

BROADCAST SYSTEMS
8222 Jamestown Dr., Austin, TX 78758
512 836-6011/800 531-5232

Studio furniture, cabinets, studio consoles,
equipment racks. Equipment rental services,
facilities design & engineering services, fi-
nancial consultants; earth station site selec-
tion, mobile vehicle construction.

BROADCAST VIDEO SYSTEMS LTD.
1050 McNicoll Ave., Agincourt, Ont., Can-
ada M1W 2L8
416 497-1020

Title keys, composite & component down-
stream keys, nonadditive keys,
component/RGB translators, video source
ID. Color bar & safe title area generators. Cox
telescope & VTR color correctors. RGB
chromakeyers. NTSC encoders. BVS/BAL
video delay lines, video filters.

BROADWAY VIDEO

1619 Broadway, New York, NY 10019
212 265-7600

Video post-production facilities, audio/video
consulting.

BRUEL & KJAER INSTRUMENTS
185 Forest St., Marlborough, MA 01752
617 481-7000

Electret/condenser mics, stereo mics. Audio
test signal generators, harmonic distortion
meters, IM meters, spectrum analyzers, real
time analyzers, wow & flutter meters. Phase
meters. Voltmeters.

Field Offices:

CA 1542 E. Katella, Anaheim 92805
714 978-8066
CA 1151 Triton Dr #B, Foster City 94404
415 574-8155
GA 2030 Powers Ferry Rd. #214, Atlanta
30339 404 951-0115
IL 555 W Central Rd, Hoffman Estates,
60195 312 358-7582
MD 21 Perry Pky. #4, Gaithersburg
20877-1375 301 948-0494
MI 12878 Farmington Rd., Livonia 48150
313 522-8600
NJ 1140 Bloomfield Ave., W Caldwell
07006 201 227-6100
TX 8031 Airport Blvd #115, Houston
77061 713 645-0167
WA 400 Boren Ave. N., Seattle 98109
206 625-1112

BRYSTON LTD.

57 Westmore Dr., Rexdale, Ont., Canada
M9V 3Y6
406 746-1800

Preamps, line amps, monitor/power amps.
LED audio level displays.

Field Office:

VT RFD #4, Box 2255, Montpelier 03602
800 451-4160/223-6159



Video Delay Lines

ALLEN AVIONICS Video & Pulse Delay Lines replace 75 ohm
coaxial cable. They reduce size, weight, costs; save time & effort in making delay changes.

Part No.	Delay Range (Nano-Sec.)	Delay Steps (Nano-Sec.)	Method of Variation	Maximum Insertion Loss (@ 100 KHz (db)	Amplitude Flatness At Any Delay Setting 100 KHz to 5.5 MHz (db)	Max. Rise Time (Nano-Sec.)	Package Size (Inches)
VAR005	3-7	Continuous	Trimmer	.20	.2 Max.	**N.A.	3 5/8 x 1 1/2 x 1/4
VAR011	0-11	Continuous	Trimmer & Toggle	.20	.25	**N.A.	4 3/8 x 2 3/8 x 1 1/16
VAR256	0-256	Continuous	Trimmer & Toggle	.15	.4	18	4 3/8 x 2 3/8 x 1 1/16
VAR320	0-320	Continuous	Trimmer & Toggle	.20	.4	22	4 3/8 x 2 3/8 x 1 1/16
VAR640	0-640	Continuous	Trimmer & Toggle	.80	.5	27	4 11/16 x 3 11/16 x 2 1/16
VP0010	0-10.5	.5	Toggle	.15	.2	3	4 3/8 x 2 3/8 x 1 1/16
VP0127	0-127	1.0	Toggle	.15	.3	14	4 3/8 x 2 3/8 x 1 1/16
VP0255	0-255	1.0	Toggle	.15	.3	16	4 3/8 x 2 3/8 x 1 1/16
VP0317	0-317.5	2.5	Toggle	.15	.3	20	4 3/8 x 2 3/8 x 1 1/16
VP0635	0-635	5.0	Toggle	*.50	.4	25	4 11/16 x 3 11/16 x 2 1/16
VP1100	0-1100	10.0	Rotary	1.25	.4	30	4 11/16 x 3 11/16 x 2 1/16
VP1270	0-1270	10.0	Toggle	*3.00	.4	30	4 11/16 x 3 11/16 x 2 1/16
VP2075	0-2075	25.0	Toggle	*3.00	.5	40	7 3/8 x 4 11/16 x 2 3/16
VW0317	0-317.5	2.5	Strap	.25	.4	28	5 x 3 1/2 x 2
VW0635	0-635	5.0	Strap	.60	.5	33	5 x 3 1/2 x 2
VW1270	0-1270	10.0	Strap	1.25	.5	33	6 1/2 x 3 1/2 x 2
VW2075	0-2075	25.0	Strap	2.50	.5	40	6 1/2 x 3 1/2 x 2

RACK MOUNTABLE UNITS

**Not Applicable.

VRM011	0-11	Continuous	Trimmer & Slide	.30	.3 Max.	10	1 1/4 x 4 1/8 x 4
VRM0255	0-255	1.0	Slide Switch	.40	.4	20	1 1/4 x 4 1/8 x 4
VRM0637	0-637.5	2.5	Slide Switch	*1.00	.4	28	1 1/4 x 4 1/8 x 6
VRM1275	0-1275	5.0	Slide Switch	*3.00	.4	33	1 1/4 x 4 1/8 x 9
VRM2270	0-2270	10.0	Slide Switch	*3.00	.5	40	1 1/4 x 4 1/8 x 9
VRS0317	0-317.5	2.5	Strap	.40	.5	26	1 1/4 x 4 1/8 x 4
VRS0635	0-635	5.0	Strap	.75	.5	35	1 1/4 x 4 1/8 x 6
VRS1270	0-1270	10.0	Strap	1.50	.5	37	1 1/4 x 4 1/8 x 9
VRS2260	0-2260	20.0	Strap	3.00	.5	40	1 1/4 x 4 1/8 x 9

*±.2db variation at any delay setting.



**RACK MOUNTABLE VIDEO
& PULSE DELAY LINES**
A complete Rack Mountable
series of Video & Pulse Delay
Lines, with the capability of
replacing up to 1450 feet of
cable, is now being marketed
by Allen Avionics. (See listing
in table at left.)

Impedance: 75 ohms.

Pulse Distortion: Less than 4% with an
input pulserise time of 20 nanoseconds.

Working Voltage: 100 volts maximum.
50 volts maximum for Rack Mountable
series.

Return Loss: 20db minimum. 15db
minimum for VP2075, VS2075 and
Rack Mountable series.

Delay Tolerance: 5% or 1 nanosecond,
whichever is greater.

We also specialize in Delay Equalized
Lowpass Filters for the Video Industry

CALL/WRITE For Delay Lines &
Filters Catalog
ALLEN AVIONICS, INC.

224 EAST SECOND ST., MINEOLA, NY 11501
Phone: 516-248-8080

BSM BROADCAST SYSTEMS
Box 19007, Spokane, WA 99219
509 838-0110

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

BUHL OPTICAL CO.

1009 Beech Ave., Pittsburgh, PA 15233
800 245-4574
Optical multiplexers.

THE BURBANK STUDIOS

4000 Warner Blvd., Burbank, CA 91522
818 954-6000
Video production facilities.

RICHARD W. BURDEN ASSOC.

20944 Sherman Way, Canoga Park, CA 91303
818 340-4590

Facilities design & engineering services, engineering consultants.

BW LIGHTING SYSTEMS

Box 470162, Tulsa, OK 74147
800 331-6042/918 664-1111

GE lamps. Quartz lighting fixtures, cyc lighting. Rosco diffusion & efx material. Matthews lighting stands & rigging. LMI & Teatronics lighting control boards, dimmer packs. Scenery rigging, props & materials. Lighting/ac cable; jackfields, patch panels. Set/studio design services.

CABLEWAVE SYSTEMS

60 Dodge Ave., North Haven, CT 06473
203 239-3311

FM & communications antennas. Cellflex foam dielectric transmission line; Flexwell coaxial cable; RF connectors.

CALAWAY ENGINEERING

Box 323, Sierra Madre, CA 91024
213 355-2094

CED video editing system; interfaces for VVG or CMX editing systems.

CALICO VIDEO CO.

8955 Thornton Rd., Stockton, CA 95209
209 952-3333

TCR-100 video cartridges. TCR-100 video cart reloading & remanufacturing.

CALVERT ELECTRONICS

1 Branca Rd., E. Rutherford, NJ 07073
800 526-6362

Camera pickup tubes, RF amps, tubes.

Field Office:

CA 1355 Redondo Ave. #6, Long Beach 90804 213 526-6362

CALZONE CASE CO.

225 Black Rock Ave., Bridgeport, CT 06605
203-367-5766

Foam insert & rack configuration transportation cases; editing/production consoles. Equipment racks; cart/tape storage.

THE CAMERA MART

456 W. 55 St., New York, NY 10019
212 757-6977

Equipment rental service. East coast distributor of Ikegami EC-35 camera. U.S. distributor of Multidyne products & Milab audio products. Dealer & distributor of broad line video & film equipment.

**MEANS
IT'S VERIFIED**

Field Office:

NY 304 First St., Liverpool 13088 315 457-3703

See ad on pg. 5.

Circle No. 103.

CANARE CABLE

832 N. Victory Blvd., Burbank CA 91502
818 840-0993

Audio & video cable; cable connectors; jackfields & patch panels.

CANON USA

1 Canon Plaza, Lake Success, NY 11042
516 488-6700

Television camera lenses. Tripods, heads, pedestals.

Field Offices:

CA 123 Paularino Ave. E., Costa Mesa 92626 714 979-6000

IL 100 Park Blvd., Itasca 60143-2693

312 250-6200

TX 3200 Regent Blvd., Irving 75063-3145 214 620-2641

CAPITOL MAGNETIC PRODUCTS

6902 Sunset Blvd., Hollywood, CA 90028
213 461-2701

Open-reel audio tape; Audiopak broadcast audio carts.

Field Offices:

CA Gordon Stafford/Cathy Lewis, 3116 W. Ave. 32, Los Angeles 90065 213 254-9111

IL Dick Dunlavy/Harriet Friefeld, 1400 Renaissance Dr. #309, Park Ridge 60068 312 298-1806

PA Dennis Schleich/Holly Homka, 2980 Ave. B, Lehigh Valley Ind. Pk #1, Bethlehem 18017 215 868-1401

See ad on pg. 66. Circle No. 143.

CAPTURED LIVE PRODUCTIONS

4911 Fernlee, Royal Oak, MI 48073
313 288-4080

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

CARLETON PRODUCTIONS

1500 Merivale Rd., Ottawa, Ont., Canada
K2C 3G6

613 224-1313

Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production facilities; equipment rental services; set/studio design services; music libraries; video/film stock shot library; videocassette duplication; PSA dist. systems; TV production services.

CAROB VIDEO

250 W. 57 St., New York, NY 10107
212 957-9525

Video post-production facilities.

CARVIN MFG. CORP.

1155 Industrial Ave., Escondido, CA 92025

619 747-1710

Mono & stereo studio consoles. Monitor

speakers. Dynamic mics. Monitor/power amps.

CASES, INC.

1745 W. 134 St., Gardena, CA 90249
213 770-4444

Foam insert, padded nylon & rack configuration transportation cases. Equipment racks.

CAT SYSTEMS

401 E. 74 St., New York, NY 10021
212 988-0290

Computer automation controllers, automatic satellite switchers. Parallel & serial interface machine control/technical automation. Transmitter remote control systems. Log printers; status/alarm indicators. Facilities design & engineering services; engineering consultants; computer consultants.

CATEL TELECOMMUNICATIONS

4050 Technology Pl., Fremont, CA 94537
415 659-8988

Stereo generators, modulators, RF amps, converters. Fiberoptic systems.

CAVOX-TAPE-ATHON CORP.

See TAPE-ATHON

CBSI/CUSTOM BUSINESS SYSTEMS

Box 67, Reedsport, OR 97467
503 271-3681

Radio business automation software & hardware.

Field Offices:

GA Mike Poulo, Atlanta 404 977-1413

MD Ira Apple, Baltimore 301 526-6724

TX Barb Simon, Austin 512 328-3731

WA Bob Lundstrom, Seattle 206 679-4041

CBX INTERNATIONAL

147 E. Olive Ave., Monrovia, CA 91016
818 357-8878

Facilities design & engineering services; mobile vehicle construction.

CCI

7353 Lee Hwy., Chattanooga, TN 37421
615 894-2580

Manual, automated & business automation interfaced master control switchers. Parallel & serial interface video routing switchers. Parallel & serial interface machine control/technical automation; vertical interval systems. Video programming & advertising automation equipment for video & film sources, including insertion & verification. Sync generators.

CCR VIDEO CORP.

6410 Santa Monica Blvd., Los Angeles, CA 90038

213 464-7151

Mobile production facilities rental; video & audio post-production facilities.

CECO COMMUNICATIONS

2115 Ave. X, Brooklyn, NY 11235
800 221-0860/718 646-6300

Distributor of full line camera tubes, RF tubes, industrial tubes, ICs, transistors.

CECO INTERNATIONAL CORP.

440 W. 15 St., New York, NY 10011
212 206-8280

Video production facilities; equipment rental services.

R-42 diversity receiver • Now with GaAsFET's.

Improved sensitivity and system range, with ultralow noise.

Cetec Vega's top-of-the-line PRO PLUS R-41 and R-42 wireless-microphone receivers have quickly become the worldwide standard of excellence. Overall quality of the PRO PLUS wireless system is equal to wired microphone systems, with respect to dynamic range, signal-to-noise ratio, distortion, etc. *We invite your comparisons.* Check these features of the new, improved PRO PLUS receivers:

- **GaAsFET front end.**

Provides the highest achievable sensitivity for maximum system range. Also incorporates a high-performance helical filter.

- **Lowest distortion.**

0.25% maximum, 0.15% typical.

- **Measurably the highest signal-to-noise ratio and widest dynamic range.**

Quiet as a wire. With DYNEX II (a new standard in audio processing), SNR is 101 dB (108 dB A-weighted). System dynamic range is 133 dB including transmitter adjustment range, from input for maximum nondistorting gain compression to noise floor.

- **"Infinite gain" receiver.**

Improved performance in the critical threshold region, superior handling of multipath conditions, better SNR, and constant receiver audio output level.

- **Professional audio circuits.**

Output is adjustable from +20

dBm to -60 dBm in four ranges. Also featured are selectable phasing and 0.2-watt independent headphone amplifier.

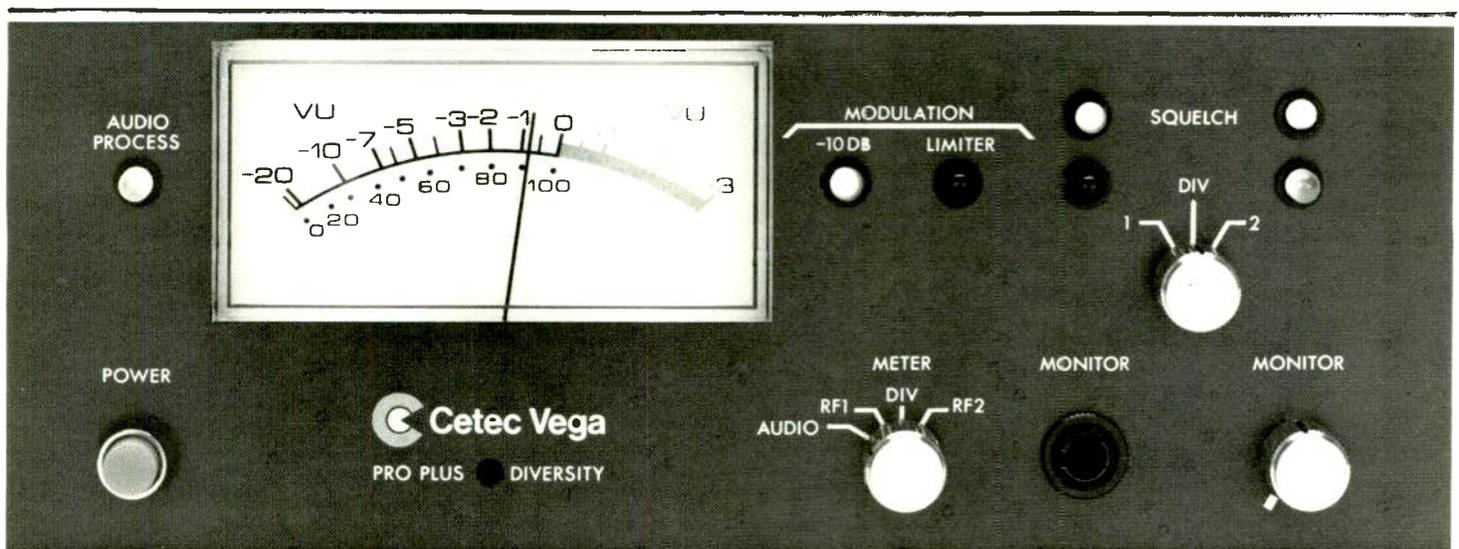
- **True dual-receiver diversity.**

The R-42 diversity system is the most reliable method to avoid dropouts. The R-41 nondiversity receiver has all of the other features of the R-42.

PRO PLUS wireless-microphone systems achieve the highest performance possible with today's advanced technology.

Write or call for further information and location of your nearest dealer: Cetec Vega, P.O. Box 5348, El Monte, CA 91734. (818) 442-0782.

The best wireless gets even better.



 **Cetec Vega**
... the professional's wireless

CELWAVE

Rte. 79, Marlboro, NJ 08876
201 462-1880

Communications antennas. Foam dielectric & coaxial transmission line; power dividers, RF connectors

Field Offices:

AZ 115 E. Watkins St., Phoenix 85004-2925
602 252-8058

FL 44 West, Box 389, Leesburg
32749-0389 904 787-9200

IL 941 N. Plum Grove Rd., Ste. B,
Schaumburg 60195 312 843-7511

CENTER CITY VIDEO

1503-05 Walnut St., Philadelphia, PA
19102

215 568-4134

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

CENTER VIDEO INDUSTRIAL CO.

5615 W. Howard St., Niles, IL 60648
312 647-8700/800 621-4354

Editing, production consoles. Equipment rental services; video post-production facilities, facilities design & engineering services; videotape duplication services

CENTRAL DYNAMICS LTD.

147 Hymus Blvd., Pointe Claire, Que.,
Canada H9R 1G1
514 697-0810

Portable audio consoles, line amps. Portable, compact studio/mobile & large automated production switchers; post-production switchers. Compressor/positioners, standalone analog efx, colorizers, RGB & encoded chromakeyers, title keyers, downstream keyers. Manual, au-

tomated & business automation interfaced master control switchers. Parallel & serial interface video routing switchers. Video DAs, pulse amps, subcarrier amps. Sync decoder.

Field Offices:

CAN 801 York Mills Rd. #201, Don Mills,
Ont. M3B 1X7 416 446-1543

GA 11 Corporate Sq. #160, Atlanta 30329
404 633-2100

IL Box 5108, Evanston 60204
312 864-6045

NY 19 William St. #3A, Mt Vernon 10552
914 668-4928

CENTRO CORP.

9516 Chesapeake Dr., San Diego, CA
92123

619 560-1578

Facilities design & engineering services; set/studio design services; engineering consultants; mobile vehicle construction; video teleconferencing systems design & construction. Studio furniture, cabinets, studio consoles, equipment racks.

See ad on pg. 67. Circle No. 144.

CENTURY PRECISION OPTICS

10713 Burbank Blvd., N. Hollywood, CA
91601

818 766-3715

Camera lenses; periscope lenses

CENTURY III TELEPRODUCTIONS

651 Beacon St., Boston, MA 02115
617 267-6400

Video production & post-production facilities

CENTURY 21 PROGRAMMING

4340 Beltwood Pkwy., Dallas, TX 75244
800 582-2100/214 934-2121

Syndicated radio programming; music libraries; recording studios. Audio carts; empty reels & carts.

CERCONE VINCENT ASSOC.

See THE PERFORMANCE GROUP

CETEC ANTENNAS

See JAMPRO

CETEC GAUSS

9130 Glen Oaks Blvd., Sun Valley, CA
91352

818 763-4323

Audio tape duplicators. Monitor speakers

CETEC IVIE

1366 W. Center, Orem, UT 84057

801 224-1800

Pink & white noise generators; sine wave generators; spectrum analyzers, real-time analyzers.

CETEC VEGA

9900 Baldwin Pl., El Monte, CA 91731

818 442-0782

Q System RF intercoms. Vega, Orator III & Vecta RF mics

See ad on pg. 65.

Circle No. 142.

CHANNELMATIC

821 Tavern Rd., Alpine, CA 92001

619 445-2691

Audio DAs. Broadcaster I MERPS multicasette decks. Parallel interface video routing

CART 'EM UP ON AA-4!

From AOR to CHR, Country to Jazz—Whatever the format, this cart's for you. For outstanding high frequency sensitivity and headroom, compatibility with all cart machines, the multi-format AA-4 delivers the sound that audiences turn on.

AUDIO PAK AA-4.
FOR STATIONS WHO CARE HOW THEY SOUND.



YOU TALKED AND WE LISTENED

The Centro NETWORKER is the result of extensive research into your network news requirements.

- Vehicle chassis and suspension engineered to carry heavy components.
- Unparalleled Centro quality in an attractive affordable package.
- Available in a rugged standard package with many options for your specific requirements.
- 2.3 meter dish with 49.5 Dbi gain and selectable-adjustable vertical and horizontal polarization from inside the vehicle.
- Three year unlimited mileage, limited chassis warranty and serviceable in over 4,500 locations throughout the United States.
- Engineered, designed and constructed to meet your most demanding Satellite News Gathering requirements.



CENTRO CORPORATION
9516 CHESAPEAKE DRIVE
SAN DIEGO, CALIFORNIA 92123

(619) 560-1578

See the NETWORKER at RTNDA
Booth #319

Circle 144 on Reader Service Card

switchers; parallel & serial interface machine control. Digital clocks. Engineering consultants.

Field Offices:

CA Mike Watson, 2500 Chicago Ave. #F4, Riverside 92507 714 686-8020
CO Dick White, 6885 Xavier Cir. #3, Westminster 80030 303 650-5950
GA Wes Hanemayer, 6 Clarendon Pl., Avondale Estates 30002 404 289-4834
NJ Tony Keator, 54 Harvard Dr., Fair Haven 07701 201 747-5122
WI Roger Heidenreich, 549 Park Ave., Prairie du Sac 53578 608 643-2445

CHESTER CABLE, DIV. CELWAVE

Drawer D, Chester, NY 10918
914 469-2141

Audio & video cable.

CHIPS DAVIS LEDE DESIGNS

2169 Francisco Blvd. #J1, San Rafael, CA 94901
415 459-2888

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

CHOICE ELECTRONICS

Box 1475, Gainesville, FL 32602
904 375-4434

Audio monitor speakers. Audio patch panels, jackfields. Titlers, subtitles. Matrix wipe generators. Monitor-based teleprompters. Facilities design & engineering services.

CHRISTIE ELECTRIC CORP.

20665 Manhattan Pl., Torrance, CA 90501
213 320-0808

Nicad batteries, chargers. Bulk tape degaussers.

CHROMA DIGITAL SYSTEMS
See SHINTRON

CHRONO-LOG CORP.

2 W. Park Rd., Havertown, PA 19083
215 853-1130

Digital clocks, timers, complete clock/timing systems. Time code generators and readers.

CHYRON CORP.

265 Spagnoli Rd., Melville, NY 11747
516 249-3018

Scribe, Chyron IV, RGU, VP Series character generator/graphics systems; Chameleon digital art/paint systems. Videofex digital efx generators.

CINEMA PRODUCTS CORP.

2037 Granville Ave., Los Angeles, CA 90025
213 478-0711/477-1972

Cine cameras. Angenieux & Canon lenses. Video matte boxes; adjustable video zoom lens control. Mini-Worral geared camera head; Steadicam camera stabilizing system; Mini-Mote remote pan/tilt system. Camraprompter scroll entry. ENG/EFP portable teleprompters.

CINEMILLS CORP.

3500 W. Magnolia Blvd., Burbank, CA 91505
818 843-4560

Daymax high-intensity bulbs for Strand Cen-

tury 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

5734 Industry Ln., Frederick, MD 21701
301 695-0200

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

CIRCUIT RESEARCH LABS

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

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

See ad on pg. 69.

Circle No. 146.

DAVID CLARK CO.

360 Franklin St. Box 155, Worcester, MA 01613-0155
617 756-6216

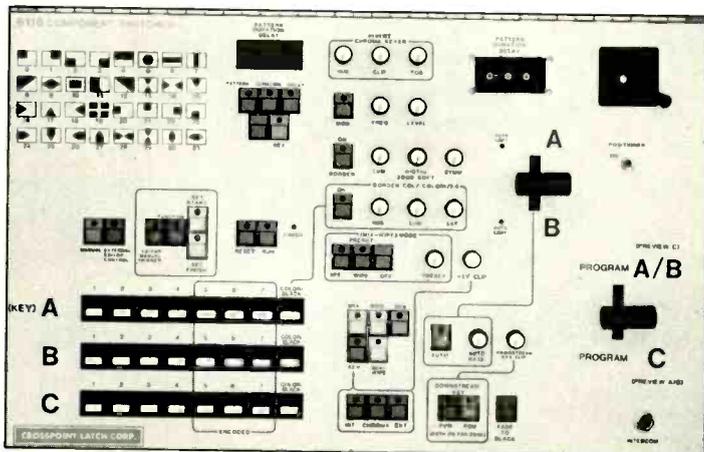
Headphones. Hardwired intercom systems.

CLEAR-COM INTERCOM SYSTEMS

1111 17 St., San Francisco, CA 94107
415 932-8134

Hardwired intercom systems; headphones.

6116 COMPONENT SWITCHER \$10,715.



**FULL CONTROL FROM EDITOR KEYBOARD
HANDLES BOTH COMPONENT AND ENCODED
SIGNALS**

- COLORIZER
- RGB CHROMA KEYS
- 32 PATTERNS
- FADE TO BLACK
- PATTERN MODULATOR
- COLORED BORDERS

OPTIONS

Encoded to component decoder
component to RGB translator
400 Event Storage Registers
(100 Sequences)
Serial or parallel Editor control
Second Chroma keyer
7209 Programmable controller

7209 CONTROLS ENTIRE SWITCHER including positioner, colorizer, borders etc., providing smooth transitions of all stored controls during programmed transitions.

CROSSPOINT LATCH CORP.

95 PROGRESS STREET • UNION, N.J. 07083
Country Code 1 • (201) 688-1510 • TELEX 132850

CRL makes your channel sound as good as it looks

Stereo audio processing is in your future. That's why there's no time like the present to select the stereo audio processing system that will meet your needs for years to come.

A system like the CRL TVS-3001 television studio processor and TVS-3002 stereo limiter/generator. Both are designed with the superior performance features your station needs.

You won't find a more intelligently designed, high-quality TV stereo processing system anywhere. So, plan for the future now with CRL's TVS-3001 and 3002. Designed to make your channel sound as good as it looks.

Call or write CRL today for complete information and a no-cost demonstration.



CRL Systems

2522 West Geneva Drive
Tempe, Arizona 85282
(800) 535-7648 (602) 438-0888
TELEX: 350464 CRL TMPE. UD.
Circle 146 on Reader Service Card



POWERFUL ANIMATION — INCREDIBLE SPEED



ARTSTAR 3D brings you powerful, high resolution three dimensional video graphics animation capabilities never before available at real-world prices! Versatile skills at your fingertips include:

Full 3D frame-by-frame animation with automatic VTR control—in Component Video or NTSC.

8 kinds of animation: color palette "movie," stack, multiple-plane 3D, cut-out, event recording/playback, rotoscoping, and traveling matte for system-generated graphics into live video.

Now announcing exclusive *real-time* cel animation in high resolution!

Plus:

Multiple Light Sources

Phong Shading—for "spectacular" specular reflections

Texture Mapping—wrap around 3D surfaces

Spline Motion Paths • Extensive **Key Framing**

And, this "Super Hero" is *also* a full-color, high resolution, full-featured paint system with high-speed 3D rendering & modeling, flash frame grab, vector type character generation, and laser disk digital still-store option.

ARTSTAR 3D—from ColorGraphics—your Super Production Heros! Call today for more information or a demonstration at your facility.

See it at SIGGRAPH Booth #1456

ARTSTAR
COLORGRAPHICS SYSTEMS INC.

DYNATECH Broadcast Group

5725 Tokay Boulevard • Madison, Wisconsin 53719 • (608) 274-5786

Circle 147 on Reader Service Card

CMC TECHNOLOGY CORP.

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

Replacement & rebuilt heads for quad & one-inch VTRs; audio & video tape erasers, degaussers.

CMX CORP.

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

Electronic audio editors; editors for digital audio. A/B-roll editors, multisource editors.

COASTCOM

2312 Stanwell Dr., Concord, CA 94527
415 825-7500

Video filters. Diplexers. Transmit/receive satellite earth stations. Remote control systems. RF program subcarrier.

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
818 362-2566

Portable audio consoles. RF & lavalier mics. SMPTE time code generator/readers.

COLORADO VIDEO

Box 928, Boulder, CO 80306
303 444-3972

Analog & digital slow-scan transmitters/receivers. Sync generators. Field/framestores, video noise reducers.

COLOR FILM CORP., VIDEO DIV.

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

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

COLORGRAPHICS SYSTEMS

5725 Tokay Blvd., Madison, WI 53719
608 274-5786

ArtStar II/ArtStar 3D character generator/graphics systems & digital art/paint systems; ArtStar 3D three-dimensional modeling & animation. LiveLine weather graphics displays, weather-based art/paint systems.

See ad on pg. 70.

Circle No. 147.

COLORTRAN

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

Studio, TV, and theater lamps & quartz fixtures; HMI PAR Sunlites; Far Cyc & Cyc Strip cyc lighting; Lee Color Media diffusion & efx material; lighting stands & rigging, Patchman, Scene Master 60, Packmaster & Prestige Series lighting control boards; dimmer packs.

Field Offices:

CA John Fuller, 478 47 Ave., San Francisco 94121 415 668-4600

FL Jack Gallagher, 7406 Spring Ct., Tampa 33614 813 866-1377

NJ Alan Kibbe/Jane Head, Meadows Office Complex, 301 Rte. 17 N., Rutherford 07070 201 438-4009

TX Steve Surratt, 1603 Babcock #130, Office K, San Antonio 78229 512 344-5533

COLUMBIA AUDIO/VIDEO

Columbia Bldg. 1, Highland Park, IL 60035
312 433-6010

Equipment rental service; video post-production facilities; projection systems.

COLUMBINE SYSTEMS

1620 Jackson, Golden, CO 80401
303 279-4000

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

COMARK COMMUNICATIONS

Box 275, Colmar, PA 18915
215 822-0777

Comark, Marconi & Eddystone AM, FM, VHF, UHF & shortwave transmitters; TV exciters, diplexers, multiplexers, modulators. RF amps, tubes, attenuators, converters, filters, loads, switches. M/A-Com intercity microwave. FM antennas; antenna tuning units. Bogner, SWR, Andrew, LeBlanc & Dick TV HP & CP antennas. Coaxial transmission line, power dividers, RF connectors. Pi-Rod, Vert. Technology & Stainless tower masts, rigging, hardware, lighting. Moseley, TFT transmitter remote control systems, STLs.

Comark, Tektronix demodulators. Tektronix modulation monitors, antenna monitors, field intensity meters, sideband analyzers, RF power meters & wattmeters, RF calorimeters, frequency monitors, controllers, RF test signal generators, impedance bridges, phase meters, oscilloscopes, delayed sweep scopes. EEV, Amperex klystrons. LEA surge protectors.

COMMUNICATIONS ALTATEC

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

Video production & post-production facilities; 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, degaussers. Dimmer packs. Distributor of microphones (Shure), videotape (Maxell), lamps (GE/Sylvania), diffusion & efx material (Rosco), batteries (Anton/Bauer), tripods & heads (Lisand), dollies (Bilora), transportation cases (Calzone), furniture (Winsted), cabinets & consoles (Bretford), test equipment (Leader), cable connectors (Hiros), & tools (Xcelite).

Field Office:

2082 Michelson Dr. #212, Irvine 92715

714 851-8344

See ad on pg. 71.

Circle No. 148.

COMPU-PROMPT

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

213 461-3113

Monitor-based, scroll entry & ENG/EFP portable teleprompters.

COMPUTER AIDED VIDEO™

Automatic Cable Labeling and Cataloging

If you have ever had to label a few hundred cables, you know what a time-consuming and irritating job it is. No more.

Whenever you add, replace, or change a cable in your system, Comprehensive's CABLETRAK™ software automatically prints out labels for both ends of the cable and updates your cable inventory.

CABLETRAK™ will also tell you what cables are attached to a particular piece of equipment, their wire type, length, and any notes you may have made.

If you are building a studio, CABLETRAK™ will print out sublists for your installation crews.

If you don't have time to label and keep track of every cable in your system, let CABLETRAK™ do it for you.

For more information call Comprehensive toll-free at 1-800-552-2CAV.

CABLETRAK™



Comprehensive
VIDEO II SUPPLY CORPORATION

148 Veterans Drive
Northvale, New Jersey 07647
(201) 767-7990

MEANS IT'S VERIFIED

COMPUSONICS

1355 S. Colorado Blvd. #607, Denver, CO 80222
303 753-0076
Digital audio recording & mixing system.

COMPUTER GRAPHICS LABS

405 Lexington Ave., New York, NY 10174
212 557-5130
Animate! video animation controllers. IMAGES II— character generator/graphics systems, digital art/paint systems. Instamation digital efx generators.

COMPUTER PROMPTING CORP.

#831, 115 K St. NW, Washington, DC 20005
202 783-2051
Computerized teleprompters.

COMREX CORP.

Box 780, Sudbury, MA 01776
800 237-1776
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.

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 IFB systems; RF mics.

COMTREC LTD.

POB 5500, Newport Beach, CA 92662
800 443-2751
MacVideo Cam monochrome cameras. Title keyers. 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

1602 Carolina St., Bellingham, WA 98226
206 734-4323
Automatic satellite switchers. Monitor/power amps. Audio routing switchers. 25 Hz tone sensors & generators.

CONIFER CORP.

Box 1025, Burlington, IA 52601
319 752-3607
Receive-only satellite earth stations, upconverters & downconverters; LNAs. MMDS & ITFS receivers.

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
203 324-2889/800 322-2537
Seck portable & stereo studio audio consoles. Accessit analog audio efx & reverb, monitor/power amps, audio patch panels & jackfields. Audio & video cable.

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

600 N. Rimsdale Ave., Covina, CA 91722
818 966-3511
Monochrome, NTSC, RGB & high resolution video monitors.

CONTINENTAL ELECTRONIC/ CONTEL

1620 W. 32 Pl, Hialeah, FL 33012
305 822-1421
Cart player/recorders; LPTV transmitters.

CONTINENTAL ELECTRONICS, DIV. VARIAN

Box 270879, Dallas, TX 75227
214 381-7161
AM, FM & short wave transmitters. FM exciters. RF loads, combiners, diplexers. FM antennas. Demodulators. Phasing & coupling.
Field Offices:
AL Dave Hultsman, Box 26509, Birmingham 35226 205 822-1078
CA Marvin Steelman, 11296 Lakeshore N., Auburn 95603 916 916 0277
CO Ken Perkins, 7846 S. Centaur Dr., Evergreen 80439 303 670-1049
IL John D. Abdnour, Box 575, Streator 61364 815 672-8535
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, Schroon 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 pg. 126.

Circle No. 186

See ad on pg. 119.

Circle No. 199.

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 328, Binghamton, NY 13902
607 724-2484
Power line conditioners for microprocessor-based equipment; transformers, 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 55415
612 642-4645
Hubcom transportable satellite earth stations. Satellite time brokers. Satellite newsgathering services.

CONVERGENCE CORP.

1641 McGaw, Irvine, CA 92714
714 250-1641
Two-machine editor/controllers, A/B roll editors, multisource editors. SMPTE time code generator/readers.
Field Office:
NY Steven DiFranco, 250 W. 57 St. #815, New York 10019 212 765-1333
See ad on pg. 32. Circle No. 122.

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 lav-alier, 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., Minneapolis, MN 55412
612 521-5870
Video production & post-production facilities; mobile production facilities rental; equipment rental services.

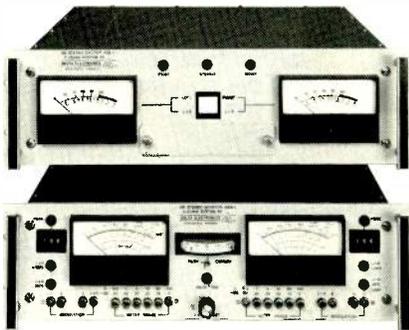
THE CROMWELL GROUP

Box 150846, Nashville, TN 37215
615 383-7560
Recording studios; financial consultants; marketing/advertising services.

CROSSPOINT LATCH CORP.

95 Progress St., Union, NJ 07083
201 688-1510
Compact studio/mobile, large automated & computer-controlled production switchers; post-production switchers; switcher with

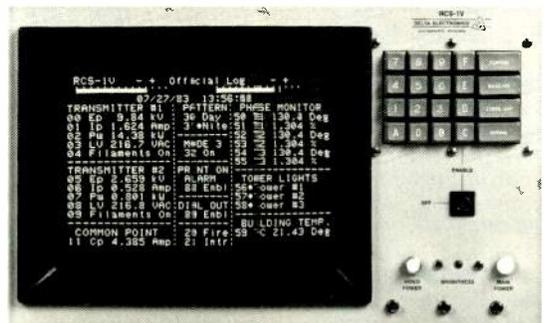
DELTA BROADCAST PRODUCTS



ASE-1/ASM-1

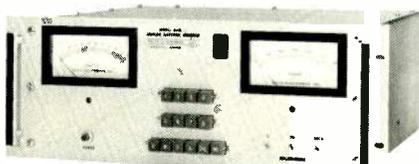
AM Stereo without compromise. The AM Stereo Exciter and Modulation Monitor provides a C-QUAM™ quadrature modulated stereo signal featuring low distortion and channel separation greater than 35 dB throughout the audio spectrum. The ASE-1 generates a signal to produce a phase modulated transmitter carrier. 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.



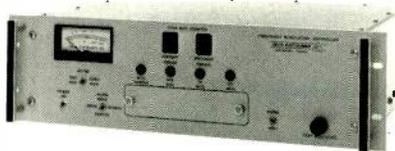
RCS-1V

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.



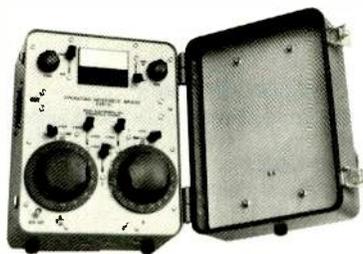
RG-4

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.



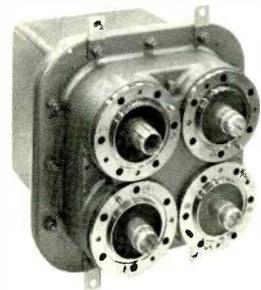
APC-1

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



dual TBC. Video sync, black burst, color bar generators. TBCs.
See ad on pg. 68. **Circle No. 145.**

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.
See ad on pg. 81. **Circle No. 153.**

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, ModelMaker 3D modeling & picture manipulation.

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.

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
617 777-1401
Waveform analyzers; waveform synthesizers; dc voltage standards. Voltmeters, multi-meters, capacitance meters, ohm meters.

DATATEK CORP.
1121 Bristol Rd., Mountainside, NJ 07092
201 654-8100

Audio preamps & line amps; audio DAs, audio routing switchers. Parallel & serial interface video routing switchers. Proc amps, video DAs, pulse amps, subcarrier amps. Transmitter color phase equalizer identification of source system (IDS).

DATAWORLD
Box 30730, 4827 Rugby Ave. #200, Bethesda, MD 20814
301 652-8822/800 368-5754
Computer database of FCC engineering information; antenna design services.

DATUM
1363 S. State College Blvd., Anaheim, CA 92806
714 533-6333
SMPT E time code generator/readers; VITC reader/generators; video source ID.

DAVIS & SANFORD
24 Pleasant St., New Rochelle, NY 10802
914 632-1636
Camera tripods, heads, pedestals, dollies, remote pan/tilt systems.

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. BTSC noise reduction cards. Mixer/distribution amplifier module. Digital STL for audio & EFP. Satellite compandor. Horizontal equipment rack.

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. Transmitter remote control systems. Modulation monitors, antenna monitors, RF power meters & wattmeters, RF test signal generators, impedance bridges, toroidal current transformers.
See ad on pg. 73. **Circle No. 149.**

DESISTI LIGHTING/ DESMAR CORP.
328 Adams St., Hoboken, NJ 07030
201 792-4980
Lamps, HMI & CSI fixtures, quartz fixtures, cyc lighting, lighting stands & rigging, dimmer packs. HMI ballasts. Lighting/ac cable.

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 mastering

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.

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 pg. 127. **Circle No. 188.**

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 pg. 75. **Circle No. 150.**

DIGIMAX INSTRUMENTS
8560 Production Ave., San Diego, CA 92121
619 578-7171
Audio preamps. Nicad batteries & chargers. LaserDisc videodisc players. 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.
See DSC

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 pg. 126. **Circle No. 187.**

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. Videl DAs, pulse amps.
See ad on pg. 27. **Circle No. 114.**

To a company whose name means quality, it was a natural step to take.

Dielectric Communications is now your single source for complete UHF RF systems due to our recent purchase of RCA's Antenna Division. Dielectric and RCA have had a long-term association, and are both known worldwide for highly reliable broadcasting equipment. It was only natural for Dielectric to begin offering these high quality antennas as part of our already extensive line of UHF components.

Over 600 UHF Pylon Antennas have been shipped from our Gibbsboro, NJ, assembly/test range and are providing years of trouble-free service with minimal maintenance. These ruggedly constructed antennas are designed for low relative windload and weight. All use a single feed point with high power input ratings. They are available in numerous vertical and horizontal pattern combinations to meet a wide range of broadcast coverage requirements.

Other broadcast products manufactured by Dielectric include: coaxial and waveguide diplexers; motorized waveguide and coaxial switches; rigid coax and waveguide transmission line and filter products; and custom RF systems with Magic Tee switching for UHF stations.

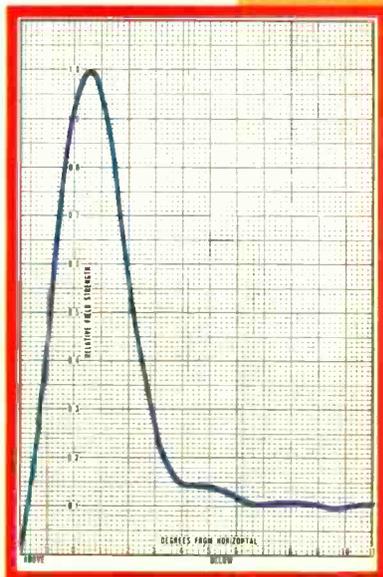
Dielectric's reliable equipment is backed by a full range of in-house services from design to field testing. Call us today for free specification brochures—**1-800-341-9678.**

The Tradition Continues.



Raymond, Maine 04071
(207) 655-4555 • (800) 341-9678
TWX: 710-229-6890

Circle 150 on Reader Service Card



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

Discriminate Audio Processor AM & FM compressor/limiters; Dorrough Loudness Meter. FM stereo generators.

R.L. DRAKE

Box 112, Miamisburg, OH 45342
513 866-2421

Receive-only satellite earth stations, LNAs.

DRAKE-CHENAULT RADIO CONSULTANTS

8399 Topanga Canyon Blvd., Canoga Park, CA 91304

213 883-7400

Radio consultants.

THE DROID WORKS

3301 Kearner Blvd., San Rafael, CA 94912
415 457-5282

EditDroid multisource video editor; SoundDroid audio editing/mixing system.

DRS

See PRECISION ECHO

DSC

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

Frame File digital still store; Prisma video animation controllers. Post-production switchers. Illusion & Eclipse digital video efx generators.

Field Offices:

CA Hugh Gillogly, 17206 Pinot Pl., Poway 92064 619 485-1156

FL Chuck Wacker, 820 NW 39 St., Gainesville 32605 904 375-6740

IN Morrell Beavers, Rt. 1, Box 47B, Trafalgar 46181 317 738-2319

MN Mike Barsness, 245500 Cedar Point Rd., New Prague 56071 612 758-3036

NY John Barker, 325 Central Ave. #219, White Plains 10606 914 738-3219

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

6 Forest Ave., Paramus, NJ 07652
201 845-8900

Telecine color correctors. Character generator/graphics systems; digital art/paint systems; 3D modeling & manipulation.

VICTOR DUNCAN

6305 N. O'Connor Rd. #100, Irving, TX 75039

214 869-0200

Video & film production equipment rentals, sales & service.

DUNCAN ELECTRONICS

2865 Fairview Rd., Costa Mesa, CA 92626
714 545-8261

Slideline slide attenuators.

DUNN INSTRUMENTS

544 Second St., San Francisco, CA 94107
415 957-1600

ProColor 35 mm tabletop camera.

DWIGHT CAVENDISH CO. LTD.

2117 Chestnut Ave., Wilmette, IL 60091
312 256-0937

Videocassette duplicating equipment & modules.

DX COMMUNICATIONS

10 Skyline Dr., Hawthorne, NY 10532
914 347-4040

Receive-only satellite earth stations, block downconverters, LNAs, modulators, 12 GHz equipment; satellite accessories, splitters, dividers, line amps.

DYMA ENGINEERING

Box 1535, Los Lunas, NM 87031
505 865-6700

Mic mixers, portable audio consoles. Audio DAs, audio routing switchers, audio patch panels & jackfields, audio mult boxes & splitters. Parallel & serial interface video routing switchers. Sync, black burst, color bar & video slate board/countdown generators. Proc amps, video DAs, pulse amps, subcarrier amps. Lamps, cyc lighting, lighting control boards, dimmer packs. Camera tripods & heads, dollies. Foam insert & rack configuration transportation cases, editing/production consoles. Cart/tape storage. FM antennas. Rigid, foam dielectric & coaxial transmission line. Facilities design & engineering services; engineering consultants.

DYNAIR ELECTRONICS

5275 Market St., San Diego, CA 92114
619 263-7711

Audio DAs, audio routing switchers. Parallel & serial interface video routing switchers. Parallel & serial interface machine control/technical automation; vertical interval systems. Video/cable equalizers. Video DAs, pulse amps, subcarrier amps.

See ad on pg. 77.

Circle No. 151.

DYNATECH DATA SYSTEMS

7644 Dynatech Ct., Springfield, VA 22153
703 569-9000

Video patch panels; coaxial patching equipment.

DYNATECH NEWSTAR

3001 Latham Dr., Madison, WI 53713
608 274-8686

NewStar & NewStar Discovery radio & TV newsroom computer systems.

EAGLE VIDEO

721 E. State St., Rockford, IL 61104
815 963-0963

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

EAST COAST VIDEO SYSTEMS

112 Ellington St., E. Orange, NJ 07017
212 431-7453

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

EASTMAN KODAK CO.

343 State St., Rochester, NY 14650
716 724-4293

Eastman professional videotape: one-inch, 3/4-inch cassettes, half-inch cassettes. Eastman film stock.

ECHOLAB

175 Bedford Rd., Burlington, MA 01803
617 273-1512

Portable production switchers, compact studio/mobile production switchers, post-production switchers. Digital efx generators.

ECONCO BROADCAST SERVICE

1318 Commerce Ave., Woodland, CA 95695

916 662-7553

Rebuilt power tubes.

EDCOR

16782 Hale Ave., Irvine, CA 92714
714 863-1529

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

EDITEL/CHICAGO

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

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

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.

EECO

1601 E. Chestnut Ave., Box 659, Santa Ana, CA 92708

714 835-6000

IVES two-machine editor/controllers, A/B-roll editors; EMME multisource editor; Eeconoline SMPTE time code generator/readers; VITC reader/generators; EECODER still-frame audio system for interactive videodiscs.

EEG ENTERPRISES

1 Rome St., Farmingdale, NY 11735
516 293-7472

SMPTE time code generator/readers. Video source ID. Closed captioning, teletext.

EEV

4 Westchester Plaza, Elmsford, NY 10523
914 592-6050

Leddicon camera pickup tubes; Photon monochrome cameras. RF amps, RF tubes. Vacuum tubes; rectifiers; capacitors; surge protectors; LCDs.

Field Offices:

CA Kees van der Keyl, 5455 Garden Grove Blvd. #420, Westminster 92683

714 895-3948

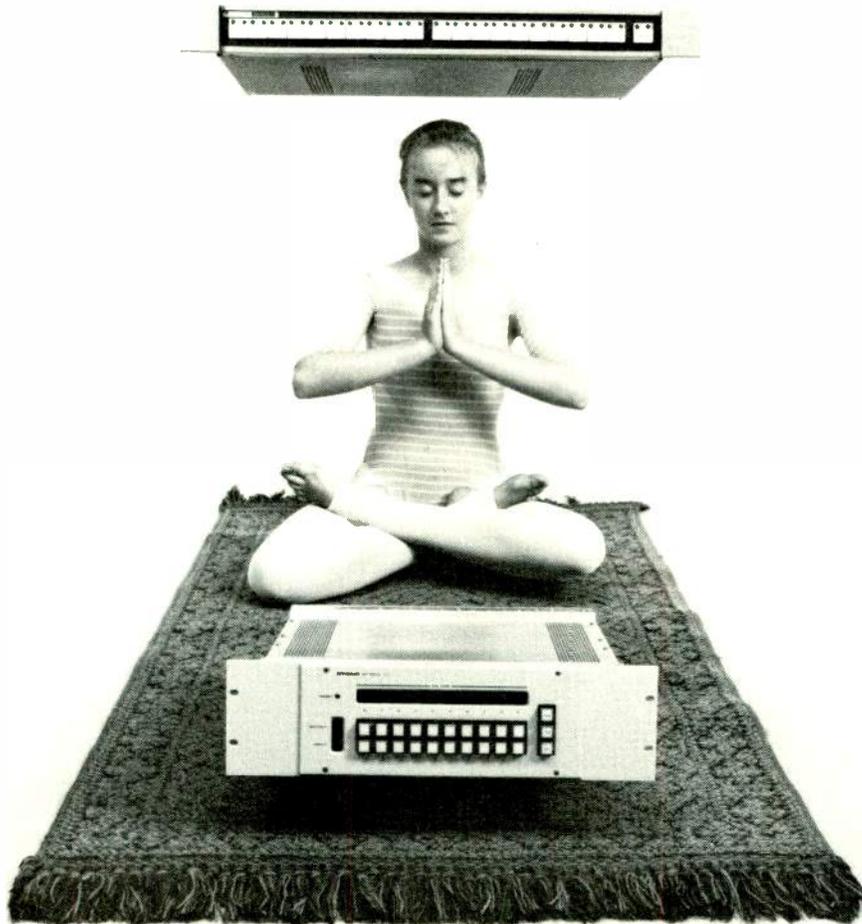
GA Harry Kozicki, 15 Dunwoody Pk. #100E, Atlanta 30338 404 394-9201

IL Jim Comella, 890 Deerpath, Hoffman Estates 60194 312 843-8417

Our Smart Little Switch Now *Has The Self-* **CONTROL** Of A Yoga Enthusiast

In 1979, our "Smart Little Switch" led the industry. At the time, this 10 x 10 switch had things pretty well under control. With its HDTV performance and component capability at NTSC prices, it soon had risen to become our fastest selling product. Today, it's still the source of considerable peace of mind on the part of users. Now we've teamed the Smart Little Switch with our new Series 1 Controls and are achieving far greater levels of self-control. With a wide range of options, users can add big system features to any Series 10 ever built. Just connect our PCA-904A Control containing one of its many software programs to the comm line and you have X-Y control of the entire matrix — in one rack unit. Insert a different program and you have sequential control that even remembers what you do for the time you do it. That's not all. Select from our growing library of software programs, in combination with Series 1 Controls, and you can achieve such big system features as: •Batch switching from a VDT or computer, or simply from 20 push buttons, each programmed for a different batch •Dedicated two-bus control in a single rack unit •Long distance computer control via modems. How's that for control? Using our new Series 1 Controls, there's no end to the system well-being that can be achieved if you put your mind to it. Why not Lotus Position your Series 10 for higher levels of control. If you're not a Series 10 user, with a little serious meditation you could be. To order, control yourself and call: 800-854-2831 NA. • 619-263-7711 CA.

Leaders in Signal  Switching and Control



DYNAIR

5275 Market Street, San Diego, California 92114

Circle 151 on Reader Service Card

Covering All the Bases

Meet the team of innovative Time Base Correctors from FOR-A. These high performance systems combine the latest advances in digital and component signal processing with the versatility to handle every professional broadcast and post-production application.

- **FA-410 Time Base Corrector**—The full-feature "Workhorse" TBC with Dynamic Tracking™ for the Sony BVU-820 and Panasonic NV-8950 VTRs.

- **FA-400/FA-420 TBCs with Frame/Field Picture Freeze** plus processing of Non-Synchronous signals from remote locations or Non-V-Locked VTRs.
- **FA-430 TBC with Image Processor**—Providing the ultimate in color correction, image enhancement and noise reduction with Y/C Dub, Dynamic Tracking and DOC.
- **FA-440 TBC with Video Production Effects**—An exciting array of multiple digital effects including Compression, Inversion, Mosaics, Posterization and Multi-Move.
- **FA-800 AUTOCOR Frame Synchronizer with Automatic Level Control**—Now with capability for correcting 1" (Type C) VTRs, including Velocity Correction, DOC and VTR SC mode.

- **FA-450 Component Interfacing TBC**—Handles any component, Y/C Dub or Composite Signal and provides Full Transcoding Interface capabilities including decoding and encoding functions. Employing 4:2:2 sampling and 8-bit encoding for each component, the FA-450 provides Full-Frame Correction, Color Picture Freeze, DOC and Dynamic Tracking. Designed with future video technology in mind, the FA-450 updates existing systems and insures against format obsolescence.

So cover all the bases and join the winning team. FOR-A is ready to review its versatile line-up with you. Call your FOR-A dealer . . . and ask about our new 2-year warranty.

U-matic and Dynamic Tracking are registered trademarks of Sony Corporation.



FOR-A®
INNOVATIONS IN VIDEO
and AUDIO TECHNOLOGY

FOR-A CORPORATION OF AMERICA Nonantum Office Park, 320 Nevada Street, Newton, MA 02160
East Coast: (617) 244-3223 West Coast: (213) 402-5391

WA Don Rose, 19001 40 Pl. N.E., Seattle
98155 206 363-2200

EG&G

35 Congress St., Salem, MA 01970
617 745-3200
Strobe-guard tower lighting.

EIDSON ELECTRONIC CO.

Box 3751, 3409 W. Pecan Dr., Temple, TX
76501
817 773-3901
Quartz crystals for AM, FM, TV.

EIGEN VIDEO

Box 848, Nevada City, CA 95959
916 272-3461
3/4-inch U VCRs; digital image processors;
videodisc recorders; digital framestores.

ELCOM BAUER

6199 Warehouse Way, Sacramento, CA
95826
916 381-3750
ALC & AGC amps, AM & FM compressor/
limiters. AM & FM transmitters; FM exciters;
antenna tuning units; AM diplexers,
triplexers.

ELCON ASSOCIATES

1450 O'Connor Dr., Toronto, Ont., Canada
M4B 2T8
416 759-5614
Videotape cleaners, evaluators.

ELECON

See UNIVERSAL ELECON

ELECTOR USA

Box 699, Pinebrook, NJ 07058
201 882-0584
Barco NTSC & high resolution video monitors
& video projectors; TV tuners.

ELECTRIC WORKS, COMM. DIV.

14952 Waverly, Irvine, CA 92714
714 551-3998
Video interface for audio consoles; electronic
audio editors, SMPTE time code synchronizers;
time insertion sequencers, computer
automation controllers. Telecine control systems;
vertical interval machine control; two-
machine editor/controllers. A/B-roll editors,
SMPTE time code generator/readers, VITC
reader/generators. Engineering consultants.

ELECTRO CONTROLS

2975 S. 300 W., Salt Lake City, UT 84115
801 487-9861
Celebrity, Celebrity Plus & Premiere lighting
control boards; dimmer packs.

ELECTROHOME

809 Wellington St. N., Kitchener, Ont.,
Canada N2G 4J6
519 744-7111
NTSC encoders. Monochrome, NTSC, RGB
& high resolution video monitors; video
projectors. Large-screen color data/graphics &
video production systems. Receive-only satellite
earth stations; SMATV antennas.
Field Office:
NY 250 Wales Ave., Tonawanda 14150
716 694-3332

ELECTRO IMPULSE LAB

116 Chestnut St., Box 870, Red Bank, NJ
07701
201 741-0404
RF attenuators, RF loads. RF power meters,
wattmeters, calorimeters.

ELECTRONICS DIVERSIFIED

1675 N.W. 216 Ave., Hillsboro, OR 97124
503 645-5533
Lighting control boards (Litestar, Trouba-
dour, TCC, SEC, DCC, Showboard), dimmer
packs (Dimmex, SCRimmerette, SCRimmer,
SCM, Mark VII, DPC).

ELECTRO & OPTICAL SYSTEMS

31 Progress Ct., Unit 13, Scarborough,
Ont., Canada M1G 3V5
416 439-9333
Agents for Pye TVT, Philips, CEL, Electro-
craft, CMX, Merlin, Barco & Mycrotex.

ELECTRO-SOUND

160 San Gabriel Dr., Sunnyvale, CA 94086
408 245-6600
High-speed tape duplicating equipment.

ELECTRO-VOICE

600 Cecil St., Buchanan, MI 49107
616 695-6831
Dynamic, electret/condenser, shotgun & lav-
alier mics. Graphic equalizers. Sentry monitor
speakers.
Field Office:
CA Doug MacCallum, 8234 Doe Ave., Box
3297, Visalia 93277 209 651-7777
MI Jesse Walsh/Terry Smith, 600 Cecil St.,
Buchanan 49107 616 695-6831
CAN Mark Simmons, 345 Herbert St., Box
520, Gananoqui, Ont. K7G 2V1
613 382-2141

ELICON

940 S. Leslie St., La Habra, CA 90631
714 870-6647
Animation stand motion control systems;
character generator/graphics systems; 3D
modeling & manipulation; bit pad digitizers.

EMCEE

Box 68, White Haven, PA 18661
800 233-6193
Transmitters: VHF, UHF, LPTV, MMDS, ITFS,
translators. Turnkey facilities installation;
transmitter system design services.

EMCOR PRODUCTS

1600 Fourth Ave. N.W., Rochester, MN
55901
507 289-3371
Rack configuration transportation cases;
cabinets; studio consoles; equipment racks.

EMERGENCY ALERT RECEIVER

Box 20629, New York, NY 10025
212 695-4767
FM SCA receivers; EBS receivers.

EMPIRE VIDEO

216 E. 45 St., New York, NY 10017
212 687-2060
Video post-production facilities.

ENCLOSURE CORP.

2900 Wharton Rd., Bristol, PA 19007
215 785-2900
Cabinets; equipment racks.

ENERTEC SCHLUMBERGER/ PROFESSIONAL AUDIO

1 Rue Nieuport, 78140 Velizy Villacoublay,
France
1 30703070/Telex 697430 ENERSON F
Mic mixers, portable audio consoles, mono &
stereo studio consoles, audio-for-TV con-
soles. Single-deck & dual/triple-deck cart
players. Portable ATRs, 2-/4-track studio

ATRs. Open-reel audio tape, carts, cas-
settes, 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 ra-
dio & TV centers.

E-N-G CORP.

2930 Cloverdale Ave., Concord, CA 94520
415 798-4060
ENG microwave-equipped mobile vehicles
with telescoping masts. Satellite
newsgathering vehicles.

ENG HELICOPTER PRODUCTIONS, LTD.

9919 Carter Rd., Bethesda, MD 20817
301 469-8109
Helicopter-mounted camera stabilizing sys-
tems; complete helicopter microwave &
communication system rentals.

ENTERPRISE ELECTRONICS

Box 1216, Industrial Park, Enterprise, AL
36331
205 347-3478
Weather radar systems, tracking radar sys-
tems, Doppler radar systems.

ENVIRONMENTAL CONTAINER SYSTEMS

3560 Rogue River Hwy., Box 188, Grants
Pass, OR 97526
503 476-8871
RFI/EMI shielded containers; shock & vibra-
tion isolated containers.

ENVIRONMENTAL SATELLITE DATA

5200 Auth Rd., Suitland, MD 20746
301 423-2113
Color Connection & Front End weather
graphics displays, weather satellite
displays, weather radar displays, weather
symbol inserters, weather-based art/paint
systems, LPATS lighting detection & display.

ENVIRONMENTAL TECHNOLOGY

1302 High St., South Bend, IN 46618
219 233-1202
Tower ice sensors. Air dehydrators.
Field Offices
IL Tom Kellner, 730 N. Hicks Pl. #407,
Palatine 60067 312 358-2622
NC Robert Millice, POB 221972, Charlotte
28222 704 542-3380

ESC ELECTRONICS

534 Bergen Blvd., Palisades Park, NJ
07650
201 947-0400
Delay lines, LC filters, transformers.

ESE

142 Sierra St., El Segundo, CA 90245
213 322-2136
Digital clocks, timers, complete clock/timing
systems. Audio DAs, telco interface equip-
ment; VU meters, LED audio level displays;
EBS two-tone systems. Two-machine editor/
controllers, SMPTE time code generator/
readers. Video DAs.

See ad on pg. 43.

Circle No. 127.

ESL

120 S.W. 21 Terrace #C104, Ft.
Lauderdale, FL 33312
305 583-0626
EELA Audio mixers, ancillary broadcast

equipment, telephone hybrids, Reporto-
phone minimixer.

ESPN

ESPN Plaza, Bristol, CT 06010
203 584-8477

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

ETHEREUM SCIENTIFIC CORP.

7641 Clarewood #336, Houston, TX 77036
713 784-2630

Design & construction of transportable
uplink/downlinks & satellite newsgathering
vehicles; earth station site selection; satellite
time brokers.

EVENTIDE

1 Alsan Way, Little Ferry, NJ 07643
201 641-1200

Harmonizer digital audio efx; digital audio
delay; Timesqueeze audio time
compression/expansion. Spectrum
analyzers.

EVERTZ MICROSYSTEMS

3515 Mainway, Burlington, Ont., Canada
L7M 1A9
416 335-3700

Chaser & Emulator SMPTE time code syn-
chronizers. SMPTE time code generator/
readers, VITC reader/generators; video slate
board/countdown generators; titlers &
subtitlers. Digital clocks, timers, complete
clock/timing systems.

EXCALIBUR INDUSTRIES

12427 Foothill Blvd., Lake View Terrace,
CA 91342
818 899-2547

Foam insert, padded nylon & rack configura-
tion transportation cases; editing/production
consoles.

EXPRESS TOWER CO.

Box 37, Locust Grove, OK 74365
918 479-6484

Tower masts; tower construction.

EXR

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

Audio processing exciter, projector.

FAIRLIGHT INSTRUMENTS

2945 Westwood Blvd., Los Angeles,
CA 91364

213 470-6280

Music synthesizers. CVI digital video efx
generator.

FANTASEE LIGHTING

404 N. River, Ypsilanti, MI 48197
313 482-6565

Distributor of full line lighting fixtures, con-
trollers, rigging & accessories. Set design
service.

FAROUDJA LABORATORIES

946 Benicia Ave., Sunnyvale, CA 94086
415 941-8585

ColorEx video noise reducers; VHP &
RecordEx image enhancers; video flesh tone
corrector. NTSC encoders, decoders, comb
filter boards.

FARRTRONICS

480 Dutton Dr., Waterloo, Ont., Canada
N2L 4C6
519 746-6200/800 265-2713

Hardwired intercom systems. Audio DAs,
audio patch panels & jackfields. VU meters.
Video patch panels.

FAX PRODUCTIONS

4924 Hampden Ln., Bethesda, MD 20814
301 652-7800

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

FIBERBILT CASES

601 W. 26 St., New York, NY 10001
212 675-5820

Foam insert (Supercase) & rack configura-
tion (Supertrunk) transportation cases.

FICON BROADCAST

Box 150846, Nashville, TN 37215
615 329-2400

Radio business automation software.

FIDELIPAC

Box 808, Moorestown, NJ 08057
609 235-3900/800 HOT TAPE

Dynamax single-deck, dual/triple-deck &
phase control matrixing audio cart player/
recorders; audio carts, tape erasers &
degaussers. Cart/tape storage.

See ad on pg. 1

Circle No. 101.

FILM & VIDEO ASSOC.

2700 Seventh Ave. S., Birmingham, AL
35233

205 322-6348

Video production facilities; mobile produc-
tion facilities rental; equipment rental ser-
vices; production support services.

FILM/VIDEO EQUIPMENT SERVICE

1875 S. Pearl St., Denver, CO 80210
303 778-8616

Wide Eye wide-angle lens attachments Por-
table Energy Products nicad & lead-acid
batteries, chargers.

IMERO FIORENTINO ASSOC.

44 W. 63 St., New York, NY 10023
212 246-0600

Facilities design & engineering services; set/
studio design services; engineering
consultants. 3M Scanmural studio set
backdrops.

Field Office:

CA Robert M. Dahl/Nancy Haas, 7060 Hol-
lywood Blvd. #1000, Hollywood 90028
213 467-4020

FIRSTCOM BROADCAST SERVICES

13747 Montfort #220, Dallas, TX 75240
214 934-2222

Music libraries on CD; syndicated radio
programming.

FISHER BERKELEY CORP.

5800 Christie Ave., Emeryville, CA 94608
415 655-9696

Ektacom hardwired intercom systems.

FITZCO SOUND

912 N. Midhiff, Midland, TX 79701
915 684-0861

Audio equipment rental service; audio engi-
neering consultants. Facilities design & engi-
neering facilities; video production &
post-production facilities; mobile production
facilities rental; recording studios.

FLASH TECHNOLOGY

55 Lake St., Nashua, NH 03060
603 883-6500

High-intensity tower beacons; photoelectric
controls; remote monitoring for incandes-
cent lighting.

JOHN FLUKE MFG. CO.

Box C9090, Everett, WA 98206
206 356-5400

RF test signal generators; frequency coun-
ters. Voltmeters, multimeters, dB meters.

FOR-A CORP. OF AMERICA

Nonantum Office Park, 320 Nevada St.,
Newton, MA 02160
617 244-3223

Digital audio memory, digital audio storage.
Digital still stores; titlers & subtitlers, "draw-
on-screen" systems; post-production
switchers, component switchers. Digital efx
generators, compressor/positioners, RGB &
encoded chromakeyers, downstream
keyers. SMPTE time code generator/
readers, VITC reader/generators. TBCs,
frame synchronizers, field/framestores, TBC/
framestores, color correctors. NTSC
encoders, decoders. Video DAs.

Field Offices:

CA 11060-E Artesia Blvd., Cerritos 90701
213 402-5391

IL 7250 S. Millard St., Chicago 60629

312 582-2233

See ad on pg. 78.

Circle No. 152.

FOROX CORP.

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

Video animation controllers; animation stand
motion control. Film cameras. Film
recorders.

FORTEL

2985 Gateway Dr., Norcross, GA 30071
404 447-4422

TBCs, field synchronizers, frame synchroni-
zers; Turbo 2 field/framestores & TBC/
framestores; Colorex video noise reducers &
image enhancers; color correctors.

Field Offices:

CA Tim Stockhaus, 1374 Wright Ave.,
Sunnyvale 94087 408 730-5919

CT John Duffy, 135 Rainbow Trail, Vernon
06066 203 872-1087

KS David Rangel, 10778 Hauser Dr.,
Lenexa 66210 913 469-9430

FOSTEX CORP. OF AMERICA

15431 Blackburn Ave., Norwalk, CA 90650
213 921-1112

Mic mixers, portable consoles. 2-1/4-track &
multitrack ATRs. Portable, multitrack inte-
grated cassette recorder/mixer. Audio
compressor/limiters, graphic equalizers.
Analog special efx, reverb. Monitor speakers
& components, headphones. Dynamic, rib-
bon, moving coil & stereo mics. Audio line &
power amps. Audio-to-video synchronizers
and editing systems.

See ad on pg. 83.

Circle No. 155.

FREELAND PRODUCTS CO.

Rt. 7 Box 628, Covington, LA 70433
504 893-1243/800 624-7626

Rebuilt RF tubes.

FREQUENCY DEVICES

25 Locust St., Haverhill, MA 01830
617 374-0761

Active filter modules for stereo generators.

FREZZOLINI ELECTRONICS

5 Valley St., Hawthorne, NJ 07506
201 427-1160

Lamps, quartz lighting fixtures, lighting stands & rigging. Nicad & lead-acid batteries & chargers, ac/dc converters & inverters.
See ad on pg. 82. Circle No. 154.

FUJINON

672 White Plains Rd., Scarsdale, NY 10583
914 472-9800
Camera lenses, lens remote control.

FUJI PHOTO FILM USA

555 Taxter Rd., Elmsford, NY 10523
914 789-8100
One-inch videotape; 3/4-inch & half-inch videocassettes.

Field Offices:

CA 1211 E. Artesia Blvd., Carson 90746
213 636-0101
GA 5461 Peachtree Ind. Blvd., Norcross
30092 404 441-2222
IL 1000 Pratt Blvd., Elk Grove Village 60007
312 569-3500
NJ 800 Central Blvd., Carlstadt 07072
201 935-6022
TX 3500 Garden Brook Dr., Dallas 75234
214 243-2537

See ad on pg. 86.

Circle No. 156.

GABRIEL ELECTRONICS

Box 70, Libby Rd., Scarborough, ME 04074
207 883-5161
Microwave antennas. Rigid, foam dielectric & coaxial transmission line.

GARNER INDUSTRIES

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

Tape duplicators. Audio head degaussers; audio & video tape erasers, degaussers

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.

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 6-206, 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; mobile vehicle construction.

GENERIC COMPUTER SYSTEMS

WISR Bldg., Box 151, Butler, PA 16001
412 283-1300

Radio business automation software.

b MEANS IT'S VERIFIED

GENTNER ENGINEERING CO.

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

801 268-1117

Hardwired intercoms; audio DAs, audio routing switchers, audio patch panels & jackfields; telco interface equipment.

GENTNER RF PRODS. DIV.

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

Transmitter remote control systems & satellite network controllers; remote control accessories.

GLENTRONIX (1977) LTD.

90 Nolan Ct., Unit #7, Markham, Ont., Canada L3R 4L9

416 475-8494

Equipment rental services. Exclusive Canadian distributor of Ross video switchers & special eff systems, Dynatech jackfields, Telcom Research time code generator/readers & synchronizers, Porta-Pattern test charts, CMC head rebuilding program, Scientel sideband analyzers, Torpey clocks & timing systems.

GLM™



Advancing technologies can move at such a rate a new product may blur by without offering the true explanation of why it was developed in the first place.

Quite simply the new GLM is a superior studio quality microphone that incorporates all the benefits of its larger more conventional predecessors.

Crown technology has always ignored the conventions of new product development and recognized no limits in achieving the ultimate in professional quality.

See your nearest Crown dealer. Find out how this incredibly small microphone achieves such a high level of performance.

Crown International, Inc., (219) 294-8000
1718 W. Mishawaka Rd., Elkhart, IN 46517

 **CROWN®**

GML AMERICA
 8150 Leesburg Pike #910, Vienna, VA 22180
 703 790-0101
 Digital video efx generators; TBC/framestores.

GOLDEN APPLE MEDIA
 112 W. Boston Post Rd., Mamaroneck, NY 10543
 914 381-4141
 Video production & post-production facilities rental; recording studios; audio post-production facilities, facilities design & engineering services; set/studio design services; engineering consultants.

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 90039
 213 466-3561
 Swintek Hitchhiker RF mics; mic fishpoles. Filmo & Image 300 cine cameras; Trinitar 16 mm lenses. EOS & Lynx Robomation video animation controllers. Nicad batteries, chargers. Pearson camera heads, Colortran & Elemack dollies, Elemack cranes & jibs. Equipment rental services

GORMAN-REDLICH MFG.
 6 Curtis St., Athens, OH 45701
 614 593-3150

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

GOTHAM AUDIO
 1790 Broadway, New York, NY 10019
 212 765-3410
 Portable, stereo studio & audio-for-TV consoles; console automation. CD/DAD players, turntables, pickup arms, phono cartridges, complete disc consoles. Computer automation controllers, complete program automation systems, automatic time/weather announcers. ALC & AGC amps, AM & FM compressor/limiters, parametric & graphic equalizers, audio noise reduction. Digital audio efx & reverb, digital delay. Monitor speakers. Electret/condenser, shotgun & stereo mics; mic booms & dollies. Audio preamps & line amps. Audio routing switchers. Rotary & slide attenuators, VU & PPM meters, LED displays, video monitor displays. Wow & flutter meters. Audio cable.
Field Office:
 CA 7445 Orion Ave., Van Nuys 91406 818 785-2211

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
 Audio-for-TV consoles; audio DAs; PPM meters. Downstream keyers; video DAs, pulse

amps, subcarrier amps. Custom transmitter remote control systems.

GRAPHIC EXPRESS
 3678 Fourth Ave., San Diego, CA 92103
 619 298-2834
 Modular news & studio sets, scenery construction, scenery rigging, props & materials, set design service. Studio furniture, cabinets, studio consoles. News graphics slide service, lighting design.

THE GRASS VALLEY GROUP
 Box 1114, 13024 Bitney Springs Rd., Grass Valley, CA 95945
 916 273-8421

Audio-for-TV consoles. Audio DAs, audio routing switchers. Dubner titlers & subtitlers. Texta character generator/graphics systems, digital art/paint systems, 3D modeling & manipulation, "draw-on-screen" systems. Weather-based art/paint systems. Compact studio/mobile & large automated production switchers; post-production switchers, component switchers. Kaleidoscope digital efx generators. Manual & automated master control switchers. Parallel interface video routing switchers. Audio routing switchers. Parallel interface machine control/technical automation. Two-machine video editor/controllers, multisource video editing systems. Video sync generators. Video/cable equalizers. Proc amps, video DAs, pulse amps. Wavelink, EZ-Link fiberoptic systems. SC/H phase meters.
Field Offices:
 CA Doug Buterbaugh, 21243 Ventura Blvd. #206, Woodland Hills 91364 213 999-2303

Frezzi On-Board™

UNINTERRUPTIBLE POWER

during battery changing

ON ENG/EFP CAMERAS

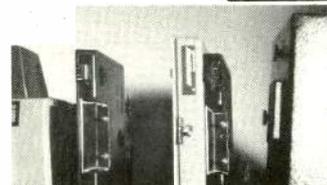
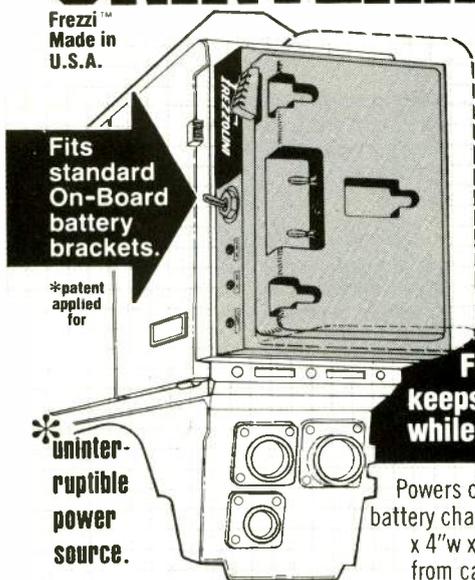
Frezzi™ - Power-UPS-Interface* keeps you shooting without stopping while you change camera battery.

Powers camera (up to) 5 minutes during camera battery change • Wt: less than 1 1/2 lbs • Size: 5.3" h x 4" w x 1.4" d • automatically re-charges itself from camera battery - ready to power camera •

Call (201) 427-1160 for information

Frezzolini Electronics Inc.

5 Valley St. Hawthorne, N.J. 07506 • TWX: 710-988-4142



Frezzi™ "one source" for all your portable power & lighting needs.

Multi-function Dual-channel AC Adapter-Battery Charger



Two independent ac adapters or chargers in one unit.

Full 4AH Premium Battery Packs for portable cameras.



12-Oz. "Mini-Fill" camera light & accessories.



Used by all 3 major networks.

FBP-90FC Exclusive: extra output connector for portable lights



1-hour re-charge. For recorders, cameras, lights.

For more information and catalogs call (201) 427-1160/1/2.

Frezzolini Electronics Inc.

7 Valley St. Hawthorne, N.J. 07506-2084
 TWX: 710-988-4142 Made in U.S.A.

ON-LINE AUDIO FOR OFF-LINE VIDEO.

Fostex



COMPLETE 8-TRACK AUDIO POST SYSTEMS FROM \$6000.

Here's your best buy in a fully functional audio sweetening facility, complete from input to output. Made expressly for film and video post production. No other manufacturer can offer you complete systems, fully integrated, ready for video or film interface.

Many popular record, TV show themes and movie soundtracks have been recorded on this equipment. Join the fast-growing list of Fostex professional users. You can continue to go outside for all your audio post work, or you can go on-line with Fostex and watch your investment pay for itself

Fostex

PERSONAL MULTITRACK
FOSTEX CORPORATION OF AMERICA
15431 Blackburn Ave., Norwalk, CA 90650
(213) 921-1112

- Model 80: 8-track recorder with integral Dolby C NR. **\$2000**
- Model 20: 2-track recorder with center SMPTE track. **\$1000**
- Model 4030 Synchronizer with Model 4035 Remote Controller: one master recorder can control up to three slaves with chase, pre-roll; resolves to film. **\$2000**
- Model 450: 8 x 4 x 2 recording console with parametric EQ, solo and in-line monitoring. **\$1000**
- Fostex makes a complete line of microphones, monitors, recorders, signal processors and accessories, even the interconnecting cable.
- All prices are approximate retail. You can pay more if you insist, but wouldn't it be better to check with a Fostex dealer first? The more you invest in a Fostex post suite, the more you'll save for that next expensive piece of video hardware. Look to Fostex for all your on-line audio needs.

Prices subject to change without notice.

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 Mark Everett, 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
See ad on pg. 8.
See ad on pg. 85. **Circle No. 157.**

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 Emerson Ray, Box 24336, Tampa
33623 813 885-1411
LA 5441 Pepsi St., New Orleans 70123
504 733-7265
GA Dick Schmidt, 2254 Northwest Pky.
#C, Marietta 30067 404 925-7725
TN Fred McCoy, 1838 Elm Hill Pike #101,
Nashville 37210 615 883-9175

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

SMPT E time code generator/readers, VITC
reader/generators; video reticle generator.

THE GREAT AMERICAN MARKET
826 N. Cole Ave., Hollywood, CA 90038
213 461-0200

Lamps, HMI & CSI fixtures, quartz fixtures,
cyc lighting, lighting stands & rigging, diffu-
sion & efx material, lighting control boards.
Lead-acid batteries, chargers; HMI ballasts.

**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; en-
gineering consultants; mobile vehicle con-
struction; studio cabinets & furniture;
set/studio design services.

GROSH SCENIC STUDIOS
4114 Sunset Blvd., Hollywood, CA 90029
213 662-1134
Scenery construction & rigging.

**GRUMMAN ELECTRONICS
SYSTEMS**
Sunrise Hwy. #A38-43, Great River, NY
11739
516 435-6001
Parallel & serial interface machine control/
technical automation; ad insertion systems.

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

CEL Ltd. audio routing switchers, digital vid-
eo efx generators, compressor/positioners,
serial interface video routing switchers,
TBCs, field synchronizers, frame synchroniz-
ers, field/framestores, TBC/framestores, vid-
eo noise reducers, image enhancers, color
correctors, standards converters. Brabury
NTSC, RGB & high resolution video monitors.

**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.

GTE ELECTRICAL PRODUCTS
Sylvania Lighting Center, 100 Endicott St.,
Danvers, MA 01923
617 777-1900
Sylvania lamps.

HALLIKAINEN & FRIENDS
141 Suburban Rd. Bldg. E4, San Luis
Obispo, CA 93401
805 541-0200

Audio-for-TV consoles. Log printers, auto-
matic TV & radio monitors, status/alarm indi-
cators. Telemetry adapters to digitize &
automate Moseley TRC 15A remote control.

HARDIGG INDUSTRIES
N. Main St. Box 201, S. Deerfield, MA
01373
413 665-2163

Foam insert & rack configuration transporta-
tion cases.

HARRIS BROADCAST DIV.
Box 4290, 3200 Wismann Ln., Quincy, IL
62305
217 222-8200

Mono & stereo studio audio consoles, audio-
for-TV consoles; computer automation con-
trollers, automatic satellite switchers,
complete program automation systems; ra-
dio business automation software; ALC &
AGC amps, AM & FM compressor/limiters,
audio noise reduction; audio preamps, line
amps, monitor/power amps, amp power
supplies.

Studio & ENG cameras; digital efx gener-
ators, compressor/positioners; TBCs, frame
synchronizers, field/framestores, TBC/
framestores, video noise reducers.

AM, FM, VHF & UHF transmitters; AM, AM
stereo, FM & TV exciters, stereo generators;
RF amps, loads & switches; intercity, porta-
ble ENG & airborne microwave systems,
central receivers, SMATV systems; FM, TV
HP & TV CP antennas.

**HARRIS BROADCAST
MICROWAVE**
967 Stierlin Rd., Mountain View, CA 94043
415 969-9100

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

**HARRIS CORP., SATELLITE
COMMUNICATIONS DIV.**
Box 1700, Melbourne, FL 32901
800 327-8478

Delta Gain lines of transmit/receive, receive-
only & transportable satellite earth stations;
upconverters, downconverters, LNAs &
LNCs, encryption systems, MAC systems,
satellite network controllers. Satellite audio,
video & data exciters & receivers. Low- &
high-rate modems for connecting earth sta-
tion systems. Communications antennas.

HARRIS 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, 3129 S. Sycamore,
Santa Ana 92705 714 850-1894
CT John Burger, 17 Tally Ho Rd.,
Ridgefield 06877 203 431-9381
FL John Borger, 1451 Owen Dr., Clear-
water 33519 813 797-4191
KS Shawn Underwood, 9025 Reeder St.
#1602, Overland Park 66214 913 541-0153

HARRISON SYSTEMS
Box 22964, Nashville, TN 37202
615 834-1184

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

HBO STUDIOS
120-A E. 23 St., New York, NY 10010
212 477-8600

Video production & post-production
facilities.

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.

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. TAF C-34, Spokane, WA
99220
509 922-4001

Audio test signal generators, harmonic dis-
tortion meters. Demodulators, modulation
monitors, RF test signal generators.

HIPOTRONICS
Drawer A, Rte. 22N, Brewster, NY 10509
914 279-8091

Automatic voltage regulators; ac/dc high
voltage test sets; voltmeters.

**RICHARD HIRSCHMANN OF
AMERICA**
POB 229, Riverdale, NJ 07457
201 835-5002

Fiber optic audio & video transmission
systems.

See ad on pg. 149. **Circle No. 246.**

HITACHI DENSHI AMERICA
175 Crossways Park W., Woodbury, NY
11797
516 921-7200
Studio, ENG, single-tube color & CCD color

Have you heard the news about the Grass Valley Group 1680 Series Production Switchers?

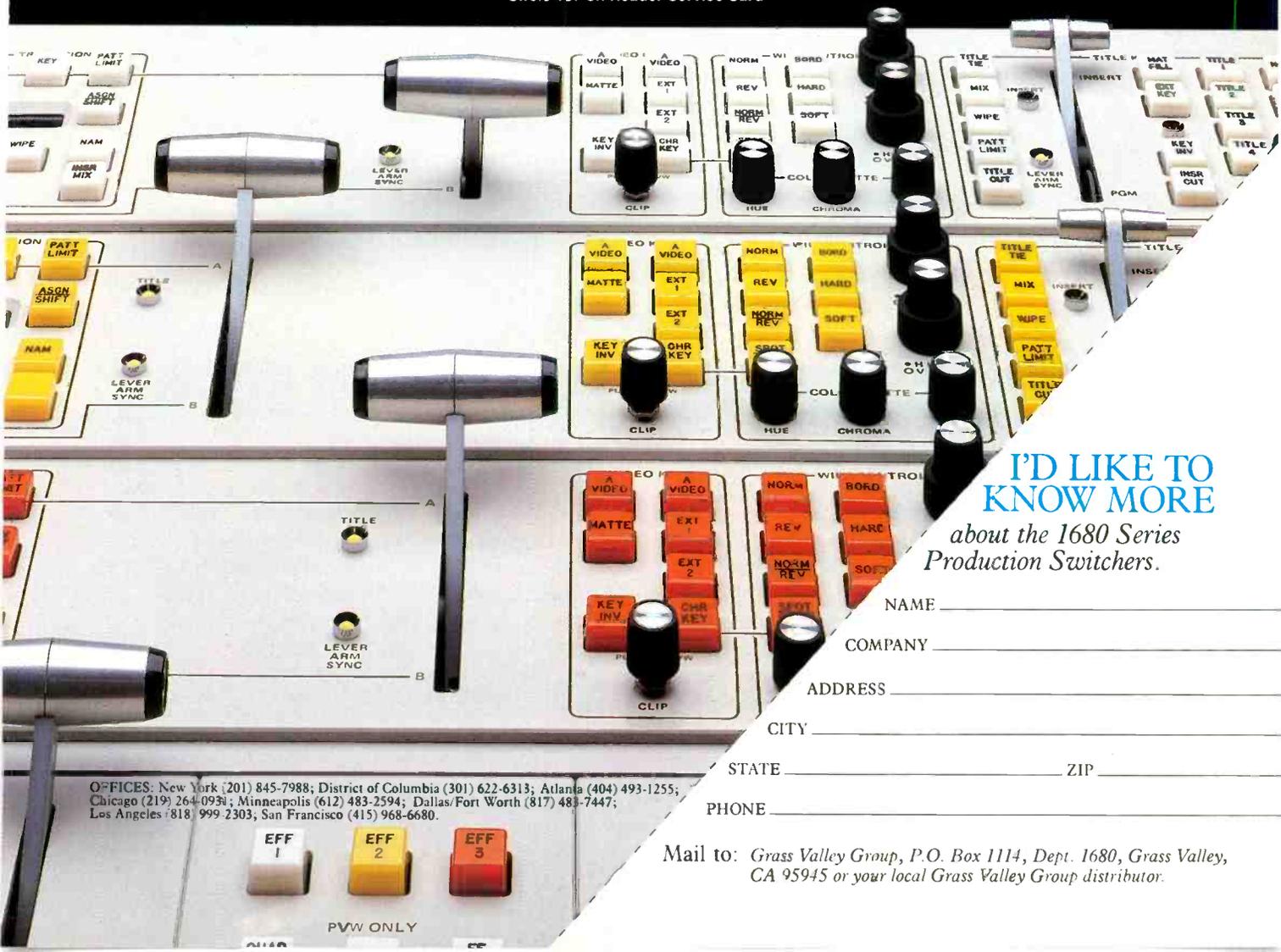
You never will unless you call
or send the coupon below to your local
Grass Valley Group distributor
or sales representative today.

Grass Valley Group®

A TEKTRONIX COMPANY

STRENGTH YOU CAN RELY ON

Circle 157 on Reader Service Card



**I'D LIKE TO
KNOW MORE**

*about the 1680 Series
Production Switchers.*

NAME _____

COMPANY _____

ADDRESS _____

CITY _____

STATE _____

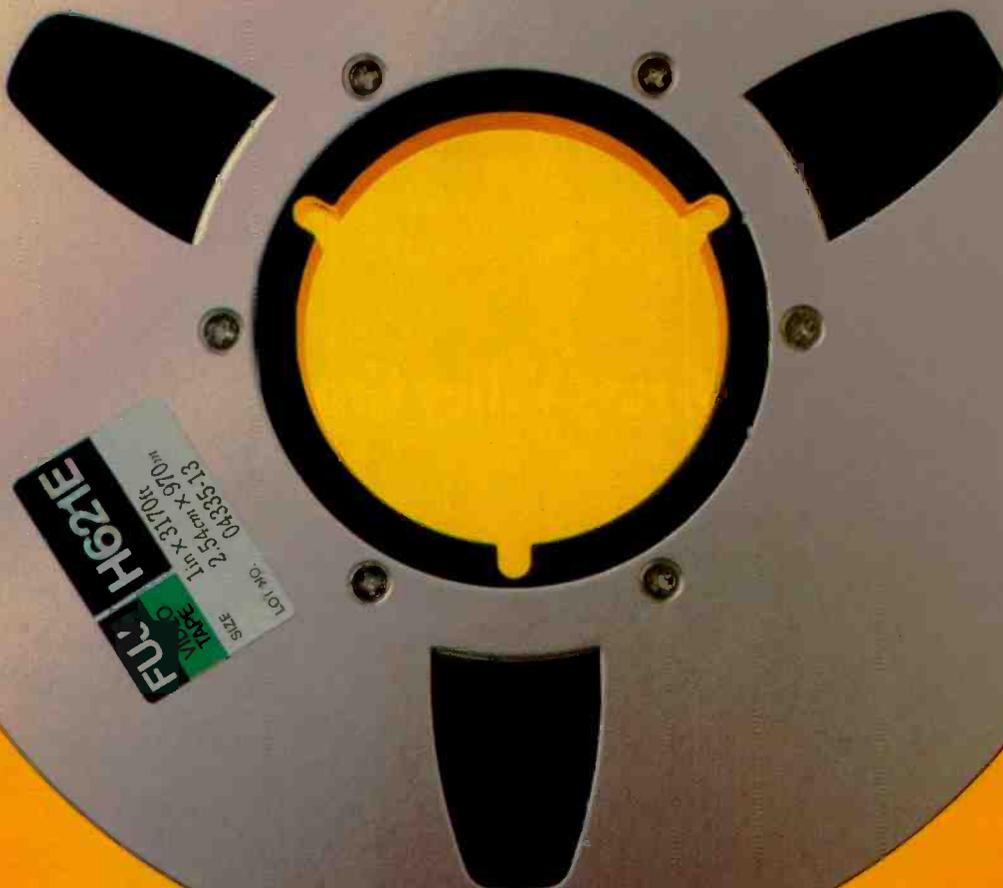
ZIP _____

PHONE _____

OFFICES: New York (201) 845-7988; District of Columbia (301) 622-6313; Atlanta (404) 493-1255;
Chicago (219) 264-0934; Minneapolis (612) 483-2594; Dallas/Fort Worth (817) 483-7447;
Los Angeles (818) 999-2303; San Francisco (415) 968-6680.

Mail to: Grass Valley Group, P.O. Box 1114, Dept. 1680, Grass Valley,
CA 95945 or your local Grass Valley Group distributor.

FUJI
VIDEO TAPE
MADE IN JAPAN



NEVER HAS ONE INCH BEEN TAKEN SO FAR.

We could tell you that Fuji's H621E 1" video-tape has a video and chroma S/N rating 2dB higher than even our best 1" tape.

And we could tell you that now we've made H621E even better with an audio rating that's 3dB higher.

But why tell you when we can show you? We'll do it right before your eyes, in your own facility. Just call your Fuji representative. He'll introduce you to a tape that will give you clear,

crisp audio and unsurpassed picture quality after more generations than you'll probably ever need.

Of course, good news travels fast. So before all these extra dBs wind up in someone else's studio, call the nearest regional office listed below toll-free and ask them for a demonstration of Fuji H621E. Because when it comes to great audio and video reproduction, why look any further?

 **FUJI** PROFESSIONAL
VIDEOTAPE

FUJI PROFESSIONAL VIDEOTAPE PRODUCTS:

Northeast Region 1-800-526-9030
(in NJ 201-935-6022)

Southeast Region 1-800-241-6005
(in GA 404-441-2222)

Midwest Region 1-800-323-4826
(in IL 312-569-3500)

Southwest Region 1-800-527-0804
(in TX 214-243-2537)

Western Region 1-800-241-7695
(in CA 213-636-0101)

© 1986 Fuji Photo Film U.S.A., Inc., Magnetic Products Div., 555 Taxter Rd., Elmsford, NY 10523

Circle 156 on Reader Service Card

video cameras. HDTV camera, digital HDTV VTR, HDTV projection display system. One-inch C VTRs. Monochrome video monitors. **See ad on pg. 89.** **Circle No. 158.**

HM ELECTRONICS

9675 Business Pk Ave., San Diego, CA 92131

619 578-8300

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

See ad on pg. 92.

Circle No. 160.

HORIZONTAL EDITING STUDIOS

2625 W. Olive Ave., Burbank, CA 91505
818 841-6750

Video & audio post-production facilities; facilities design & engineering services.

HOTRONIC

1210 S. Bascom Ave. #128, San Jose, CA 95128

408 292-1176

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 AUDIO

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

Portable, stereo studio & audio-for-TV consoles. Audio preamps, monitor/power amps. Telco interface equipment. Audio time base correctors.

HUBBARD COMMUNICATIONS/ 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 & transportable satellite earth stations. Facilities design & engineering services; engineering consultants; mobile vehicle construction.

HUDSON AUDIO VIDEO ENTERPRISES

309 Power Ave., Hudson, NY 12534
518 828-2000

Haveflex prefabricated audio cable; video cable. Video post-production facilities; equipment rental services; facilities design & engineering services; duplication & standards conversion.

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. Custom system design service.

IKEGAMI ELECTRONICS

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

Cameras: studio, field, ENG, Unicam recorder/cameras, HDTV, monochrome, electronic cinematography. Solid-state telecine systems, telecine cameras. Video monitors: monochrome, NTSC, RGB, high resolution, wide aspect ratio, battery-powered portable. Portable ENG microwave systems.

Field Offices:

CA Jerry Kraus/Bill Warnke, 3445 Kashiwa St., Torrance 90505 213 534-0050

FL Bud Mills/Kevin Goetz, 6201 Johns Rd. #5, Tampa 33614 813 884-2046

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

TX Glen Smith, 13721 Omega Rd., Dallas 75234 214 233-2844

See ad on pg. 14-15.

Circle No. 108.

See ad on pg. 47.

Circle No. 131.

See ad on pg. 142.

Circle No. 237.

IMAGE AMPLIFICATION

Box 699, Pine Brook, NJ 07058
201 882-0584

Large-screen video projectors.

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 TRANSFORM

4142 Lankershim Blvd., N. Hollywood, CA 91602

818 985-7566

Video post-production facilities; film laboratory.

IMAGE VIDEO LTD.

705 Progress Ave. #46, Scarborough, Ont., Canada M1H 2X1

416 438-3940

Downstream keyers. Manual & automated master control switchers. Parallel & serial interface video routing switchers. Parallel & serial interface machine control/technical automation. Video DAs, Silence monitor, dual mix amp; voltage monitor. Jackfields, patch panels.

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.

INFORMATION

TRANSMISSION SYSTEMS

375 Valley Brook Rd., McMurray, PA 15317
412 941-1500

UHF, LPTV & MDS transmitters. TV exciters.

INMARK CORP.

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

Comet Vacuum variable & fixed capacitors.

INNOVATIVE TELEVISION EQUIPMENT

6445 DeSoto Ave., Woodland Hills, CA 91367

818 888-9421

Tripods, heads, pedestals, ENG braces, dollies, remote pan/tilt systems. Foam-insert transportation cases. Portable antenna support tripods & heads.

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. Gordon Headroom meter (PPM); TVU video monitor level displays. Audio recorder replacement electronics. FM & TV 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

3821F S. George Mason Dr., Falls Church, VA 22041

703 578-1811

Character generator/graphics systems; digital art/paint systems; 3D modeling & manipulation; "draw-on-screen" systems; bit pad digitizers. Weather graphics displays; satellite displays; weather radar displays; weather-based art/paint systems. NTSC encoders.

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 conversion & duplication services; video post-production facilities; equipment rental services.

INTERFACE VIDEO SYSTEMS

1333 New Hampshire Ave. N.W. #LL200, Washington, DC 20036
202 861-0500

Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production services; standards conversion; duplication services; equipment rental services.

INTERGROUP VIDEO SYSTEMS
240 N.W. 67 Pl., Gainesville, FL 32606
904 335-0901

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

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

Replacement audio heads. Replacement & rebuilt video heads.

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

Pulse & subcarrier amps. Diplexers, modulators. RF amps, converters, filters & switches. Upconverters, downconverters; LNAs. Microwave systems: intercity, portable ENG, central receivers. Communications antennas. FM & AM SCAs. Two-way radio communications. Solid-state components.

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 PRODUCTION CENTER
514 W. 57 St., New York, NY 10019
212 582-6530/800 223-0622

Video production & post-production facilities. Videotape duplication services.

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; Deltadual/triple-deck cart player/recorders. ScotchCart audio cartridges; tape erasers, degaussers.
See ad on pg. 35. Circle No. 119.

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

TV & CATV modulators. Upconverters, downconverters, LNAs. SMATV systems. Power dividers. Spectrum analyzers.

b MEANS IT'S VERIFIED

Field Office:

AL John Coiro, 1749A 6 Pl. N.W., Birmingham 35215 205 853-6919

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

FM, VHF, UHF, LPTV transmitters. FM & TV exciters, stereo generators, diplexers, modulators. RF amps, converters, filters, switches. Transmit/receive & receive-only satellite earth stations. Portable ENG microwave systems. FM antennas. FM SCA equipment. RF test signal generators. Resonating cavities.

ITI ELECTRONICS
12 Kullick Rd., Fairfield, NJ 07006
201 882-6405

Audio line amps, monitor/power amps, amp power supplies. Audio patch panels, jackfields.

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.

JAMPRO ANTENNAS
6939 Power Inn Rd., Sacramento, CA 95828
916 383-1177

FM, TV HP & TV CP antennas. RF filters.

THE JANSON INDUSTRIES
1200 Garfield Ave. S.W., Canton, OH 44706
216 455-7029

Scenery construction & rigging. Cyclorama drapery & track.

JASON ELECTRONICS
2900 E. Charleston Blvd. #197, Las Vegas, NV 89104
702 384-0081

Audio test signal generators; audio tape analyzers.

JAVELIN ELECTRONICS
19831 Magellan Dr., Torrance, CA 90502
213 327-7440

Cameras: CCD, monochrome, color. Camera lenses, extenders. Video DAs. Monochrome & color picture monitors. Remote pan & tilt systems. Video source ID systems. Modulators. Video microscopes.

JBL PROFESSIONAL
8500 Balboa Blvd., Box 2200, Northridge, CA 91329
818 893-8411

Soundcraft portable audio consoles & audio-for-TV consoles, 2-1/4-track & multitrack ATRs. UREI mono & stereo studio consoles, ALC & AGC amps, parametric equalizers, preamps. JBL/UREI graphic equalizers, digital delay lines, monitor speakers, line amps, monitor/power amps.

JEFFERSON PILOT DATA SYSTEMS

501 Archdale Dr., Charlotte, NC 28210
704 529-3901

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

JEM-FAB CORP.
400 Roosevelt Ave., Freeport, NY 11520
516 868-1428

Facilities design & engineering services; engineering consultants; financial consultants; mobile vehicle construction; systems documentation; custom panel engraving & manufacturing. Modular news & studio sets; studio furniture; cabinets; custom studio consoles; equipment racks. AFV monitor switchers, AFV visual time code switchers, specialty audio & video switchers, VCR dubbing machine control systems.

JENSEN TOOLS
7815 S. 46 St., Phoenix, AZ 85044
602 968-6241

Tools; foam insert transportation cases.

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
101 Landing Rd., Landing, NJ 07850
201 398-7426

Replacement & rebuilt audio heads. Head relapping service.

J.S.L. VIDEO SERVICES
25 W. 45 St., New York, NY 10036
212 575-5082/212 944-9494

Video post-production facility.

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

41 Slater Dr., Elmwood Park, NJ 07407
201 794-3900

Cameras: field, ENG, lightweight, single-tube color, recorder/cameras. 3/4-inch U & VHS VCRs. Half-inch VHS mastering videocassettes. Standalone analog video efx; RGB chromakeyers. Video graphics system. Three-machine video editor/controllers. Video monitors. Digital audio editors; turntables; shotgun mics.

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

See ad on pg. 22.

Circle No. 112.

KAHN COMMUNICATIONS
425 Merrick Ave., Westbury, NY 11590
516 222-2221

AM stereo exciters. AM SCA equipment.

When the Hitachi HR-230's real-time diagnostic system spots a potential problem during operation, it tells you what happened, and exactly where it happened. And it tells you in plain English.

The HR-230's computer controlled self-diagnostics continually monitors 49 different operational, maintenance, and troubleshooting parameters during both playback and recording. And it gives you the whole story up front on a console display and on the monitor.

Plus, you don't have to keep your eyes glued to the machine. Because the HR-230 stores it all in memory—along with the exact location—so you can go back and check later on.

But the HR-230 has a lot more going for it than just a great memory. Our retracting tape guides and tension arms—along with a non-contact



air scanner system dramatically reduce head and tape wear. It's compatible with all major editing systems. And such features as master/slave operation of up to 48 VTRs through its built-in editor, complete autoseek, pre-aligned replacement scanner, and a built-in TBC save you a lot of time and trouble.

And the HR-230 will save you money. Because nobody offers you so complete a machine for so modest a price.

For a demonstration in your studio, contact Hitachi Denshi America Ltd. Broadcast and Professional Division, 175 Crossways Park West, Woodbury, NY 11797. Or phone (516) 321-7200 or (800) 645-7510. In Canada, contact Hitachi Denshi Ltd. (Canada), 65 Melford Drive, Scarborough, Ontario M1B 2G6; (416) 299-5900.

 **HITACHI**

Circle 158 on Reader Service Card

THE FIRST 1-INCH VTR THAT TELLS YOU WHERE TO GO.

A close-up of the VTR's monitor. The screen displays a standard color bar test pattern with the text 'DRUM UNLOCK' overlaid in the center. The control panel on the right side of the monitor is visible, featuring various knobs and buttons for adjusting the display and other functions.

DRUM UNLOCK

You can't expect much from a \$4,500* character generator.

SURPRISE!

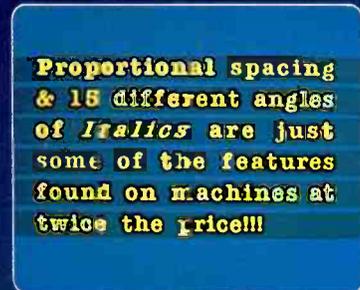
Introducing the Laird 1500-PROM high resolution character generator with 6 font resident memory and built in expandability.



65,536 Colors



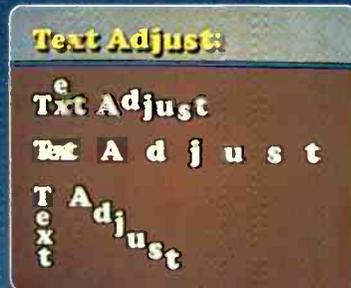
12 to 56 line
Character sizes



Proportional Spacing
and italics



Edge Modes
Attributes



Text
Adjust



Multifont
Display

Actual raster photos

STANDARD FEATURES:

- 5 resident fonts (expandable to 16 with disk option)
- High resolution characters (35ns, 1506 pixels x 485 scans)
- Up to 100 pages of internal memory
- Dual channel operation
- 65,536 resident colors
- Proportional spacing
- Flash and underline

- Selectable roll and crawl rate
- 16 tab stops
- Eight edge intensities
- Four quadrants of drop shadow
- Insert and delete editing
- Vertical and horizontal flip
- Center, right and left justify
- Character tuck and overlap
- Multiple angle italics

EXPANDABLE OPTIONS:

- 3 1/2" dual disks, 16 resident fonts and 70 font disk library
- Camera entry

- Font compose with autosize
- Bit pad
- Battery back up

*User's choice of broadcast or industrial encoder required for color operation.



LAIRD TELEMEDIA INC.®

Corporate Offices

WEST
2424 South 2570 West
Salt Lake City, Utah 84119
(801) 972-5900

MIDWEST

Three Dallas Communications Complex
6311 N. O'Connor Suite N38 LB160
Irving, Texas 75039-3510
(214) 869-7693

EAST

#1 Perimeter Park South
Suite 100 North
Birmingham, Alabama 35243
(205) 870-0967

Circle 159 on Reader Service Card

KAITRONICS CORP.

890 Cowan Rd., Burlingame, CA 94010
415 697-9102

Compact studio/mobile production switchers. Parallel & serial interface routing switchers.

KALAMUSIC

4200 W. Main St., Kalamazoo, MI 49007
616 385-5110/800 225-KALA

Syndicated radio programming; music library.

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.

KAVOURAS

6301 34 Ave. S., Minneapolis, MN 55450
612 726-9515

TritonX & WeatherLink Vista weather graphics displays & satellite weather displays; TritonX weather symbol inserters & weather-based art/paint systems, Radac weather radar displays. L-DATS lightning detection interface to TritonX.

KAY ELEMETRICS CORP.

12 Maple Ave., Pine Brook, NJ 07058
201 227-2000

Rotary attenuators. RF attenuators, switches. Audio test signal generators, spectrum analyzers, real time analyzers. RF test signal generators.

KAY INDUSTRIES

604 N. Hill St., South Bend, IN 46617
219 234-0171

Rotary phase converters for radio & TV transmitters.

KEYLITE PSI

333 S. Front St., Burbank, CA 91502
818 841-5483/800 LITE NOW

Sales & rentals of full line lighting equipment.

K&H PRODUCTS/PORTA-BRACE

Box 246, Water St., N. Bennington, VT 05257

802 442-8171

Padded nylon transportation 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.

KINGS ELECTRONICS CO.

40 Marbledale Rd., Tuckahoe, NY 10707
914 793-5000

Cable connectors, jackfields & patch panels.

KINTEK

224 Calvary St., Waltham, MA 02154
617 894-6111

Stereo synthesizers, polarity correctors; phase & correlation meter.

KLARK-TEKNIK ELECTRONICS

30B Banfi Plaza N., Farmingdale, NY 11735

516 249-3660

Mic mixers, stereo studio consoles, audio-for-TV consoles. AM & FM compressor/limiters, graphic equalizers, audio/video sync delay. Digital efx & reverb, digital delay, analog efx & reverb. Lighting stands & rigging, lighting control boards. Real-time analyzers.

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.

Box 1013, Columbia, SC 29202
803 779-7080

Tower masts; tower installations.

KLUGE COMMUNICATIONS

5350 W. Clinton Ave., Milwaukee, WI 53223

414 354-9490

Video production & post-production facilities; recording studios; audio post-production facilities; music libraries; film laboratory.

KNOX VIDEO PRODUCTS

8547 Grovemont Circle, Gaithersburg, MD 20877

301 840-5805

Telecine color correctors. Titlers, subtitles, character generator/graphics systems. Color Box colorizers, title keyers, downstream keyers, nonadditive keyers. Video proc amps.

KOSS CORP.

4129 N. Port Washington St., Milwaukee, WI 53212

414 964-5000

Dynamic & electrostatic headphones & speakers. Digital delay systems. Cassette players. Audio/video cleaning products.

KQED PRODUCTIONS

500 Eighth St., San Francisco, CA 94103
415 553-2137

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

KVIE VIDEO

2480 Garden Hwy., Sacramento, CA 95610
916 929-5797

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

LAIRD TELEMEDIA

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

Titlers, subtitles, character generator/graphics systems. 16/35 mm telecine projectors, 35 mm slide projectors, optical multiplexers. Equipment racks.

See ad on pg. 90.

Circle No. 159.

LAKE SYSTEMS CORP.

55 Chapel St., Newton, MA 02160
617 244-6881

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

See ad on pg. 49.

Circle No. 133.

LANDY ASSOCIATES

1890 E. Marlton 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

LANG VIDEO SYSTEMS CORP.

700 Warrington Ave., Redwood City, CA 94063

800 222-LANG/ in CA 415 364-1287

Two-Shot, One-Shot portable integrated ENG video switchers with audio mixer, SID, monitoring. Video source ID. Video/audio switch with color bar & ID generator.

LARCAN COMMUNICATIONS EQUIPMENT

6520 Northam Dr., Mississauga, Ont., Canada L4V 1H9

416 678-9970

FM & VHF transmitters; translators. FM & TV excitors; hybrid & notch duplexers. TV HP & CP antennas. Transmitter plant design services.

Field Offices:

IL Charles Coyle, 5335 W. Joliet Rd., Countryside 60525

312 352-0707

MD Lewis F. Page, 14440 Cherry Ln. Ct. #201, Laurel 20707

301 490-6800

LAUMIC CO.

306 E. 39 St., New York, NY 10016

212 889-3300

Sales & rentals of video editing equipment.

LEADER INSTRUMENTS

380 Oser Ave., Hauppauge NY 11788
516 231-6900

Sync, black burst & color bar generators. Stereo generators. Audio test signal generators, harmonic distortion meters, wow & flutter meters, MTS test equipment. Video test signal generators, waveform monitors, vectorscopes. Field intensity meters, frequency monitors & controllers, RF test signal generators, impedance bridges. Oscilloscopes, delayed sweepscopes, voltmeters, multimeters, dB meters.

LEA DYNATECH

12516 Lakeland Rd., Santa Fe Springs, CA 90670

800 654-8087

Perfect Power Source transformers; Surge Eliminator/Kleanline surge protectors; lighting dissipation arrays. Engineering consultants.

LEARNING 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
415 574-4441/800 227-1817

Test equipment rental services.

LEBLANC & DICK 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

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 fil-
ter decoders, video delay lines, video/cable
equalizers. Proc amps, video DAs, pulse
amps, subcarrier amps. Vertical interval pro-
cessor. Vertical interval processors; vertical
interval adder/deleter; video source ID Vid-
eo test signal generators, SCH phase met-
ers, transmitter test generator. Digital
clocks, complete clock/timing systems

See ad on pg. 95.

Circle No. 163.

LEMO USA

Box 11006, Santa Rosa, CA 95406
707 578-8811

Connectors, jackfields.

LENCO

300 N. Maryland St., Box 348, Jackson,
MO 63755

314 243-3147

Monitor/power amps; audio DAs. Sync,
black burst, color bar & safe title area gen-
erators. TBCs NTSC encoders & decoders,
comb filter decoders, video delay lines. Proc
amps, video DAs, pulse amps, subcarrier
amps. Monochrome & NTSC monitors. Video
noise meters. Processing amplifiers; master
& slave timing generators. Video test signal
generators, SCH phase meters, video noise
meters.

Field Offices:

AL Ron Burks, 5901 Spanish Moss Ct., Mo-
bile 36609 205 660-0738

CA Ron Wells, 320 Harding Ave., Los
Gatos 95030 408 356-0221

TX Russ Thalacker, 2520 Laurel Ln., Plano
75074 214 578-0419

See ad on pg. 41.

Circle No. 125.

LERRO ELECTRICAL CORP.

3125 N. Broad St., Philadelphia, PA 19132
215 223-8200

Facilities design & engineering services; mo-
bile vehicle construction.

LEXICON

60 Turner St., Waltham MA 02154
617 891-6790

Digital audio recorders; editors for digital au-
dio Audio/video sync delay. Audio digital efx
& reverb, digital delay, time compression/
expansion. Random access audio record-
ing, editing & mixing system.

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

Formed to Fit the Function.

HME's New Intercom Belt Pacs

The all-new HME Belt Pacs feature rugged aluminum housings that are curved for comfort and ease of operation. They're the lightest, most compact units available—you'll hardly know you're wearing them. What's more, you'll get unsurpassed audio quality plus compatibility with our complete line of cabled intercom systems.

HME—renowned for quality! See for yourself. Call us today to arrange a demonstration.

HME manufactures a complete line of wireless microphones, wireless intercoms, and cabled intercom products.

BH-721 dual channel

BH-720 single channel

h m e
HM ELECTRONICS, INC.

9675 Business Park Avenue, San Diego, CA 92131 Phone: (619) 578-8300 Telex: 350-771

Circle 160 on Reader Service Card

Lightning protection grounding systems; surge protectors. Facilities design & engineering services; engineering consultants.

LINES VIDEO SYSTEMS
219 S. Jefferson, Springfield, MO 65806
800 641-4674

Facilities design & engineering services, engineering consultants; audio & video equipment suppliers.

**LIPSNER-SMITH CO.,
SUBSIDIARY RTI**
4700 Chase Ave., Lincolnwood, IL 60646
312 677-3000

Ultrasonic film cleaners for film-to-tape transfers; high speed film rewinders.

LISTEC VIDEO CORP.
205 Oser Ave., Hauppauge, NY 11787
516 273-3020

Polar Video compact studio/mobile production switchers, digital efx generators, standalone analog efx & safe title area generators. Acron sync, black burst & color bar generators, NTSC encoders. Listec downstream keyers, monochrome monitors; monitor-based, scroll entry, keyboard entry & ENG/EPF portable teleprompters.

Field Office:
CA Box 3127, Glendale 91201
818 247-9266

See ad on pg. 140. Circle No. 201.

LITTON ELECTRON DEVICES
1215 S. 52nd St., Tempe, AZ 85281
602 968-4471
CRTs.

LNR COMMUNICATIONS
180 Marcus Blvd., Hauppauge, NY 11788
516 273-7111

Satellite video exciters; upconverters, downconverters; FET & parametric LNAs.

LOGITEK
3320 Bering Dr., Houston, TX 77057
800 231-5870/713 782-4592

Audiorack portable & mono studio consoles; Perfectionist stereo studio consoles; audio-for-TV consoles; console automation; Stereorack video interface for consoles. ALC, AGC amps. Monitor speakers. Preamps, line amps, monitor/power amps Audio DAs, audio routing switchers Bright-VU LED displays. Crossfire audio cross-fader. Timers.

LOUISVILLE PRODUCTIONS
520 W. Chestnut St., Louisville, KY 40202
502 582-7744

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

LOWEL-LIGHT MFG.
475 Tenth Ave., New York, NY 10018
212 947-0950

Quartz lighting fixtures; lighting stands, rigging.

LPB
28 Bacton Hill Rd., Frazer, PA 19355
215 644-1123

Mic mixers; mono & stereo studio, audio-for-TV consoles. Turntables, pickup arms AM & FM compressor/limiters. Audio DAs. High-

way & travelers information broadcast systems.

Field Office:
CA Richard Burden, 20944 Sherman Way,
Canoga Park 91303 213 340-4590
See ad on pg. 93. Circle No. 161.

L&R COMMUNICATIONS LTD.
2301 Bridgeport Dr., Box 3807, Sioux City, IA 51102
712 252-4101/800 831-0974

Tower masts; tower rigging & hardware. Preassembled & portable equipment shelters.

LRP
311 E. 47 St., New York, NY 10017
212 759-0822

Video production & post-production facilities; mobile production facilities rental; film-to-tape transfers.

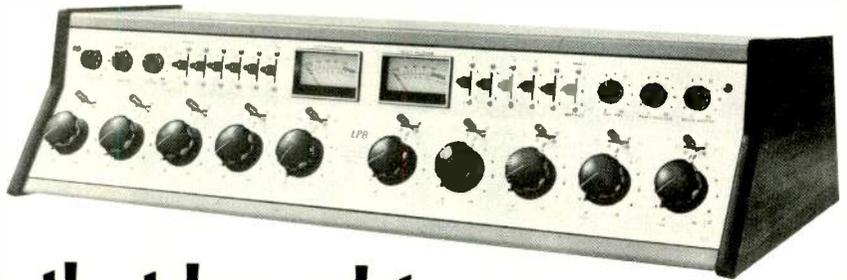
LTM CORP. OF AMERICA
1160 N. Las Palmas Ave., Hollywood, CA 90038
213 460-6166

Luxarc & Mark III HMI & CSI fixtures; lighting stands & rigging; Pepper Pots dimmer packs.

Field Offices:
FL 909 N.W. 10 Terrace, Ft. Lauderdale
33311 305 522-1070
NY 437 W. 16 St., New York 10011
212 243-9288

L-W INTERNATIONAL
50 W. Easy St., Simi Valley, CA 93065
805 522-3284

Nothing sells an LPB[®] console like the station that bought one



We recently surveyed a group of radio station General Managers who purchased LPB audio consoles...

TX 100kw FM—"Delighted; it simply won't stop."

UT FM—"Love it; would certainly buy another. Best all-around console we've ever had."

NY AM—"Great board; our second LPB. Wouldn't buy anything else."

SC AM—"Best I've ever had. It was recommended by our consultant. Have anyone interested call us."

OH FM—"Our second LPB board, because we liked the first so well!!! Never had any problem with either."

WV 50kw FM—"Couldn't be happier with it. Certainly pleased with your rep's presentation."

CA AM/FM—Our operators love it. It's a solid console. The good layout made it easy to install."

What are you saying about your console?

Call your LPB Dealer or LPB

LPB[®]

LPB Inc.
28 Bacton Hill Road
Frazer, PA 19355
(215) 644-1123
TELEX: 703000

©1985 LPB Inc.
® is a registered trademark of LPB Inc.

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. 225-3N-03, St. Paul, MN 55144
612 733-9073
Titlers, subtitles, character/generator graphics systems, digital art/paint systems, camera/VTR digitizers. 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.
See ad on pg. 20-21.

3M STORMSCOPE WEATHER MAPPING SYSTEMS
223-3N-10 3M Center, St. Paul, MN 55144
612 733-8878
Thunderstorm warning & tracking systems.

M/A-COM MAC
5 Omni Way, Chelmsford, MA 01824
617 272-3100
Intercity & portable ENG microwave systems; 23 GHz microwave system for point-to-point & STL. Skypod airborne microwave systems. Microwave central receivers.



AM BROADCASTERS CHOOSE FIELD PROVEN

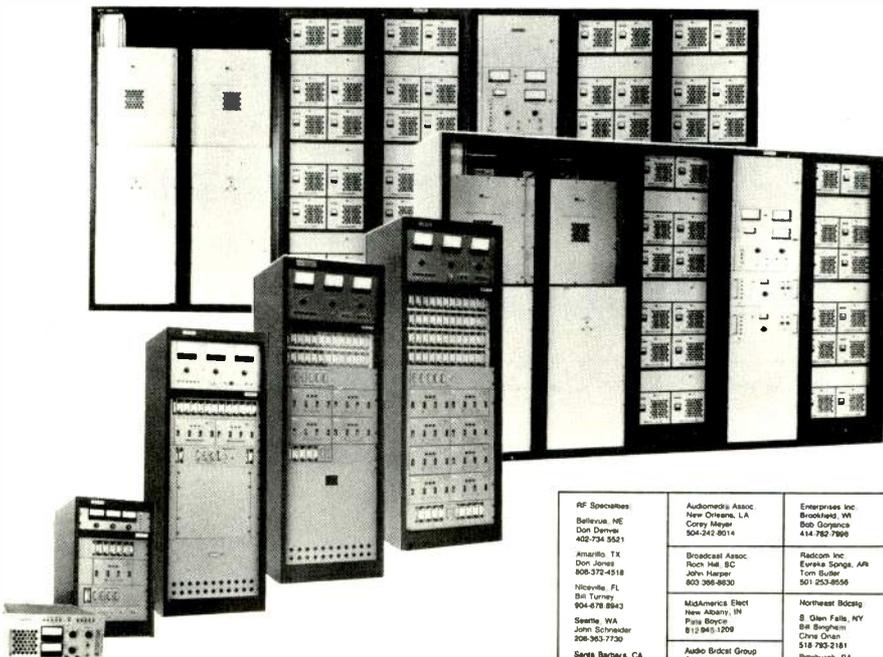
TOTALLY
SOLID STATE

AMPFET

SERIES

MODULAR

ALL POWERS



RF Specialties Bellevue, NE Don Dierke 402-734-5821	Audiomedix Assoc. New Orleans, LA Cory Meyer 504-242-8014	Enterprises Inc. Brookfield, WI Bob Gorsucha 414-782-7990
Amarillo, TX Don Jones 806-372-6118	Broadcast Assoc. Roch. Hill, BC John Harper 603-298-8030	Radcom Inc. Eureka Springs, AR Tom Butler 501-253-8556
Niceville, FL Bill Turney 904-678-5823	MidAmerica Elect. New Albany, IN Pats Boyce 812-845-1209	Northeast Bcastg. S. Olen Falls, NY Bill Singheim Chris Orban 518-785-2181
Seattle, WA John Schroeder 206-363-7720	Audio Bridgt Group Grand Rapids, MI Drew Veldema 616-452-1598	Pittsburgh, PA Tom Monahan 412-733-1894
San Diego, CA Sam Lane 605-682-8429		

totally solid state AM



NAUTEL
201 Target Industrial Circle
Bangor, Maine 04401
207-947-8200

Telex 944466

Jorgen Jensen
902-823-2233



Circle 162 on Reader Service Card

MEANS IT'S VERIFIED

M/A-COM TELECOMMUNICATIONS DIV.
11717 Exploration Ln., Germantown, MD 20874
301 428-5500
DATE modulators. TDMA & SCPC transmit/receive satellite earth stations; M/AESTRO receive-only earth stations. Small aperture Ku-band earth terminals for videoconferencing/data broadcasting.

MAGNASYNC/MOVIOLA
5539 Riverton Ave., N. Hollywood, CA 91603
818 763-8441
Videola film-to-tape transfer system. Multitrack tape-based logging recorders/reproducers.

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 pg. 139. Circle No. 238.

MAGNAVOX
Box 6950, Knoxville, TN 37914
615 521-4316
PMX AM stereo system.

MAGNETIC REFERENCE LAB
229 Polaris Ave. #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.
See ad on pg. 31. Circle No. 116.

MAGNUM TOWERS
9370 Elder Creek Rd., Sacramento, CA 95829
916 381-5053
Tower masts, rigging, hardware, lighting.

MALLORY TIMERS CO.
3029 E. Washington St., Indianapolis, IN 46201
317 261-1220
Timers.

THE MANAGEMENT
Box T, Aledo, TX 76008
817 441-8532
Radio & TV business automation software.

MANHATTAN TRANSFER/EDIT
545 Fifth Ave., New York, NY 10017
212 687-4000
Video production & post-production facilities.

LEITCH LISTENS



It's the reason why
these three new Leitch test generators
are tailored to your needs.

These three new test generators may look alike. But the software inside tells another story. Before they were designed, we sat down with transmitter, studio and transmission people to find out what they needed and wanted.

With these new Leitch 2500 NTSC test generators, you get digital generation for accuracy and stability. The Transmitter and

Transmission generators deliver up to 60 signals while the Studio generator provides 56 different signals. All with 10 bit precision.

Upgradeable EPROMs allow you to have the unit adapted to meet new signal requirements. And you get Leitch ease of operation.

If you want further information, just write or call. You'll find we're not only good listeners, we're good providers.

LEITCH

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
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

Circle 163 on Reader Service Card

ties; mobile production facilities rental; equipment rental services.

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 & tape.

MARCOM

Box 66507, Scotts Valley, CA 95066
408 438-4273

FM compressor/limiters. Audio routing switchers. Stereo generators. Demodulators, modulation monitors. Equipment distributor.

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.

MARCUS SATELLITE SERVICES

134 E. Center St., Manchester, NH 06040
203 646-1839

Satellite earth station maintenance, repair & consulting. Point-to-point microwave equipment rentals.

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. 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.

MATRIX VIDEO SERVICES

727 11 Ave., New York, NY 10019
212 265-8500

Video production & post-production facilities;

ties; mobile audio/video production facilities rental.

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, cassettes.

MAXIMA MAGNETICS

300 Bonair Ave., Hatboro, PA 19040
215 443-0700

Tape cleaning & evaluation services; custom loading of video & audio cassettes; videocassette reloading.

MCCURDY RADIO

108 Carnforth, Toronto, Ont., Canada M4A 2L4

416 751-6262

Mic mixers; mono & stereo studio & audio-for-TV consoles. Turntables. AM compressor/limiters, parametric equalizers & filters. Digital audio delay. Hardwired intercom systems; digitally controlled intercom. Line amps, monitor/power amps, amp power supplies. Audio DAs, patch panels. Low frequency extenders. PPM meters. Digital clocks, master & slave clocks. Audio post-production services; radio & TV studio design.

See ad on Cover 3.

Circle No. 227.

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

FM, VHF, UHF & LPTV transmitters; RF amps & switches; transmit/receive & transportable satellite earth stations. RF test signal generators.

MCMANUS ENTERPRISES

Box 6530, San Diego, CA 92106
619 223-1730

Equipment maintenance, overhaul & modification services; facilities design & engineering services; engineering consultants.

McMARTIN INDUSTRIES

7300 F St., Omaha, NE 68127
402 331-2000

Accu-Five mic mixers, mono studio & stereo studio consoles. Complete disc playing consoles. ALC & AGC amps, AM & FM compressor/limiters. RF intercom systems. Preamps, line amps, monitor/power amps. Rotary & slide attenuators, EBS two-tone systems. AM, FM, VHF & UHF transmitters. AM & FM exciters, stereo generators, modulators. SAP generators, monitors. RF amps, filters. Modulation monitors, field intensity meters.

MEAD DATA CENTRAL

9393 Springboro Pike, Miamisburg, OH 45342

800 227-9597

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

4401 E. Kings Ave., Phoenix, AZ 85032
602 992-2338

The Electronic Newsroom radio & TV newsroom computer software systems. ANGIS automated news graphics interface system. PC Prompter monitor-based, keyboard entry teleprompters.

MEDIA CONCEPTS

559 49 St. S., St. Petersburg, FL 33707
813 321-2122

VHS duplication facilities; standards conversion; 3/4-inch, Beta, & film-to-tape transfers. Equipment rental services.

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

Disisound 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.

See ad on pg. 148.

Circle No. 244.

MEYER SOUND

3832 San Pablo Ave., Berkeley, CA 94702
415 486-1166

Parametric equalizers; monitor speakers.

MICRO COMMUNICATIONS

Box 4365, Manchester, NH 03108
603 624-4351

FM antennas; TV HP & 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. Circular & rectangular waveguide; power dividers, RF connectors. Engineering consultants.

MICRO CONTROLS

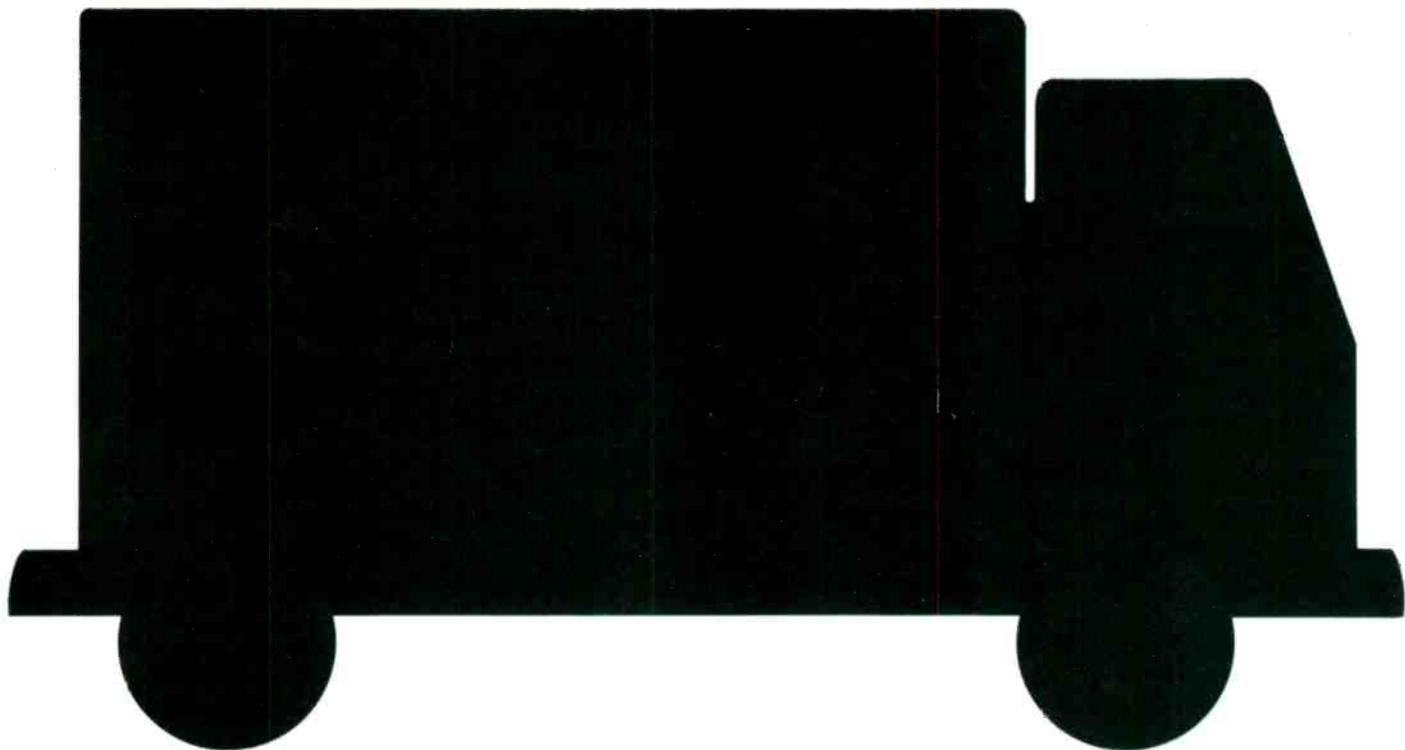
Box 728, Burleson, TX 76028
817 295-0965

Transmitter remote control systems; STLs & TSLs; FM SCA equipment.

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; satel-



Trucks are trucks. It's the gear inside that makes the difference.

How can you spot the best SNG truck investment if they all look the same on the outside?

Simple. Look at the equipment inside. If it's Microdyne, you go with one of the most trusted names in satellite communications technology.

QuickLink™: superior components for SNG.

Most SNG truck builders take one component from supplier A, another from supplier B and so on.

Microdyne's SNG truck is built to your exact specifications almost entirely with Microdyne equipment. Microdyne will do all the system design, wiring, integration, testing and training of your personnel.

Since key components are all Microdyne, there's minimal delay in making alterations, modifications or changes

*QuickLink—
a superior SNG truck
from Microdyne/AFC.*



in years to come. Other SNG truck makers use somebody else's components, so getting something fixed or replaced can take a long time.

Broadcast-quality electronics built and backed by Microdyne.



Auto-acquisition system makes peaking a piece of cake.

Take the keypad and enter the truck's latitude, longitude and current compass direction.

Punch in the code for your desired satellite, and the rest is automatic. Microdyne's auto-acquisition system does the trickiest, and most critical job in very short order. In any kind of weather.

The antenna controller peaks azimuth and elevation, peaks

polarization, and lets you change from one satellite to another immediately with pinpoint accuracy.

QuickLink: superior from the inside out.

QuickLink can be customized to your exact needs, from antenna size to communication package, video encryption and C-band or Ku-band receivers.

Equip your truck with any type of telephone or data link to receive voice or hard copy instructions or operation commands from the home station.

QuickLink. On the outside, it may look like any other SNG truck. But on the inside, it's in a class by itself.

For more information, or a demonstration, call Microdyne at (904) 687-4633.



Microdyne Corporation

491 Oak Road • P.O. Box 7213
Ocala, FL 32672 • TWX: 810-858-0307

A TOUGH ACT TO FOLLOW

Genesis 1™ With ACT 1™ \$27,990



Genesis 1 ACT 1, Microtime's high quality, low-cost digital effects system increases creative capabilities to your imagination's limit. Create through self-prompting, icon-driven menus and instructions for sequences involving moves, freeze, flips, tumbles, posterize, shadow, variable aspect ratio, XY mosaic, strobe, and source change.

Genesis 1 ACT 1 offers:

- 3-Axis joystick control
- Keyframe creation of sequences
- Smooth curvilinear movement
- Frame accurate duration of a sequence
- Routing switcher interface for dual input switching when flipping and tumbling
- Three levels of sequence storage: RAM, internal and portable

Genesis 1 ACT 1...A user-friendly digital effects system for your video productions. An ACT not to be missed at \$27,990.

 **MICROTIME**

A Subsidiary of ANDERSEN GROUP

Microtime, Inc.
1280 Blue Hills Avenue
Bloomfield, CT 06002 USA
Tel: (203) 242-4242
TWX: 710-425-1165

Northeast, Ray Bouchard (609) 896-3716
Central, David Everett (312) 934-9191
Southcentral, Steve Krant (214) 644-0232
Southeast, Jerry Rankin (404) 979-4437
Western, Chuck Bocan (714) 989-4433

Genesis 1 and ACT 1 are trademarks of Microtime, Inc.

Circle 65 on Reader Service Card

lite network controllers. Mobile vehicle construction.
See ad on pg. 97. **Circle No. 164.**

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 digital efx generators, compressor/positioners & standalone analog efx. TBCs, frame synchronizers, TBC/framestores, image enhancers.

Field Offices:

CA Chuck Bocan, Alta Loma 714 989-4433
GA Jerry Rankin, Liburn 30247 404 979-4437

IL David Everett, Hoffman Estates 60195 312 934-9191

NJ Raymond Bouchard, Lawrenceville 08648 609 896-3716

TX Steve Krant, Richardson 75080 214 644-0232

See ad on pg. 98.

Circle No. 165.

MICRO-TRAK CORP.

165 Front St., Chicopee, MA 01013
413 594-8501/800 358-8729
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.

MID-AMERICA AUTOMATION CORP.

1822 Laramie St., Manhattan, KS 66502
913 537-3289
Automate 64 computer automation controllers.

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 Rerko, 4105 Vincennes Rd., Indianapolis 46268 317 872-2327

KS Rod Herring, 12876 W. 109 St., Overland Pk. 66210 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, 1328 Wheaton Ave., Troy 48083 313 689-9730

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 Fred Wood, 1395 Air Rail Ave., Virginia Beach 23455 804 464-6256

WV Chuck Sizemore, 1020 Grosscup Ave., Dunbar 25064 304 768-1252

See ad on pg. 18.

Circle No. 110.

MIKROLAB

4121 Redwood Ave., Los Angeles, CA 90066
213 306-0120
Monitor speakers with built-in amps. Micromonitors (speaker with built-in amp). VU meters.

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.

MINDSET

965 Maude Ave., Sunnyvale, CA 94086
408 737-8555
Titlers, subtitles, character generators.

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.

MITSUBISHI PRO AUDIO

225 Parkside Dr., San Fernando, CA 91340
818 898-2341
Digital audio recorders.
See ad on Cover 2. **Circle No. 100.**

MIXMASTERS

4877 Mercury St., San Diego, CA 92111
619 569-7367
Recording studios; audio post-production facilities.

MOBILE-CAM PRODUCTS

Box A-82103, San Diego, CA 92138
619 692-3208
Mobile vehicle construction. Hardwired intercom/IFB systems. Audio & video DAs. Multi-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.

MOBILE VIDEO SERVICES

2139 Wisconsin Ave. N.W., Washington, DC 20007
202 944-2800
Video production & post-production facilities; mobile production facilities rental; local microwave common carrier.

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
718 625-7333/800 286-2603
TSG stereo generators; Sidekick multiplexers, TV Sidekick SAP generators. FM 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.

MONROE ELECTRONICS
100 Housel Ave., Lyndonville, NY 14098
716 765-2254

Automatic satellite switchers; line amps; telco interface equipment. 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., Goleta, CA 93117
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. Remote pickup equipment. STL & remote control accessories.

See ad on pg. 16. Circle No. 109.

MOTOROLA, INC., AM STEREO
1216 Remington Rd., Schaumburg, IL 60195
312 576-0554

AM stereo exciters. AM stereo modulation monitors.

MOTOROLA C&E
17-22 Whitestone Expy., Whitestone, NY 11357
212 746-1100

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.

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 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.

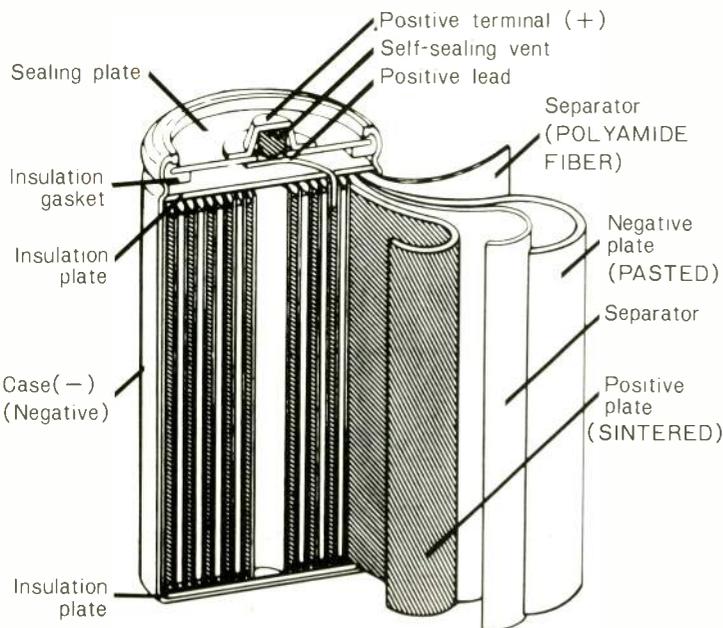
MULTI-TRACK MAGNETICS, DIV. MATRIX CORP.
3 Industrial Ave., Upper Saddle River, NJ 07458
201 327-9400

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.

MUSIC DIRECTOR PROGRAMMING SERVICE
Box 103, Indian Orchard, MA 01151
413 783-4626

PACO Ni-Cad BATTERY PACK

PACO HIGH POWER CELL GIVES YOU:



- HIGH POWER OF 4.4Ah(1C RATE)
- NO INTERNAL SHORT CIRCUIT PROBLEMS
- DEPENDABLE CONSISTENCY AND LONG LIFE

PACO PRODUCTS

● BATTERY PACK
DP-1240(12V4.4Ah)
(DIRECT REPLACEMENT
FOR SONY BP-90)



● QUICK CHARGER
KD-220



● BATTERY DEMEMORIZER
KD-120



*AVAILABLE SOON DP-11(13.2V1.7Ah)DIRECT REPLACEMENT FOR SONY NP-1

PACO ELECTRONICS U.S.A., INC.

714 WEST OLYMPIC BLVD., SUITE 706, LOS ANGELES, CA 90015
TEL-213-747-6540/TX-756923/FAX-213-747-3731

Circle 166 on Reader Service Card

Music libraries; syndicated radio programming.

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 92629
714 545-5111

Sericon parallel & serial interface video routing switchers. Audio & video DAs. QC switchers. Facilities design & engineering services.

MYCRO-TEK

Box 47068, Wichita, KS 67201
316 681-0550

Mycro-Vision & Ernie titlers, subtitles, 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

Easytalk RF intercom systems. RF mics. Infrared listening device.

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. Audio time code.

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. Digital audio mastering processor.

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.

NATIONAL VIDEO INDUSTRIES

15 W. 17 St., New York, NY 10011
212 691-1300

Video post-production facilities

NATIONAL VIDEO SERVICE

2150 Rheem Dr., Bldg. G, Pleasanton, CA 94566
415 846-1500

New & reloaded TCR-100 two-inch video cartridges; U-Matic reloading service; Betacart multiloads.

NAUTEL

201 Target Ind. Cir., Bangor, ME 04401
207 947-8200

AMFET AM transmitters.

Field Office:

CAN Hacketts Cove, RR1, Tantallon, NS B01 3J0
902 823-2233
See ad on pg. 94. Circle No. 162.

NEC AMERICA, BROADCAST EQUIPMENT DIV.

1255 Michael Dr., Wood Dale, IL 60191
312 860-7600

CCD color cameras. DVE System 10 & System 100 digital efx generators. Frame synchronizers. delays. FM, VHF & UHF transmitters. Portable ENG microwave systems. Slow-scan transmitters/receivers.

Field Offices:

CA Frank Stolten, 8300-E Sierra College Blvd., Roseville 95678 916 791-7160
NJ Lawrence Litchfield, 21 Brandywine Terr., Morristown 07960 201 540-0819
See ad on pg. 46. Circle No. 130.

NEI

934 N.E. 25 Ave., Portland, OR 97232
503 232-4445

Mic mixers; stereo studio consoles. Parametric & graphic equalizers. Analog efx, reverb. Monitor/power amps. Real time analyzers.

NES

3003 Wakefield Dr., Carpentersville, IL 60110
312 426-5900

Slimline parallel & serial interface machine control/technical automation; digital clocks & timers.

NETCOM

2901 W. Alameda Ave., Burbank, CA 94123
818 841-8855

Satellite distribution of syndicated programming; ad hoc satellite TV network creation; SNG transmission services; satellite video-conference transmission services. full-service satellite transmission facility. Large-screen video projection system rentals.

Field Office:

DC 1278 National Press Bldg., Washington 20045 202 638-3338

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 videotape reels, carts & cases; Neuvator film cleaners. Cabinets, equipment racks.

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
CAN 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.

NEW ENGLAND SATELLITE SYSTEMS

433 South St., Shrewsbury, MA 01545
617 842-4328

Distributor of satellite antennas & microwave systems. Earth station site surveys; permanent installation services.

NEWTON ELECTRONICS

340 E. Middlefield Rd., Mountain View, CA 94043
415-967-1473

Viceo 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.

NORTH AMERICAN PHILIPS LIGHTING

1 Westinghouse Plaza, Bloomfield, NJ 07003
201 429-3000

Lamps. HMI & CSI fixtures.

NORTHEAST BROADCAST LAB

Box 1179, S. Glens Falls, NY 12803
518 793-2181

Equipment distributors.

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; tape cleaners & degaussers. Splicing blocks & tape.

NORTHWEST TELEPRODUCTIONS

4455 W. 77 St., Minneapolis, MN 55435
612 835-4455

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

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

20 Tower Lane, Avon, CT 06001
203 677-5252

TBCs, TBC/framestores.

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.

MEANS IT'S VERIFIED

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.

OAK COMMUNICATIONS

16935 W. Bernardo Dr., Rancho Bernardo, CA 92127

619 485-9300

Decoders, converters & addressable systems for STV, PTV & CATV.

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.

With our Automatic Remote Control System your transmitter – and your personnel – will operate with increased efficiency

Have you ever wondered if your night operator will remember . . . to switch patterns at sunrise? . . . to periodically check critical levels? . . . the correct transmitter restart sequence? You'll never have to worry if Potomac Instruments' RC16+ is on the job. Because it'll do all these tasks for you. Plus a lot more. Automatically.

With its microprocessor based control logic, the basic RC16+ provides 16 telemetry channels with automatic out-of-tolerance alarms and remote raise/lower controls;

plus 16 status channels. The automatic functions — pattern shift, transmitter restart, power control — are pre-programmed in accordance with station license requirements and controlled with an accurate master clock.

The RC16+ is also expandable. In 16 channel increments, up to a total of 64 channels. With the remote video display option your chief engineer can get a detailed readout of all measured parameters. It's updated every 30 seconds and connects to any standard telephone. The optional plug-in automatic logger provides a permanent record of all transmitter activity. Log intervals, sequence, and alarm flags are user-selectable.

And, best of all, the RC16+ is cost effective. No other unit on the market offers these features and capabilities at this low price.

Basic System	\$4,995.00
Additional 16 Channels	1,865.00
Plug-In Automatic Logger	2,499.00
Remote Video Display Unit	650.00

POTOMAC INSTRUMENTS

932 PHILADELPHIA AVE. SILVER SPRING, MD 20910
(301) 589-2662



Circle 167 on Reader Service Card

PAY LESS ATTENTION TO YOUR VIDEO CART MACHINE

Now Available in
Beta-Cam Format



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 1-800-854-6853. In California call 714-774-5000.

Field Office:

WI Jesse L. Nickels, 1704 N. Wright Rd., Janesville 53545

608 754-2139/800 243-2001

See ad on pg. 103. Circle No. 168.

OKI TELECOM

1 University Pl., Hackensack, NJ 07601
201 646-0011

Digital standards converters.

OKTEL CORP.

1220 Page Ave., Fremont CA 94538
415 490-3100

Digital still stores, magnetic disc recorders.

OLD DOMINION BROADCAST ENGINEERING SVCE.

1101 Front St., Richmond, VA 23222
804 321-4506

Telco interface equipment. Audio cassette player/recorders; rebuilt audio heads. Hardwired intercom systems. Custom transmitter remote control systems. Antenna tuning units. Low-noise remote pickup equipment. Timers.

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.

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.

See ad on pg. 149. Circle No. 245.

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

Recording studios; music libraries; original music scores.

ONAN CORP.

1400 73 Ave. N.E., Minneapolis, MN 55432
612 574-5000

Power generators.

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.

OPRYLAND PRODUCTIONS

2806 Opryland Dr., Nashville, TN 37214
615 242-2483

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

OPTICAL DISC CORP.

17517H Fabrica Way, Cerritos, CA 90701
714 522-2370

CD mastering systems. Videodisc recording system. Color bar encoder/generator. Video test signal generators.

OPTIMUS

161 E. Grand Ave., Chicago 60611
312 321-0880

Mobile production facilities rental, video post-production facilities.

URBAN 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.

See ad on pg. 48. Circle No. 132.

ORION RESEARCH

4650 W. 160 St., Cleveland, OH 44135
216 267-7700

Audio-for-TV consoles; audio DAs, audio routing switchers. Serial interface video routing switchers; vertical interval machine control/technical automation; video DAs

ALLEN OSBORNE ASSOC.

756 Lakefield Rd. Bldg. J, Westlake Village, CA 91361
805 495-8420

Speed...



No one need be reminded of the importance of speed in today's world. New audio test requirements, now more than ever, are tuning up the demand for speed with more tests, more often and more devices to test.

The Amber 5500 Programmable Audio Measurement System offers a 3 to 10 time speed improvement over other programmable audio analyzers and perhaps 100 times that of older semi-automatic instruments. And if you really want blinding speed, our high speed plotting system captures over 500 readings per second!

The 5500 will meet the challenge of today's high-performance measurement requirements as well with distortion below 0.001%/-100dB, noise below 1uV/-120dBm and balanced generator levels above 30V/+30dBm. It measures signal level, gain, three kinds of distortion, weighted and unweighted noise, crosstalk and frequency to virtually all world standards. Balanced stereo inputs and outputs allow interface to professional, commercial and consumer devices. And if you need more measurement capability in the future, the unique Amber modular system architecture allows upward growth and system modification.

Ask for our comprehensive technical brochure.

Amber also makes one of the most popular portable high performance audio measurement systems - the 3501. Half the weight and size of comparable instruments, the 3501 has one of the best reliability records in the industry.



Amber Electro Design Inc.
4810 Jean Talon West
Montreal Canada H4P 2N5
Telephone (514) 735 4105
Telex 05-827598
US Toll free 800-361 3697

amber

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.

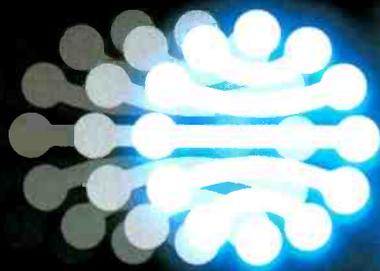
Contact your nearest Otari dealer for a demonstration, or call Otari Corporation, 2 Davis Drive, Belmont, CA 94002 (415) 592-8311 Telex: 910-376-4890

OTARI®



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Circle 17 on Reader Service Card



PESA

The "SWAT" * The best engineers assistant.

automatic analysis of all sync parameters of the video signal * video monitor output * local liquid crystal display * two independent video inputs * manual/automatic testing modes * alarm indicators for parameters out of tolerance * self-test software * RS 232 output to feed printer or PC * PAL/NTSC version.

Standard Measurements

Watcher-Analyzer:

- * sync and burst amplitude
- * field period
- * number of lines
- * horizontal sync width
- * number of cycles in burst
- * breezeway
- * number of vertical sync pulses
- * equalizer width
- * vertical pulse width
- * SC/H phase up to two degrees
- * SC frequency error up to 0.2 Hz



Timer:

- * H and V lock
- * PAL lock
- * H delay and SC phase delay between inputs A and B
- * Sync
- * Watcher
- * Analyzer
- * Timer



Pesa Electrónica, S.A.

Albalá, 12 - 28037 Madrid (Spain) - Telex: 48449 PESAE E - Tel: 754 00 78
Pesa America Inc. 6073 NW 167th St. - Miami, FL 33015 (USA) - Telex: 6712435 PESAM - Tel: 305-556-9638 - Toll Free: 1-800-USA-PESA

 INISEL Group

The affordable hi-tech.
Circle 171 on Reader Service Card

Hilomast telescoping microwave masts.
See ad on pg. 40. Circle No. 124.

OSRAM CORP.

Box 7062, Jeanne Dr., Newburgh, NY 12550
914 564-6300
HMI lamps & lighting fixtures.

OTARI CORP.

2 Davis Dr., Belmont CA 94002
415 592-8311

Single-deck cart player/recorders. Portable, 2-1/4-track studio & multitrack open-reel ATRs. Digital audio recorders. Tape duplicators.

See ad on pg. 105. Circle No. 170.

PACIFIC COAST VIDEO

635 1/2 Chapala, Santa Barbara, CA 93101
805 965-5015/213 876-3503

Video production & post-production facilities.

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.

PACIFIC RECORDERS & ENGINEERING

2070 Las Palmas Drive, Carlsbad, CA 92008

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. Cartcue splice finder. Complete disc playing consoles. AM & FM compressor/limiters, stereo & mono; Voice Processor parametric equalizers. Preamps. Stereo & mono audio DAs, NTP audio routing switchers, audio patch panels & jackfields. VU & PPM meters. Delay controller insert switcher. Custom & stock studio furniture, cabinets, studio consoles, equipment racks, cart/tape storage. Clocks, timers. Facilities design & engineering services; studio design consultants; engineering consultants.

PACIFIC VIDEO

809 N. Cahuenga Blvd., Los Angeles, CA 90038
213 462-6266

Video & audio post-production facilities; videodisc mastering services; graphics production.

PACKAGED LIGHTING SYSTEMS

Box 285, 29-41 Grant St., Walden, NY 12586

914 778-3515/800 426-1133

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.

714 W. Olympic Blvd., #706, Los Angeles, CA 90015

213 747-6540

Nicad batteries, chargers.

See ad on pg. 100.

Circle No. 166.

See ad on pg. 112.

Circle No. 240.

PAG AMERICA

Box 15194, 1270 Hendersonville Rd., Asheville, NC 28813

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.

Field Office:

TN Thom Belford, 5650 Matlock, Knoxville 37921 615 588-8410

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, amp power supplies.

Cameras: studio, field, ENG, single-tube color, CCD color, monochrome; Recam recorder/cameras. Newwicon, Vidicon camera pickup tubes. 3/4-inch U, M-format, M-II format & VHS VCRs; MERPS multicassette decks. 3/4-inch & half-inch videocassettes. Optical disc recorders. Telecine cameras. Titlers, subtitlers; 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.

Receive-only satellite earth stations, LNBS. Audio test signal generators; video test signal generators; oscilloscopes, logic analyzers. Capacitors.

See ad on pg. 10-11.

Circle No. 106.

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.

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. VHS interface for Sony editors. Frezzi On-Cam VTR system.

THE PERFORMANCE GROUP

2741 Noblestown Rd., Pittsburgh, PA 15205

412 922-0900

Rentals of lighting, power & support equipment; facilities design & engineering services; set/studio design services; engineering consultants

PERROTT ENGINEERING LABS

7201 Lee Hwy., Falls Church, VA 22046

703 532-0700

Nicad, silver-zinc & lead-acid batteries, chargers. Quartz lighting fixtures, cyc lighting. Lighting/ac cable, cable connectors. Quartz crystals; crystal filters, oscillators.

See ad on pg. 137.

Circle No. 197.

PESA AMERICA

6073 N.W. 167 St., #C4, Miami, FL 33015

305 556-9638/800 USA PESA

Hardwired intercom systems; audio DAs. Character generator/graphics systems; NTSC & high-resolution video monitors. LPTV transmitters, translators; receive-only satellite earth stations. Burst phase meters, SCH phase meters. Mobile vehicle construction.

See ad on pg. 106.

Circle No. 171.

PETERS PRODUCTIONS

9590 Chesapeake Dr., San Diego, CA 92123

619 565-8511/800 255-8511

Audio post-production facilities; recording studios; syndicated radio programming

PHILIPS TELEVISION SYSTEMS

900 Corporate Dr., Mahwah, NJ 07430

201 529-1550

Monitor speakers. Studio, field & ENG cameras; recorder/cameras. Sync generators. FM, VHF & UHF transmitters. FM & TV exciters. FM SCA equipment. Mobile vehicle construction.

Field Offices:

CA Michael W. Hartt, 3760 Cahuenga Blvd.

W., N. Hollywood 91604 818 766-8184

MD Colin Parkhill, 5410 Baychester Ct.,

Alexandria 22310 703 461-0188

MN Jeffrey N. Clarine, 15611 Fish Point

Rd., Prior Lake 55372 612 447-6036

TX Michael J. Mackin, Rte 2, 801 E.

Woodglen, Lewisville 75067 817 455-2214

PHILIPS TEST & MEASURING INSTRUMENTS

85 McKee Dr., Mahwah, NJ 07430

201 529-3800/800 631-7172

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

PHOEBUS MANUFACTURING

2800 Third St., San Francisco, CA 94107
415 550-1177

Ultra Arc HMI & CSI fixtures; Ultra Quartz quartz lighting fixtures.

PHOTO AND VIDEO ELECTRONICS

1620 Hillside Ave., New Hyde Park, NY
11040

516 328-6606

Pave Perispheric wide-angle macro lens. Liesegang 35 mm slide projectors.

PICTURE MANAGEMENT SYSTEMS

1069 Wisconsin Ave. N.W., Washington,
DC 20007

202 338-6390

Photo Store videodisc stock shot library.

PINZONE COMMUNICATIONS PRODUCTS

Box 540, Newbury, OH 44065
304 296-4493

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 ELECTRONICS (USA)

POB 22711, 5000 Airport Pl. Dr., Long
Beach, CA 90801 213 420-5700

Laser disc players.

PLASTIC REEL CORP. OF AMERICA

Brisbin Ave., Lyndhurst, NJ 07071
201 933-5100

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

CONSTANTINE N. POLITES & CO.

833 Guenther Ave., Yeadon, PA 19050
215 626-4643

Scaffolding couplers for lighting grids.

POLYCOM CORP. OF AMERICA

201 E. Erie St., 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.

b MEANS IT'S VERIFIED

POLYLINE CORP.

1233 Rand Rd., Des Plaines, IL 60016
312 297-0955

Open-reel audio tape, carts, cassettes, sprocketed mag film, test tapes & leaders, empty reels & carts, tape cleaners & evaluators, erasers & degaussers. Distributor of videotape.

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.

POSITIVE VIDEO

15 Altarinda Rd., Orinda, CA 94563
415 254-3902

You provide the vibration



The Schwem Gyrozoom® 60/300 will stabilize it



One of the torture tests we gave the Schwem Gyrozoom 60/300 Image Stabilizer Lens was an improvised dolly shot using an ordinary office chair. The chance you'll ever want to do that is remote. Still, it's nice to know it's possible.

You're more likely to use the Schwem Gyrozoom 60/300 for conventional handheld applications like snowmo-

biles, toboggans and skydiving. Or even boats, motorcycles and golf carts. In fact, almost anywhere that vibration threatens to ruin the shot. The Gyrozoom 60/300 fits most 2/3" ENG/EFP cameras and eliminates virtually all image vibration.

Consider the creative possibilities. Tripod quality images on location because practically anywhere you can

put a camera you can stabilize the image with a Schwem Gyrozoom 60/300.

Call Schwem today for a free demonstration. (800) 228-1333-242 or (415) 935-1226. 3305 Vincent Road, Pleasant Hill, CA 94523.



SCHWEM TECHNOLOGY

Video post-production facilities

Field Office:

CA 1250 San Carlos Ave., San Carlos, CA
9407 415 595-4041

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.

See ad on pg. 102.

Circle No. 167.

POWERPAK SYSTEMS

1200 Everman Pky, Ft. Worth, TX 76140
817 293-1761

FM exciters, stereo generators. RF amps.

PRECISION ECHO

3105 Patrick Henry Dr., Santa Clara, CA
95054

408 988-0516

Video Frame Star portable still-frame videodisc recorder. Video animation controller; Budget Squeezer compressor/positioner.

PRIME IMAGE

19943 Via Escuela, Saratoga, CA 95070
408 867-6519

TBC + & TBCSYNC + TBCs, frame synchronizers, digital efx generators.

PRO BATTERY CO.

2941 Oakcliff Industrial Ct., Atlanta, GA
30340

800 451-7171/404 449-5900

Nicad & lead-acid batteries, chargers. Kobold HMI ballasts, HMI & CSI fixtures, diffusion & efx material, lighting stands & rigging. GE, Sylvania, & Osram lamps.

PRODUCTION MASTERS

321 First Ave., Pittsburgh, PA 15222
412 281-8500

Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production facilities; equipment rental services; music libraries.

PROTECH AUDIO CORP.

Flowerfield Bldg. #1, St. James, NY 11780
516 584-5855

Mic mixers. Audio head cleaners, degaussers. 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.

PROTON CORP.

737 W. Artesia Blvd., Compton, CA 90220
213 638-5151

Video off-line monitors.

PRO VIDEO/CINETAPE

801 N. La Brea Ave., Hollywood, CA 90038
213 934-8840

Video post-production facilities

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

FM transmitters. FM exciters, stereo generators. Modulation monitors.

See ad on pg. 34.

Circle No. 118.

See ad on pg. 36.

Circle No. 120.

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

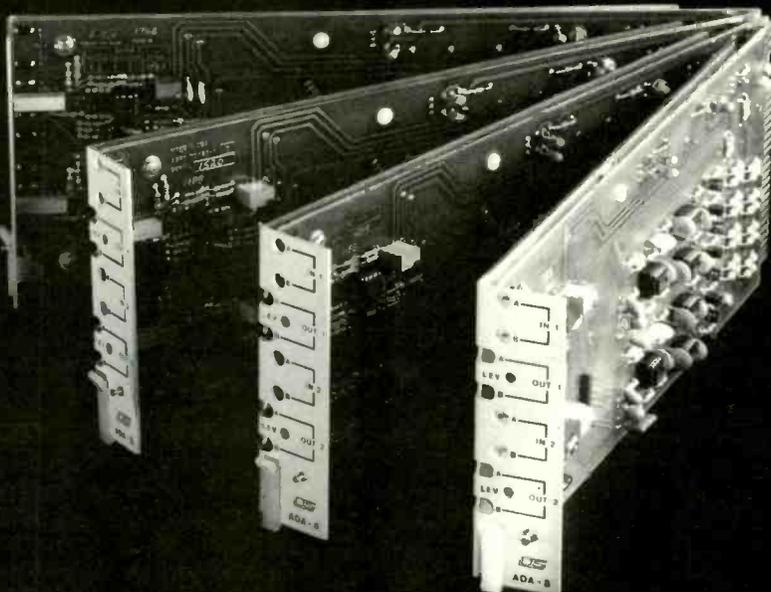
Super Flexible ADA

These Utah Scientific Audio DAs provide eight isolated outputs from one input—or four isolated outputs from each of two separate mono or stereo inputs—or can be used as remotely controlled mixers*—or with remote gain control.*

They mount ten-to-the-frame with single or redundant power supplies, and feature specs like .05% IMD/THD and $\pm .05$ dB flatness, all at +24 dBm/20 KHz.

Write or call for literature, a quote, or the name of your nearest dealer.

*With optional mix/gain module.



UTAH SCIENTIFIC, INC.
DYNATECH Broadcast Group

1685 West 2200 South, Salt Lake City, Utah 84119
Phone: (800) 453-8782 Toll Free or (801) 973-6840 • TLX 269-916

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

QUALITY VIDEO SUPPLY

76 Frederick St., Hackensack, NJ 07602
201 488-8336/800 431-6000

Telecomp computer video combiner, distributor of video and audio accessories, supplies & equipment.

QUANTA CORP.

2440 S. Progress Dr., Salt Lake City, UT 84119

801 974-0992

Microgen titlers, subtitlers, Quantafont character generator/graphics systems; Quantapaint & Quantapaint 32 digital art/paint systems; Dimension 3D modeling & animation system.

Field Offices:

MTN Gary Montgomery, 3417A Honeycutt Rd., Salt Lake City, UT 84106 807 485-1913

W Brent Bullock, 3417A Honeycutt Rd., Salt Lake City, UT 807 485-1913

SW Mel Williams, 1535 S. Memorial #124, Tulsa, OK 74112 918 627-4151

MW Benton Everett, 3559 Port Cove Dr. #25, Pontiac, MI 48054 313 423-5168

NE Peter Glassberg, 57 North St. #207, Danbury, CT 06810 203 797-1179

SE George Cudabec, 209 Bass Rd., Chattanooga, TN 37421 615 892-8427

INTL Len Zeller, 16006 Waterloo Rd., Cleveland, OH 44110 216 692-3410

EURO David Hughes, Postbox 289, 1430 AG Aalsmeer, The Netherlands
31 2977-23473

QUANTE CORP.

3350 Scott Blvd., Bldg. 15, Santa Clara, CA 95054

408 727-2077

Fiberoptic systems; audio & video encoders.

QUANTEL

3290 W. Bayshore Rd., Palo Alto, CA 95051

415 856-6226

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 pg. 38.

Circle No. 117.

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 meth-

od (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.

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 SYSTEMS

5113 W. Chester Pike, 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 de-

Showstopper!

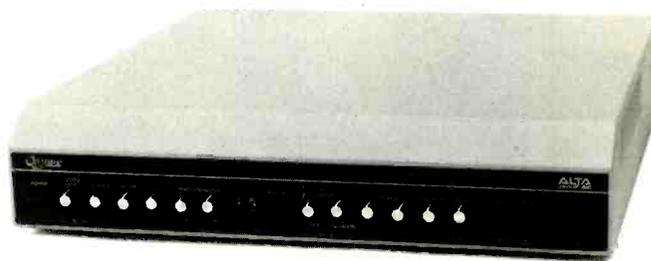
Digital Picture Freeze & "Infinite Window" TBC/Synchronizer

4x1 Audio & Video
Switcher... Built In!

H & V Image
Enhancement

D.O.C.

Meets Broadcast
RS170 Video
Specifications



Digital Video Effects

- Mosaic
- Freeze
- Posterization
- Colorization
- Picture Strobe

Cygnus

Video Production System

\$4990. List Price

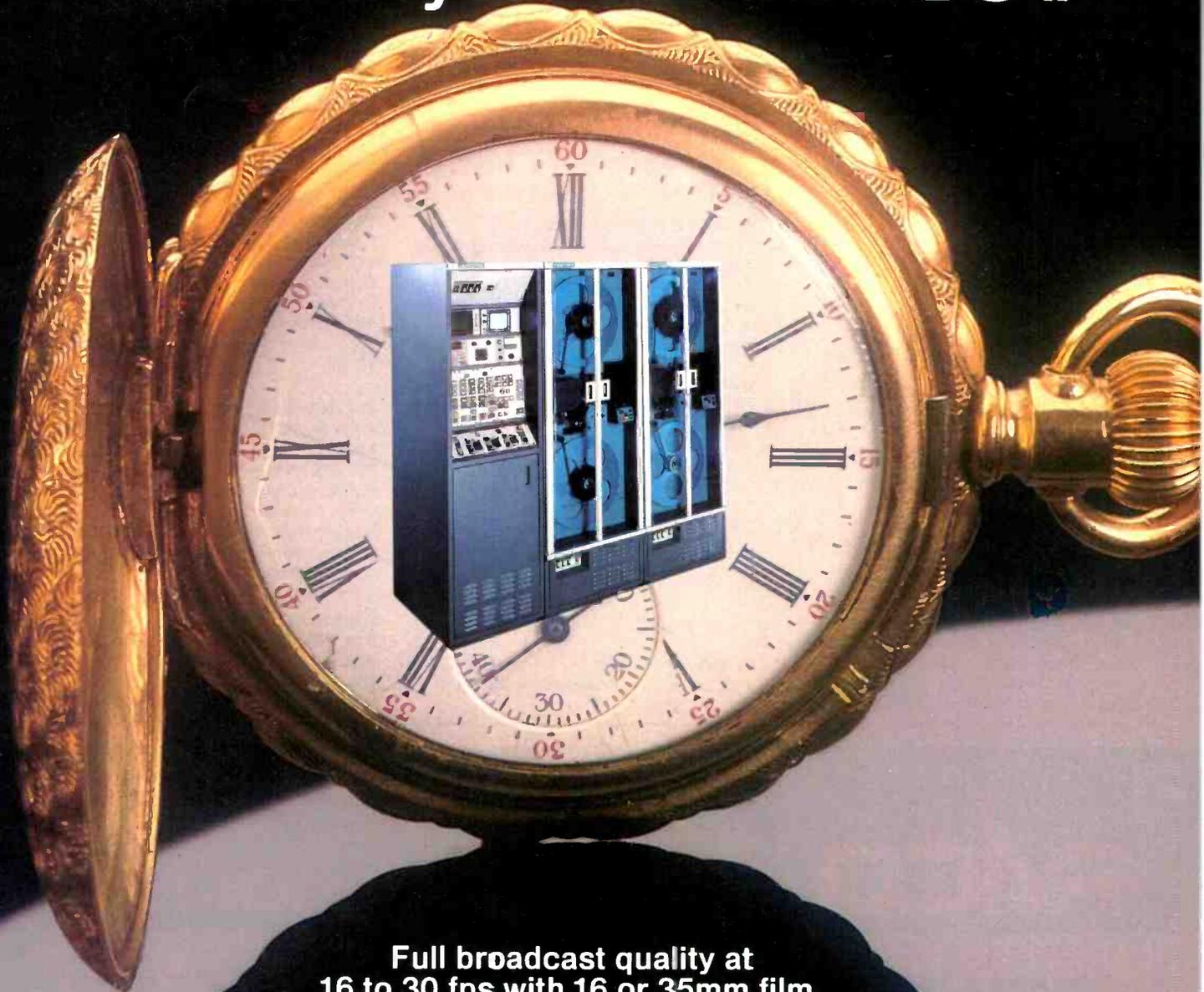
Phone or write for full particulars

The ALTA Group, Inc. 535 Race Street, Suite 230 San Jose, CA 95126 (408) 297-2582

**ALTA
GROUP, INC**

Circle 40 on Reader Service Card

Time is on your side with ADS-1.



**Full broadcast quality at
16 to 30 fps with 16 or 35mm film.**

ADS-1 is the only telecine designed specifically for broadcasters. It lets you compress film running time by as much as 25% without any unacceptable video side-effects. With this far superior technology, you'll never again have to cut scenes or suffer from picture degradation.

ADS-1 is fully compatible with 16 or 35mm film to give you the increased aesthetic impact that only 35mm can offer. You can also take advantage of the optional exclusive dirt/scratch concealment system and an automatic color corrector.

Rank Cintel is the world's only specialized manufacturer of telecine equipment. Backed by more than four decades of experience, you'll be glad to have ADS-1 on your side. For more information just call Rank Precision Industries at (914) 353-1914; (215) 886-9817; (609) 953-1331; or (818) 765-7265.

sign & engineering services; set/studio design services.

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.

RADMAR

1263-13 Rand Rd., Des Plaines, IL 60016
312 298-7980

16 mm telecine projectors. Videotape duplication services.

RAINBO PRODUCTS

410 N. River, Ypsilanti, MI 48197
313 482-6591

Lighting head assembly color changer; Horizon memory manual lighting controller.

RAM BROADCAST SYSTEMS

346 W. Colfax, Palatine, IL 60067
312 358-3330

U.S. distributor for McCurdy Radio products. Phasescope stereo monitoring device.

RAMKO RESEARCH

3501 #4 Sunrise Blvd., Rancho Cordova, CA 95670
916 635-3600

Mic mixers, portable audio consoles, DC Series mono & stereo studio consoles. XL Series power amps & audio consoles. Primus, Phasemaster single-deck cart player/recorders, Phasemaster real-time phase correcting cart player. AM compressor/

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
714 895-7278

Mic mixers; portable, mono & stereo studio, audio-for-TV consoles. Modular console for post-production. Monitor speakers. Power amps.

See ad on pg. 42.

Circle No. 126.

RANGERTONE RESEARCH

115 Roosevelt Ave., Belleville, NJ 07109
201 751-6833

Solid state telecine systems, telecine cameras, 16/35 mm telecine projectors, 35 mm slide projectors, optical multiplexers, telecine control systems.

RANK CINTEL

13340 Saticoy St., N. Hollywood, CA 91605
818 765-7265

Slide File digital still store. Solid state telecine systems, flying spot scanners, telecine color correctors, Amigo telecine control systems, Ferrit sound dubber; field/framestores.

Field Offices:

IL 411 E. Jarvis Ave., Chicago 60018
312 297-7720
NY 260 N. Route 303, W. Nyack 10094
914 353-1914

See ad on pg. 111.

Circle No. 175.

RAYCOM GROUP

1400 Eutaw Pl., Baltimore, MD 21217
301 561-3331

Skylink SNG communication system. Broadband power amps; ENG microwave transmitters & receivers.

RCA AMERICAN COMMUNICATIONS

4 Research Way, Princeton, NJ
08540-6684

609 987-4000

Satellite transmission services; post-production services.

RCA NEW PRODUCTS & CCTV DIV., TUBE OPERATIONS

New Holland Ave., Lancaster, PA 07602
717 295-6123/800 233-0155

Camera pickup tubes. RF amps, RF tubes. Fiberoptic systems.

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 systems. Dynamic, electret/condenser, RF & lavalier mics. IFB/ENG telephones, telephone headphones. Two-way radio communications.

REACH ELECTRONICS

Box 308, 1600 W. 13 St., Lexington, NE
68850

308 324-6661

Pocket Pagers RF intercoms.

PACO Ni-Cad BATTERY PACK

POWER UP! NEW PACO DP-11 (13.2V 1.7Ah)



■ NEW HIGH POWER CELLS ENABLE 1.7AH(0.2C Discharge Rate)

■ THE MAINTENANCE FREE THERMAL PROTECTOR IS BUILT-IN, AS OTHER PACO BATTERY PACKS.

■ THIS IS THE DIRECT REPLACEMENT FOR SONY NP-1.

PACO ELECTRONICS U.S.A., INC.

714 WEST OLYMPIC BLVD., SUITE 706, LOS ANGELES, CA 90015
TEL-213-747-6540 / TLX-756923 / FAX-213-747-3731

Circle 240 on Reader Service Card

b MEANS IT'S VERIFIED

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

UniVuUer VU & PPM meters, video monitor audio level displays. Safe title area generators. MonSter stereo coherency meter. Blanking width verifier. Facilities design & engineering services; mobile vehicle construction.

RECORTEC

275 Santa Ana Ct., Sunnyvale, CA 94086
408 737-8441

Videotape loaders, timers, rewinders; videotape 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.

REES ASSOCIATES

4200 Perimeter Ctr. Dr. #245, Oklahoma City, OK 73112

405 946-9800/800 527-2046

Facilities design & engineering services; engineering consultants; architectural & planning consultants.

Field Offices:

TX 2710 Stemmons Fwy., Stemmons N. Tower #900, Dallas 75207 214 630-7337

TX 6750 W. Loop S. #700, Bellaire 77401 713 432-7337

REEVES TELETAPE

708 Third Avenue, New York, NY 10017
212 573-8888

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

REGISTER DATA SYSTEMS

Box 1246, 404 Carroll Blvd., Perry, GA 31069

912 987-2501

Radio business automation hardware & software. Sea-Tex weather radar displays.

RE INSTRUMENTS CORP.

31029 Center Ridge Rd., Westlake, OH 44145

216 871-7617

Digital fiberoptic systems. Dual-channel audio analyzer; TV stereo test generator. RF test signal generators.

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;

This tape failure doubled the cost of an already expensive video production.



Videotape: The Weakest Link

To the producer, this shot became much more expensive and complicated than planned... all because the videotape quality was unknown before use.

Why wait for disaster to strike your video productions because of unknown tape quality? Prevention costs much less. RTI's new TapeChek 6120 is the world's top performing evaluator/cleaner for 1" videotape, specifically designed for professionals who demand superior tape performance.

With TapeChek you are assured that every inch of videotape is up to the high standards you expect from 1" tape. At 20 times standard play speed, the TapeChek 6120 accurately and thoroughly evaluates, inspects, cleans and polishes all blank or prerecorded tapes. Advanced 20 track MicroPulse detection electronically identifies dropouts. Plus, it can provide physical evaluation of prerecorded tapes without erasure. TapeChek's precision vacuum-assisted cleaning system substantially reduces temporary dropouts caused by loose oxide and dirt. Tape condition is graphically

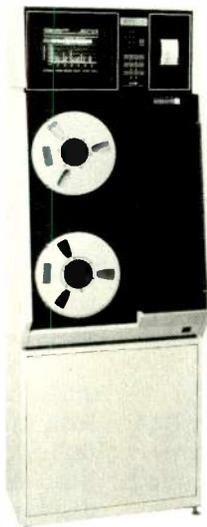
displayed by color CRT while a hard copy printer reports type and location of dropouts and damage.

Why risk increased production costs and lost revenue because of unknown tape quality? For complete information call:

1-800/323-7520.

In Illinois, call: 1-800/851-4028.

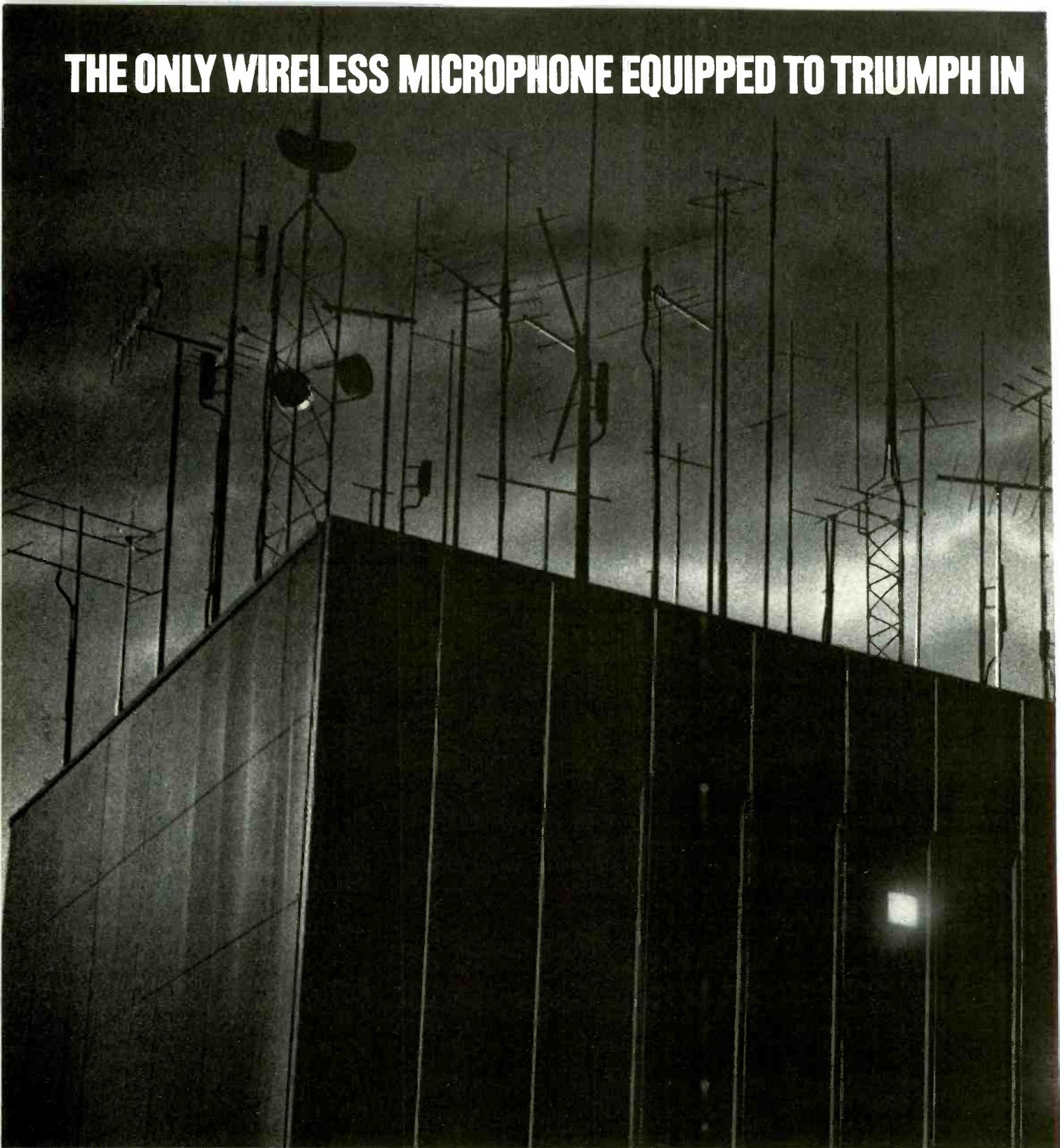
From Alaska, Hawaii and outside the U.S.A., call: 312/677-3000.



4700 Chase Avenue
Lincolnwood, IL 60646-1689

Leading the way in videotape care.

THE ONLY WIRELESS MICROPHONE EQUIPPED TO TRIUMPH IN



The airwaves are bursting with interference. TV broadcasts, police emergency calls, taxi dispatches, even other wireless microphones.

All of which can make a performer look bad, and an engineer look worse. But fortunately, Sony has created an effective alternative to the anxiety of conventional wireless microphones. The VHF Synthesized Wireless System.

TUNE YOUR WAY OUT OF A JAM.

Other wireless microphones are pre-tuned to just one channel. Each electronically synthesized Sony VHF wireless microphone, on the other hand, gives

you 48 channels—48 opportunities to get on the air without interference. With a mere push of a button.

In fact, with as few as 4 Sony wireless microphones and a tuner, you can reach 168 microphone channels. And the Sony Wireless System makes it possible to use up to 13 microphones in the same place at the same time. Also, Sony's tuner gives you an easy-to-read LCD display. Which is an indispensable asset when you happen to be in a big hurry.

In addition, Sony's wireless microphones won't leave you wincing at poor dynamic range. Thanks to a companding technique which yields a dynamic range

THE BATTLE OF THE BANDS.

in excess of 94dB. Well within the realm of wired microphone performance.

The Sony system is also designed to withstand the rigors of live recording. Besides being lightweight, it's also extremely sturdy. Including everything from the microphones, to the body pack transmitter, to the tuners, to the shock-resistant portable cases and rack-mounting brackets.

An arsenal of equipment designed to be invaluable to you in the battle of the bands. And to be an exceptional value

in Part 74 subpart H of the FCC regulations, and requires an appropriate license.



as well—about \$3,000 for a full-diversity system.

A small price to pay to keep a respected engineer's reputation from being at the mercy of a taxi dispatcher.

For more information about the Sony Wireless System, call the Sony Professional Audio office nearest you. In the East, call (201) 368-5185; in the South, (615) 883-8140; in the Central Region, (312) 773-6002; and in the West, (213) 639-5370.

SONY
Professional Audio

The SSL Stereo Video System

The Practical Standard For MTS Production

Before and beyond the transmitter, Multichannel Television Sound is an art. In the studio and post-production suite, the creative use of stereo can do as much or more than lighting, lensing, colour and video effects to give depth, impact and immediacy to the television picture. It quite literally adds an entirely new dimension to the viewing experience.

In stereo, television is a whole new ball game — or newscast, or series, or advert, or sitcom, or special. Because stereo is both natural and compelling, the programming possibilities are as broad as the imagination and skills of today's sound designers. Technical limitations and the constraints of time are the only obstacles. And that's where SSL can help.

Our SL 6000 E Series Stereo Video System handles complex MTS production with unrivalled ease and efficiency. Designed to simultaneously speed and enhance all aspects of television audio production,



the SL 6000 E Series makes innovative stereo programming practical on a daily basis.

Only SSL has triple stereo mix buses for stereo music, dialogue and effects, plus rapid mix-minus matrixing for Second Audio Program creation. Only SSL provides compressor/limiters, parametric equalizers, expanders and noise gates on every channel — plus balance and image width controls for all stereo sources. And only SSL provides such time-saving operational features as patch-free audio subgrouping and pushbutton signal processor routing. For post-production efficiency, even the multitrack electronics remotes are built right in. And that's just the new line standard equipment!



Options include Total Recall™ — an SSL exclusive, completely independent of the audio path, which allows any operator to recreate the most intricate console setups for any programme with rapid accuracy, week after week. Programmable dynamic stereo equalisation and panning may also be added, along with

tape cleaners, evaluators, erasers, degaussers. Ultrasonic film cleaners. VITC reader/generators. Dropout analyzers.
See ad on pg. 113. Circle No. 176.

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.

RICHMOND SOUND DESIGN

1234 W. Sixth Ave., Vancouver, BC, Canada 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

HitList computerized music scheduling and library maintenance system.

RKO TAPE CORP.

3 Fairfield Cres., W. Caldwell, NJ 07006
201 575-8484

Audio & computer tape duplicators. Audio cassettes.

Field Office:

NY 1440 Broadway, New York 10018
212 764-6603

ROH/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. Audio cable.

ROHDE & SCHWARZ/POLARAD

13 Nevada Dr., Lake Success, NY 11042
516 488-7300

Sync & color bar generators. AM, FM, VHF, UHF & LPTV transmitters. FM & TV exciters, modulators. Receive-only earth stations. Transmitter remote monitoring equipment.

Spectrum analyzers. 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.

ROHN

Box 2000, Peoria, IL 61656
309 697-4400

Tower masts, rigging, hardware, lighting.

ROSCO LABORATORIES INTL.

36 Bush Ave., Port Chester, NY 10573
914 937-1300

Lighting diffusion material, gels & filters. Scenery materials, props.

ROSCOR CORP.

6061 Feehanville Dr., Mt. Prospect, IL 60056

312 539-7700

Mobile vehicle construction; mobile production facilities rental; video post-production facilities; equipment rental services; facilities design & engineering services; engineering consultants. Custom studio consoles & equipment racks. Audio tone generator; monitor tally system.

Field Office:

WI Glenn Curry, 4701 W. Schroeder Dr.
#110, Milwaukee 53223 414 357-8000

JUDSON ROSEBUSH CO.

1619 Broadway, New York, NY 10019
212 397-5400

Video post-production facilities; video/film stock shot library; computer animation services.

ROSNER TELEVISION SYSTEMS

250 W. 57 St., New York, NY 10107
212 246-2850

Facilities design & engineering services; engineering consultants; earth station site selection; mobile vehicle construction.



multi-repeatable Events Control, Automatic Dialogue Replacement, and centralised command of up to five synchronised audio and video machines. All of this is thoroughly integrated with the SSL Studio Computer — the world's number one choice for mixing automation.

Best of all, the SSL Stereo Video System is not a hasty revamp of an old mono design. Nor is it an experimental project in search of a guinea pig. It is a practical, reliable international standard for advanced television audio production — proven in well over half a million hours of network and independent studio and mobile operation — in Great Britain, Japan, Germany, Scandinavia, Australia, Canada and all across the United States.

Take advantage of our experience. Call or write today for a free 40 page colour brochure describing the operation and applications of the SL 6000 E Series Stereo Video System. If your station or facility is contemplating an upgrade to full MTS production capabilities, we'll be happy to arrange a complete demonstration. And be sure to ask about our training programmes.

Solid State Logic

Begbroke, Oxford, England OX5 1RU • (08675) 4353
200 West 57th Street • New York, New York 10019 • (212) 315-1111
6255 Sur set Boulevard • Los Angeles, California 90028 • (213) 463-4444

ROSS AMERICAN LOGIC SYSTEMS
20540 D Superior St., Chatsworth, CA 91311
818 709-4195
Lamp-array displays for game shows, elections, telethons; computerized control light wall for theaters. Custom system design.

ROSS VIDEO LTD.
500 John St., Box 220, Iroquois, Ont., Canada K0E 1K0
613 652-4886
Portable, compact studio/mobile & large automated production switchers; post-production switchers.

RPM/RADIO PROGRAMMING/MANAGEMENT
25140 Lahser Rd. #232, Southfield, MI 48034
800 521-2537/in MI 313 358-1040
Syndicated radio programming; music libraries.

RSCAN CORP.
511 11 Ave. S., Minneapolis, MN 55415
612 333-1424
Satellite weather displays, lightning tracking systems. Lang video-to-slide printer. Zephyr weather data service. Weather Sentinel services.

RTS SYSTEMS
1100 W. Chestnut St., Burbank, CA 91506
818 840-7313
Hardwired intercom systems, IFB systems. Preamps, line amps, monitor/power amps. Audio DAs, telco interface equipment.

RUSLANG CORP.
320 Dewey St., Bridgeport, CT 06605
203 384-1266
Studio furniture; studio consoles; equipment racks; cart/tape storage.

RUSSCO ELECTRONICS MFG.
5690 E. Shields Ave., Fresno, CA 93727
209 291-5591
Turntables, tonearms. Audio DAs. Preamps, power amps. Audio consoles. Telephone remote equipment.

SACHTLER CORP. OF AMERICA
400 Oser Ave., Hauppauge, NY 11788
516 231-0033
Camera tripods, heads, pedestals, ENG braces, dollies.
See ad on pg. 121. Circle No. 182.

SADELCO
75 W. Forest Ave., Englewood, NJ 07631
201 569-3323
TV signal level meters; white noise generators; meter repairs.

SAE/SCIENTIFIC AUDIO ELECTRONICS
1734 Gage Rd., Montebello, CA 90640
213 726-9999
Audio cassette player/recorders. CD/DAD players. Parametric equalizers. Preamps, monitor/power amps.

SAKI MAGNETICS
8650 Hayden Pl., Culver City, CA 90230
213 559-6704
Replacement audio & video ferrite heads for Ampex, MCI, Otari, ReVox & Scully record-

ers. Replacement 2-inch metal heads for Ampex, MCI, Mincom, Otari & Studer Recorders

SAMSON PRODUCTS CORP.
124 Fulton Ave., Hempstead, NY 11550
516 489-2203
VHF wireless mic systems.

SANSUI ELECTRONICS
1250 Valley Brook Ave., Lyndhurst, NJ 07071
201 460-9710
Audio cassette player/recorders; digital cassette recorders. CD/DAD players. Graphic equalizers. Preamps, line amps. VHS VCRs. Tilters, subtitlers. NTSC monitors. A/V signal processor & special efx generator. Digital clocks, timers.

Field Offices:
CA Len Gielarowski, 17150 S. Margay Ave., Carson 90746 213 604-7300
IL Paul Hirose, 2015 S. Arlington Hts. Rd. #112, Arlington Heights 60005 312 439-6320
TX Mark Smith, 13773 N. Central Expy. #1414, Dallas 75243 214 699-1964

SATCOM TECHNOLOGIES
2912 Pacific Dr., Norcross, GA 30071
404 448-2116
Transmit/receive & transportable satellite earth stations. Satellite network controllers.

SATELLEASE
223 W. Erie, Chicago, IL 60610
312 649-9339/800 323-1366
Satellite networking services; transmission/reception services; satellite time brokers.

Compact

without Compromise



Studer 961/962: Small Wonder

It's a wonder how a console so small can do so much ... and sound so good!

The Swiss have a special talent for making great things small. A case in point: the new 961/962 Series mixers from Studer. In video editing suites, EFP vans, remote recording, and radio production, these compact Studers are setting higher standards for quality audio.

Sonic performance is impeccable throughout, with noise and distortion figures well under what you'd need for state-of-the-art digital recording. By refining and miniaturizing circuits developed for our 900 Series production consoles, Studer engineers have squeezed world-class performance into suitcase size.

The 961/962 Series is fully modular, so you can mix-and-match modules to meet your requirements. The 961/962 features stereo line level input modules with or

without 3-band EQ, plus mono mic/line inputs and master module with compressor/limiter. Other choices include a variety of monitor, talk-back, auxiliary, and communication functions. The 961 frame holds up to 14 modules, the 962 accepts up to 20.

Other new features in the 961/962 Series include improved extruded guide faders, balanced insert points, FET switching, electronic muting, Littlite® socket, and multi-frequency oscillator.

Thanks to its light weight, DC converter option, and sturdy transport cover, you can put a 961/962 mixer on the job anywhere. And, with Studer ruggedness and reliability, you can be sure the job will get done when you get there.

Packed with performance and features, 961/962 consoles will surely

make a big splash in audio production circles. Small wonder. Call your nearest Studer representative for more details.



With snap-on cover, mixer is road-ready in seconds.

STUDER REVOX

Studer Revox America, Inc.

1425 Elm Hill Pike/Nashville, TN
37210/(615) 254-5651

New York (212) 255-4462 • Los Angeles (818) 780-4234
Chicago (312) 526-1660 • Dallas (214) 943-2239
San Francisco (415) 930-9866

Circle 179 on Reader Service Card

SATELLITE CONSULTANTS

Box 1509, Idaho Springs, CO 80452
303 567-4679

Engineering consultants; earth station site selection; mobile vehicle construction; satellite time brokers.

SATELLITE MUSIC NETWORK

12655 N. Central Expy. #600, Dallas, TX 75243

214 991-9200/800 527-4892

Live radio programming networks via satellite.

SCALA ELECTRONIC CORP.

Box 4580, Medford, OR 97501
503 779-6500

FM, TV HP & CP, communications antennas. STL & TSL antennas. Power dividers.

SCENE THREE

1813 Eighth Ave. S., Nashville, TN 37203
615 385-2820

Video & film production & post-production facilities; mobile production facilities; audio post-production facilities.

SCHAFFER WORLD COMMUNICATIONS CORP.

Box 31, Marion, VA 24354
703 783-2001

Mic mixers, portable, mono & stereo studio consoles, console automation. Random-access cartridges. Multi-deck cart player/recorders. CD players, turntables, pickup arms. Relay sequencers, time insertion sequencers, computer automation controllers, automatic satellite switchers, complete program automation systems, automatic

time/weather announcers. Radio business automation systems.

Field Office:

VA Box 31, Marion 24354 703 783-2000

RON SCHILLER ASSOC.

140 Country Rd., Tenafly, NJ 07670
201 568-1552

Facilities design & engineering services; engineering consultants.

See ad on pg. 136.

Circle No. 196.

SCHNEIDER CORP. OF AMERICA

400 Crossways Park Dr., Woodbury, NY 11797

516 496-8500

Camera lenses, filters, lens remote control. Equipment rental services; lens repair.

Field Office:

CA Peter Mieke, 861 Production Pl., Newport Beach 92663 714 631-7430

See ad on pg. 45.

Circle No. 129.

SCHWEM TECHNOLOGY

3305 Vincent Rd., Pleasant Hill, CA 94523
415 935-1226

Gyrozoom image stabilizing lens.

See ad on pg. 108.

Circle No. 172.

SCIENTIFIC-ATLANTA

Box 105027, Atlanta, GA 30393

404 441-4000

Stereo generators, modulators. Transmit/receive, receive-only & transportable satellite earth stations; upconverters, downconverters; LNAs; scrambling & encryption systems; MAC systems; satellite network controllers. SMATV systems. Rigid, foam dielectric & coaxial transmission line;

power dividers; RF connectors. Video test signal generators. TBCs, frame synchronizers, field/framestores, TBC/framestores. Optima cabinets, studio consoles, equipment racks.

See ad on pg. 123.

Circle No. 183.

SCIENTIFIC-ATLANTA/DIGITAL VIDEO SYSTEMS DIV.

120 Middlefield Rd., Scarborough, Ont., Canada M1S 4M6

416 299-5888

Sync, black burst, color bar & safe title area generators. TBCs, field synchronizers, frame synchronizers, field/framestores, TBC/framestores. Encryption systems, MAC systems.

See ad on pg. 126.

Circle No. 187.

SCIENTIFIC SYSTEMS

92 Westwood Dr., Toms River, NJ 08753
201 255-2230

Audio preamps, line amps, monitor/power amps; audio DAs.

L.J. SCULLY MFG. CORP.

138 Hurd Ave., Bridgeport, CT 06604
203 368-2332

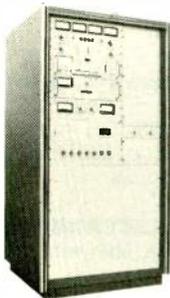
2-4-track studio ATRs.

SCV

414 N. Sparks St., Burbank, CA 91506
818 843-7567

FM compressor/limiters; parametric & graphic equalizers. Analog efx, reverb. Preamps, line amps, amp power supplies. Telco interface equipment; audio multi boxes, splitters. Audio phase checker.

New Class A Winner



Continental's Type 814B 4.3 kW FM Transmitter uses the Type 802A Exciter to deliver a crisp, clean signal.

With an output of 4,300 watts, it has plenty of power reserve for Class A operation on a 2-bay antenna system. It's solid-state except for one 4CX3500A Tetrode in the final amplifier. A built-in harmonic filter is just one of many outstanding operating benefits. For a brochure, call (214) 381-7161. Continental Electronics, a Division of Varian Assoc., Inc. PO Box 270879 Dallas, Texas 75227.

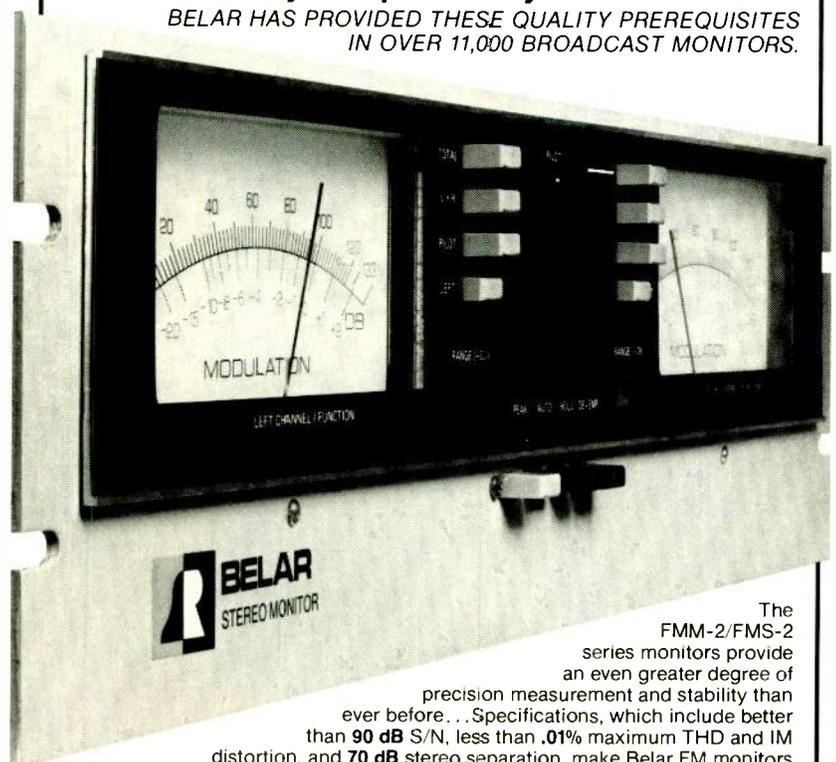
Transmitters 1 to 50 kW AM and to 60 kW FM, FM antennas, studio & RF equipment. ©1986 Continental Electronics/6213



Circle 199 on Reader Service Card

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BELAR HAS PROVIDED THESE QUALITY PREREQUISITES IN OVER 11,000 BROADCAST MONITORS.



The FMM-2/FMS-2 series monitors provide an even greater degree of precision measurement and stability than ever before... Specifications, which include better than 90 dB S/N, less than .01% maximum THD and IM distortion, and 70 dB stereo separation, make Belar FM monitors the most accurate available today.

BELAR ELECTRONICS LABORATORY, INC.
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Call or write for more information on Belar AM, FM, Stereo, SCA and TV monitors.

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VIDEO CENTER



for • VIDEO PRODUCTION
• POST-PRODUCTION
• EDITING • ENG • EFP

- CABINET CONSOLES
- DESK CONSOLES
- VTR/VCR RACKS
- DUBBING RACKS

STANTRON VIDEO CENTER

Designed for YOUR VIDEO EQUIPMENT has modular "add-on" features that allow maximum flexibility and versatility in designing console arrangements for professional, industrial, communication and educational VIDEO CENTERS.

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or call Toll Free: 1-800-821-0019
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So. Calif. please call 1-213-875-0800
TWX: 910-499-2177

STANTRON

Unit of Zero Corporation

factory:
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305 665-5694

Underwater video productions.

SELCO PRODUCTS CO.

7580 Stage Rd., Buena Park, CA 90621
714 521-8673

VU & PPM meters.

See ad on pg. 147.

Circle No. 194.

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3200 Sencore Dr., Sioux Falls, SD 57107
605 339-0100/800 843-3338

Audio & video test signal generators. Field strength meters, impedance bridges. Oscilloscopes, multimeters, dB meters.

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Headphones. Mics: dynamic, electret/condenser, RF, shotgun, lavalier & modular. Audio analyzers. Impedance bridges.

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Computer automation controllers, automatic satellite switchers, complete program automation systems.

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Mic mixers. ALC & AGC amps, parametric & graphic equalizers. Preamps, line amps, monitor/power amps. Audio DAs, audio patch panels & jackfields, audio multi boxes & splitters. LED displays.

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Headphones. Hardwired intercom systems.

SHALLCO

Smithfield Ind. Pk., Box 1089, Smithfield, NC 27577

919 934-3135

Daven/Shallco rotary attenuators, Slidex slide attenuators.

SHARP ELECTRONICS

Sharp Plaza, Mahwah, NJ 07430
201 529-8731

ENG/EFP & single-tube cameras; recorder/cameras. Professional Series VHS VCRs. NTSC, RGB & high-resolution video monitors; video projectors. Dynamic mics.

Field Offices:

CA Gary Bridges, 20600 S. Alameda St., Carson 90810 213 637-9488

GA Ron Parker, 725 Old Norcross Rd., Lawrenceville 30245 404 995-0717

IL Paul Insco, 430 E. Plainfield Rd., Countryside 60525 312 432-9292

SHINTRON CO.

144 Rogers St., Cambridge, MA 02142
617 491-8700/800 358-NTSC

Compact studio/mobile production switchers, post-production switchers, component switchers. Digital still store. Digital efx generators, compressor/positioners, colorizers, RGB & encoded chromakeyers, downstream keyers. Parallel & serial interface video routing switchers; component routing



Best Show on Wheels. The New Video 20 Pedestal System.

When you and your EFP camera are on the go, get maximum portability plus studio comfort with the Video 20 Pedestal System from Sachtler. A pneumatically supported center column with its pressurized balance system provides multiple load capabilities for smooth and precise on air movement. The steerable dolly assures equally smooth and precise tracking. Also, the Video 20 Pedestal can be combined with the Sachtler Semi-Dolly or used as a stable, stationary unit. For lightweight portability and professional results, the Video 20 Pedestal System proves itself a champion in action. Everywhere. Every time. Of course all Video 20 Pedestal System combinations come with Sachtler's guaranteed leakproof fluid heads for the ultimate in smooth, precise shooting.

That's what we are known for. Worldwide. For detailed information, please contact us.

Sachtler. The System.

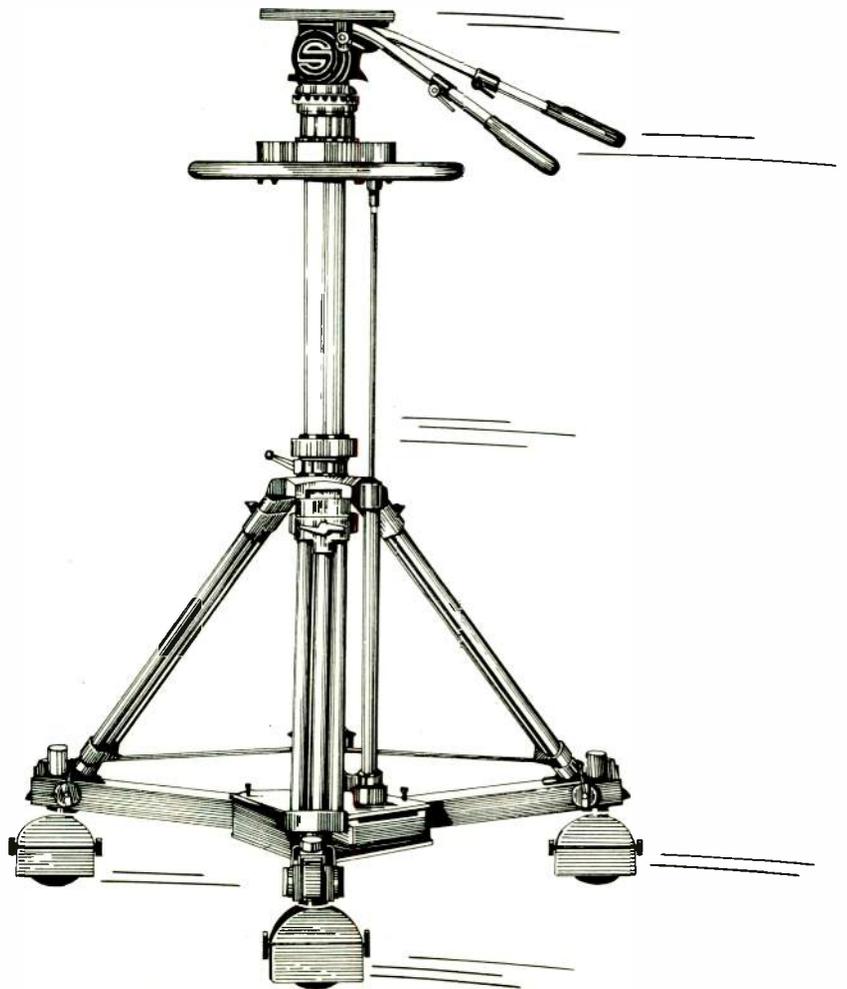


Sachtler Corp.
400 Oser Avenue
Hauppauge N. Y. 11788
Phone (516) 231-0033

3316 W. Victory Blvd.
Burbank, CA 91505
Phone (818) 845-4446

Sachtler GmbH Dieselstr. 16,
 D-8046 Garching/München,
 West Germany

Circle 182 on Reader Service Card



switchers. SMPTE time code generator/readers. SMPTE time code synchronizers. VITC reader/generators. Component frame synchronizers. NTSC TBC/framestores, standards converters. Video & audio DAs, subcarrier amps, audio routing switchers. Chroma Digital TBC/framestores.

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Diplexers, multiplexers. RF filters, loads, switches. Antennas. FM, TV HP & CP, antenna tuning units. Rigid & coaxial transmission line, power dividers, RF connectors. Directional couplers, AM/FM & AM/LPTV isocouplers, pressurization units, RF patch panels.

See ad on pg. 135.

Circle No. 173.

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6630 Topper Pky., San Antonio, TX 78233
512 653-6761
Mobile vehicle construction.

SHURE BROS.

222 Hartrey Ave., Evanston, IL 60202
312 866-2200

Mic mixers, portable consoles. CD/DAD players; phono cartridges. Mics: dynam, electret/condenser, PZM, lavalier, shotgun, stereo, mic booms & dollies. Preamps, line amps. Audio DAs, audio multi boxes & splitters. Surround Sound decoders.

See ad on pg. 13.

See ad on pg. 122.

Circle No. 107

Circle No. 181.

SIECOR CORP.

489 Siecor Pk., Hickory, NC 28603
704 327-5964
Fiberoptic transmission systems.

SIERRA VIDEO SYSTEMS

P.O. Box 2462, Grass Valley, CA 95945916
273-9331

RJW address: 251 Rolling Meadow Dr., Billings, MT 59101406 628-7344

Audio routing switchers. RGB chroma-keyers, title keyers, downstream keyers. Serial interface video routing switchers. Color bar generators. Video DAs. Component video transcoders for Betacam & M-II formats; component video breakout boxes.

SIGMA ELECTRONICS

Box 448, E. Petersburg, PA 17520
717 569-2681

Sync, black burst, color bar, SID & sale title area generators; video slate board/countdown generators. Proc amps, audio & video DAs, pulse amps, subcarrier amps. Video test signal generators.

SIMS VIBRATION DYNAMICS

17724 15 Ave. N.E., Seattle, WA 98155
206 362-0700

Electric Isolator isolation bases for turntables, CD players.

SINGER BROADCAST PRODUCTS

875 Merrick Ave., Westbury, NY 11590
516 683-3000

AM & FM stereo generators. FM exciters. SCA generators.

SKAGGS TELECOMMUNICATIONS SERVICE

5181 Amelia Earhart Dr., Box 27477, Salt Lake City, UT 84127

801 539-1427

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SKOTEL CORP.

1445 Provencher, Brossard, Que., Canada J4W 1Z3

514 465-8990/in US 800 361-4999

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SKYWORKS

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215 497-5100

Skycam aerial camera remote-control system.

SLD/STAGE LIGHTING DIST.

Stony Pt. Industrial Pk., Stony Pt., NY 10980

800 228-0222/914 947-3035

GE & Sylvania lamps. Quartz fixtures, cyc lighting, lighting stands & rigging, lighting control boards, dimmer packs. Rosco & Lee diffusion & efx material.

SMITH-VICTOR CORP.

301 N. Colfax, Griffith, IN 46319
219 924-6136

Audio cassettes. Half-inch videocassettes. Lamps, quartz lighting fixtures, lighting



The alternative to our "double isolation" headsets.

The Shure SM1 and SM2 Headsets isolate you from sound in two exclusive ways.

First, these headsets use extra-large, pillow-soft ear pads for superior noise isolation and comfort. Second, they feature a noise-reducing mic, with a precision cardioid polar pattern, to leave background noises where they belong...in the background. The mic's tailored frequency response insures outstanding voice reproduction.

Other features include: an all-metal boom and double-braced, all-metal headband for greater durability and comfort; a patented boom mount for total mic position flexibility; detachable cable; and a stylish matte chrome and black finish that looks great "on camera".

The SM2 is a dual-ear headset, the SM1 — single. For complete information, write or call Shure Brothers Inc., 222 Hartrey Avenue, Evanston, IL 60202-3696. (312) 866-2553.



SHURE
Breaking Sound Barriers

Please see us at RTNDA Booth #351

Circle 181 on Reader Service Card

Scientific Atlanta



THE ONLY FULL LINEUP THAT COVERS ALL THE BASES.

SCIENTIFIC-ATLANTA MAKES COMMUNICATION SYSTEMS TURNKEY AND TROUBLE FREE.

The need for reliable and trouble free systems for video, audio and data satellite transmission increases everyday. To meet this need, Scientific-Atlanta offers the most comprehensive line and has become one of the largest suppliers of high quality satellite products in the world.

Whether uplink or downlink, our earth stations are complete, offering: antennas, exciters, receivers, low-noise amplifiers, switching equipment, power amplifiers, plus every accessory.

Ku-Band electronics are now available with the same standard of performance that Scientific-Atlanta has set in its C-Band electronics. And, data communication is available from 56 Kb/s to T-1.

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Scientific-Atlanta can design and install a complete system. Or, we can provide specific components to stand alone or integrate perfectly with an existing system. Such flexibility results in cost-effectiveness because you choose only the features you need. And, once specified, you receive prompt system assembly and shipment.

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Scientific-Atlanta is in a unique position to offer responsive and continuous after-sales support. From comprehensive training programs to the fastest possible turnaround for maintenance, replacement parts and repairs.

Our full line of trouble-free products, turnkey system approach, flexibility and responsive customer service have gained the confidence of operators worldwide. That's the reason we've supplied more large earth stations than any other manufacturer in the world.

Scientific-Atlanta has been the leader in earth station technology, sales and performance from the beginning. For more information call Dan Landreth at (404) 449-2844. Or, send in the coupon below.

I want to know more about the Scientific-Atlanta full lineup of products.

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Company _____

Title _____

Address _____

City _____ State _____

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Have a sales representative contact me.

BM/E 8 86

Mail to: Scientific-Atlanta Department AR,
P.O. Box 105027, Atlanta, GA 30348

stands & rigging, diffusion & efx material.
Kenlock tripods.

WARREN R. SMITH, INC.
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Snorkel & telecine lenses. Animatics stands,
servo slide positioners, title positioners.

SOLID ELECTRONICS LABS
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215 353-9449

Video production facilities; mobile produc-
tion facilities rental; equipment rental
services.

SOLID STATE LOGIC
Begbroke, Oxford, U.K. OX5 1RU
08675 4353

Mic mixers; portable consoles; mono &
stereo studio & audio-for-TV consoles;
console automation, video interface for
consoles.

Field Offices:
CA Andy Wild, 6255 Sunset Blvd.
Los Angeles 90028 213 463-4444
NY Piers Plaskitt, 200 W. 57 St., New York
10019 212 315-1111

See ad on pg. 116-117.

SOLL, INC.
401 E. 74 St., New York, NY 10021
212 988-0290

Cat satellite network controllers, transmitter
remote control systems, log printers, status/
alarm indicators. Facilities design & engi-
neering services; engineering & computer
consultants.

H.A. SOLUTECH LTD.
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da H2H 2L8
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Automated broadcasting system; adaptive
cochannel system.

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305 962-8650
Satellite receive-only earth stations.

SONAR RADIO CORP.
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Videoraser videotape erasers, degaussers.
Video production & post-production facili-
ties; recording studios; equipment rental ser-
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SONO-MAG CORP.
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Time insertion sequencers, computer auto-
mation controllers, automatic satellite
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systems, automatic time/weather announ-
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**SONY BROADCAST PRODUCTS
CO.**

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Studio & field cameras, Betacam three-tube,
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¾-inch U, half-inch Betacam VCRs. Betacart
MERPS multicassette system. VTR slow-mo
systems; Super Motion video system. Two-
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multisource video editors, VITC reader/
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tion & battery-powered portable monitors.

Audio Products Dept.: Mic mixers, porta-
ble audio consoles, stereo studio consoles,
console automation, audio-for-TV consoles;
video interface for consoles. Audio cassette
player/recorders. Portable, 2-¼-track &
multitrack ATRs, audio layback system, cen-
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Digital audio recorders. SMPTE time code
synchronizers, editors for digital audio. CD/
DAD players. Parametric equalizers. Digital
efx, reverb. Monitor speakers. Electret/
condenser, RF, lavalier & shotgun mics, mic
booms, dollies. Monitor/power amps.

Field Offices:

CA Robert Manahan, 2820 W. Olive Ave.,
Burbank 91505 818 841-8711
GA Andy Kryworuchenko, 2300 Peachford
Rd., Atlanta 30338 404 451-7671
HI T. Katoh, 1020 Auahi St., Honolulu
96814 808 531-5981
IL David Doherty, 500 Park Blvd., Itasca
60143 312 773-6046
TX Charlie Taylor, 1320 Walnut Hill Rd.,
Irving 75038 214 659-3600
NY Lenny Staskiewicz (NY/NE)/Bob
Combs (Mid-Atl.), 15 Essex Rd., Paramus
07652 201 368-5111/5120

See ad on pg. 2-3.

See ad on pg. 114-115. Circle No. 177.

SONY MAGNETIC PRODUCTS CO.
1 Sony Dr., Park Ridge, NJ 07656
201 930-1000

Audio cassettes. One-inch videotape,
¾-inch & half-inch cassettes, industrial 8 mm

WE WORRY, SO THAT YOU WON'T HAVE TO.

We have strong opinions about the way
communications towers should be built.

Some people think that quality standards
can be somewhat flexible.

We don't agree.

Some people think that "off-the-shelf"
designs, with minor adjustments, are
sufficient to meet most requirements.

We don't agree.

Some people think that short cuts in
fabrication are justified when the end
product seems "good enough".

We don't agree.

For TV, CATV, "Class C" FM, AM and
microwave towers, call STAINLESS. We
worry about quality . . . so you won't
have to.

The Tower People



Stainless, inc.

North Wales, PA 19454 U.S.A.
Phone: (215) 699-4871
TWX: 510-661-8097

C0186



THE TEKTRONIX SPG-170A. ITS FEATURES AND VALUE CAN'T BE MATCHED.

Introducing the new Tektronix Master Sync Generator, the SPG-170A. It has the features you need in an RS-170A sync generator... all in an affordable, 1 1/4-inch package. Just plug it in, set and forget it. You can't do better than that!

All SPG-170A signals are digitally generated to pro-

vide excellent SCH and timing accuracy. Included are digital genlock, high stability internal reference and digitally generated black burst.

With the SPG-170A, outputs are always color framed correctly—regardless of input signal SCH phase.

The SPG-170A's sync timing controls enable you to advance or delay subcarrier and pulse outputs relative to the black burst output. This

eliminates the need for separate delay lines.

Offered as options... an exclusive audio tone output for setting program levels, in addition to color bars with 12 character I.D. and tape leader countdown.

Don't settle for less. Get the full story from your Tektronix representative.

Ask for a demonstration and see why we say the SPG-170A's features and value can't be matched!

**Behind the Scenes
in Quality Television.**



Tektronix SPG-170A
NTSC SYNC GENERATOR

I.D.

AUDIO TONE

RS-170A

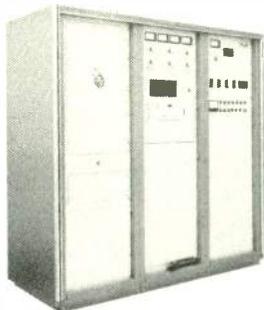
DIGITAL GENLOCK

COLOR BARS

Tektronix
COMMITTED TO EXCELLENCE

Circle 185 on Reader Service Card

New 35 kW FM Power From A Proven Winner



- SCR Power Control
- Automatic RF Power Output Control
- Automatic SWR Circuit Protection
- SWR Output Power Foldback
- Remote Control Interface
- AC Power Failure Recycle
- Grounded Screen Amplifier
- Internal Diagnostics

Continental's New Type 816R-5 is a high performance FM transmitter that uses the Type 802A exciter to deliver a crisp, clean signal.

The power amplifier uses an EIMAC YC 130/9010 Tetrode specially designed for Continental, to meet stringent FM service requirements at 35kW.

The 816R-5 is an outgrowth of Continental's popular 816R Series of 10, 20, 25 and 27.5 kW FM transmitters. It uses husky components and is built to give many years of reliable, dependable service.

For brochure and operating data, call (214) 381-7161. Continental Electronics, a Division of Varian Assoc., Inc. PO Box 270879 Dallas, Texas 75227.

Transmitters 1 to 50 kW AM and to 60 kW FM, FM antennas studio & RF equipment ©1986 Continental Electronics/6210



Circle 186 on Reader Service Card



DPS-175 TBC/Framestore

Crystal vision framestore and full-featured TBC... all in a single rack unit. The DPS-175's 525-line buffered memory freezes frames or fields of incoming monochrome, heterodyne or direct color with a 3.58 MHz feedback to tape source. And you get TBC with wide dynamic tracking range of -1 to +3 and clear viewing up to $\pm 30X$ play speed.

Synchronous and non-synchronous tape source switching means flexibility and compatibility of tape source, with a 525-line

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

buffered correction window and RF/TTL selectable drop out compensator.

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

Scientific Atlanta

Digital Video Systems Division

Circle 187 on Reader Service Card

MEANS IT'S VERIFIED

videotape; empty reels, carts & cassettes; tape cleaners & evaluators.

Field Offices:

CA Mark Rath, 700 W. Artesia Blvd., Compton 90220	213 537-4300
GA Don Riggs, 2300 Peachford Rd., Atlanta 30338	404 455-0782
IL Michael Cullen, 500 Park Blvd., Hamilton Lakes, Itasca 60143	312 773-6000
NJ Robert Grassi, 15 Essex Rd., Paramus 07652	201 368-5000

SONY VIDEO COMMUNICATIONS PRODUCTS DIV. 1 Sony Dr., Park Ridge, NJ 07656 201 930-1000

Field, ENG, CCD color & monochrome cameras; recorder/cameras. $\frac{3}{4}$ -inch U & Beta VCRs. Digital still stores, optical disc recorders. Character generator/graphics systems, bit pad digitizers, camera/VTR digitizers. Portable production switchers. Standalone analog efx, downstream keyers. A/B roll editors. Monochrome, NTSC, RGB, high-resolution & battery-powered portable video monitors; video projectors. Still frame video recorder; video color printers.

SOPER SOUND MUSIC LIBRARY Box 498, Palo Alto, CA 94302 415 321-4022/800 227-9980 Production music library.

SOUNDCRAFT ELECTRONICS 8500 Balboa Blvd., Northridge, CA 91329 818 893-4351

Stereo studio consoles, audio-for-TV consoles. Multitrack ATRs.

Field Offices:

NY 1841 Broadway #511, New York 10023	212 315-0877
CAN 1444 Hymus Blvd, Dorval, Que. H9P 1J6	514 685-1610

SOUND GENESIS 2001 Bryant St., San Francisco, CA 94110 415 285-8900 Engineering systems designer & installer.

SOUNDOLIER 1859 Intertech Dr., Fenton, MO 63026 314 962-9870

Monitor speakers; PageKom hardwired intercoms. Select Series cabinets, studio consoles, equipment racks. Audio transformers

SOUND TECHNOLOGY 1400 Dell Ave., Campbell, CA 95008 408 378-6540

Audio test tapes, leaders. Audio test signal generators, harmonic distortion meters, IM meters, spectrum analyzers, tape recorder/ audio test systems, wow & flutter meters, MTS test equipment; automated audio switching system for T&M.

Field Offices:

NC Robert Millice, POB 221972, Charlotte, NC 28222	704 542-3380
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*Trade mark of Sony Corp

SOUND WORKSHOP PROFESSIONAL AUDIO PRODS.

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516 582-6210

Stereo studio & audio-for-TV consoles, console automation, serial video interface for consoles.

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214 243-5719

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SPECTRA SONICS

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801 392-7531

Mic mixers, portable consoles, mono studio consoles ALC & AGC amps. AM & FM compressor/limiters, parametric & graphic equalizers Monitor speakers Lavalier mics Preamps, line amps, monitor/power amps, amp power supplies Slide attenuators VU meters LED audio level displays Studio consoles, equipment racks RF test signal generators

SPECTRUM PLANNING

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214 361-2126

Facilities design & engineering services, engineering consultants, earth station site selection, RFI measurements

SPENCER BROADCAST

316 E. El Camino Dr. N.E., Phoenix, AZ 85020

602 242-2211

Facilities design & engineering services, engineering consultants, financial consultants, Distributor full line broadcast equipment

SPIN PHYSICS, DIV. EASTMAN

KODAK

3099 Science Park Rd., San Diego, CA 92121

619 453-5410

VTR replacement heads; quad head refurbishing

SPRAGUE MAGNETICS

15720 Stagg St., Van Nuys, CA 91406
800 553-8712/818 994-6602

Replacement & rebuilt audio & video heads, audio & video head cleaners, degaussers, alignment & tension gauges Audio test tapes & leaders, tape erasers & degaussers Splicing blocks & tape Record cleaning & care equipment

STAGE LIGHTING DISTRIBUTORS

See SLD

STAINLESS, INC.

Third St., N. Wales, PA 19454
215 699-4871

Antenna towers,

See ad on pg. 124.

Circle No. 184.

STANCIL CORP.

921 N. Highland Ave., Hollywood, CA 90038

213 464-7461

Tape-based loggers

STANDARD COMMUNICATIONS CORP.

Box 92151, Los Angeles, CA 90009
213 532-5300

Receive-only satellite earth stations, downconverters, LNAs.

STANTON MAGNETICS

200 Terminal Dr., Plainview, NY 11803
718 445-0063

Phono cartridges, record cleaning & care equipment Dynamic microphones Preamps Announcer's earphone, pre-preamps

STANTRON/UNIT OF ZERO CORP.

6900 Beck Ave., N. Hollywood, CA 91605
213 875-0800

Cabinets, studio consoles, equipment racks, cart/tape storage.

See ad on pg. 120.

Circle No. 180.

STAR CASE

648 Superior, Munster, IN 46321
219 922-4440

Foam-insert & rack configuration transportation cases

STARFAX

8157 Lankershim Blvd., N. Hollywood, CA 91605

818 768-2905

Video production & post-production facilities; mobile production facilities rental, audio post-production facilities; equipment rental services, film-to-tape transfers; Starsync auto film & sound sync system.

STEENBECK

9554 Vassar Ave., Chatsworth, CA 91311
818 998-4033

Flatbed film editors; flatbed table with U-Matic transport for video sound editing, solid state telecine system, magnetic film recording equipment.

STOREEL CORP.

2050-C Chamblee-Tucker Rd. #2, Box 80523, Atlanta, GA 30341

404 458-3280

Stor-Max & Railriders high-density storage cabinets; mobile & static audio cart cabinets.

See ad on pg. 146.

Circle No. 241.

STRAIGHT WIRE AUDIO

2611 Wilson Blvd., Arlington, VA 22206
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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18111 S. Santa Fe Ave., Rancho Dominguez, CA 90221

213 637-7500

Lamps, HMI & CSI fixtures, quartz fixtures, Sirio Ianiro Fresnels, Iris cyc lights, diffusion & efx material, lighting stands & rigging, Light Palette & Mantrix lighting control boards, dimmer packs. Solid state HMI ballasts

Field Offices:

NJ 20 Bushes Ln., Elmwood Park 07407
201 791-7000

CAN 6490 Viscount Rd., Mississauga Ont L4V 1H3
416 677-7130

STUDER REVOX AMERICA

1425 Elm Hill Pike, Nashville, TN 37210
615 254-5651

Portable, mono & stereo studio, audio-for-TV consoles Audio cassette player/recorders

Total Radio Recall.



The Dictaphone 5600 Veritrac™ voice communication recording system is 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 advertiser's spots on schedule and meeting all your FCC requirements. So if they ask for proof, you've got it all there on tape, ready for quick retrieval and replay.

Tune into the Dictaphone 5600 Veritrac logger. And never get your signals crossed again.

For more information, fill in the coupon or call toll-free: QBM/E 86

1-800-342-8439

Or mail to: Dictaphone Corporation, 120 Old Post Road, Rye, NY 10580

Name _____

Title _____ Phone _____

Company _____

Address _____

City _____ State _____ Zip _____

DICTAPHONE® and Veritrac are trademarks of Dictaphone Corp., Rye, N.Y. ©1985 Dictaphone Corp.

 **Dictaphone**

A Pitney Bowes Company

Circle 188 on Reader Service Card

Portable ATRs, 2-/4-track studio & multitrack ATRs. Digital audio recorders. Electronic audio editors, SMPTE time code synchronizers. CD/DAD players. Monitor speakers. Monitor/power amps. Telco interface equipment.

Field Offices:

CA Thomas Jenny/Vencil Wells, 14046 Burbank Blvd., Van Nuys 91401

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, 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 pg. 118.

Circle No. 179.

STUDIO FILM & TAPE

6670 Santa Monica Blvd., Hollywood, CA 90038

213 466-8101

Kodak, Agfa, Ampex, TDK videotape & film.

STUDIO TECHNOLOGIES

5520 W. Touhy Ave., Skokie, IL 60077

312 676-9177

Ecoplate analog audio reverb, music synthesizers.

JOHN M. SULLIVAN ASSOC.

880 Commonwealth Ave., Boston, MA 02215

617 277-1710

Video production & post-production facilities; remote production facilities rental; recording studios; audio post-production facilities; equipment rental services; set/

studio design services; engineering consultants; video/film stock shot library.

SUMMIT SOFTWARE SYSTEMS

2111-M 30 St. #1126, Boulder, CO 80301

303 494-1761

Radio & TV business automation software.

SUNDANCE PRODUCTIONS

7141 Envoy Ct., Dallas, TX 75247

214 688-0081

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

SUPERIOR ELECTRIC CO.

383 Middle St., Bristol, CT 06010

203 582-9561

Stabiline transformers, surge protectors, voltage regulators, uninterruptible power sources.

SURCOM ASSOCIATES

305 Wisconsin Ave., Oceanside, CA 92054

619 722-6162

Jennings & Cornell Dubilier capacitors; relays.

SUSSEX LEASING CORP.

175 Great Neck Rd., Great Neck, NY 11021

516 482-7373

Financial consultants, lease financing.

SWAGER TOWER CORP.

Box 656, Fremont, IN 46737

219 495-5165

Tower masts, 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. Two-way radio communications; remote pickup equipment.

SWITCHCRAFT

5555 N. Elston Ave., Chicago, IL 60630

312 792-2700

Audio connectors, patch bays. Audio & video cable, cable connectors.

SWR, INC.

Box 215, Goffstown, NH 03045

603 529-2500

FM & TV CP antennas; Clarion TV HP antennas; antenna tuning units. K-Line rigid transmission line. Engineering consultants.

SYMETRIX

4211 24 Ave. W., Seattle, WA 98199

206 282-2555

AM & FM compressor/limiters, parametric equalizers, audio noise reduction. Monitor/power amps. Telco interface equipment.

New for color.

The FCS-30/C features a column mount to support a 2 2/3", 3-tube color camera and self contained 3200°K lighting.

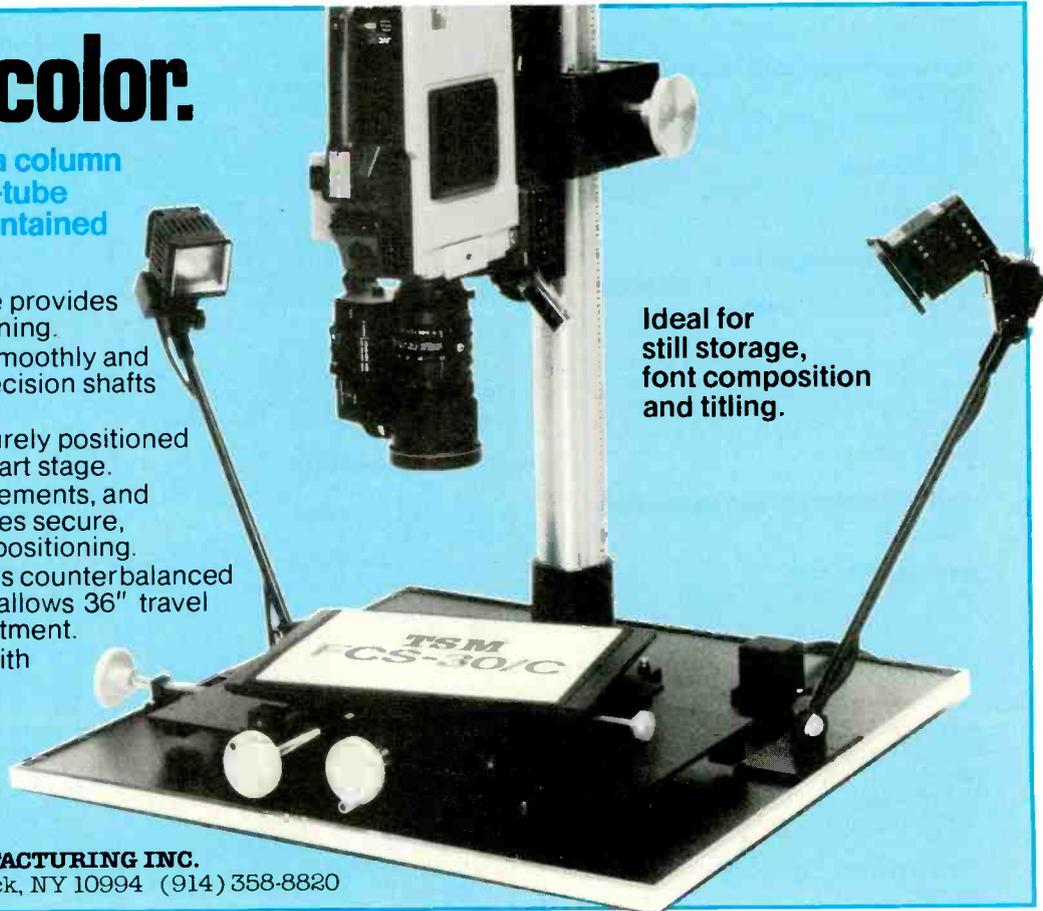
- Triple movement art stage provides X, Y and rotational positioning.
- 9" x 12" art stage moves smoothly and accurately along steel precision shafts and bronze bushings.
- Artwork is easily and securely positioned with magnets to the steel art stage.
- Height scale, with 1/4" increments, and locking mechanism assures secure, accurate and repeatable positioning.
- Universal camera mount is counterbalanced for easy positioning, and allows 36" travel with rack and pinion adjustment.
- Two lights are provided with On-Off switch.

Ideal for still storage, font composition and titling.



TOTAL SPECTRUM MANUFACTURING INC.

20 Virginia Avenue, West Nyack, NY 10994 (914) 358-8820



MEANS IT'S VERIFIED

SYMTEC

15933 W. Eight Mile Rd., Detroit, MI 48235
313 272-2950

Titlers, subtitlers, character generator/
graphics systems, digital art/paint systems,
bit pad digitizers, camera/VTR digitizers.

SYRACUSE SCENERY & STAGE LIGHTING CO.

1423 N. Salina St., Syracuse, NY 13208
315 474-2474

Scenery construction, scenery rigging.

SYSTEM ASSOCIATES

5801 Uplander Way, Culver City, CA 90230
213 641-2042

Used broadcast equipment broker.

SYSTRON DONNER, INSTRUMENT DIV.

2727 Systron Dr., Concord, CA 94518
415 682-6161

Frequency counters, RF generators.

TABER MANUFACTURING & ENGINEERING CO.

1880 Embarcadero Rd., Palo Alto, CA
94303

415 493-3811

Replacement audio & video heads, lapping
service. Taberaser head degaussers, audio
& video tape cleaners & degaussers. Power
amps.

TAMRON INDUSTRIES

24 Valley Rd., Port Washington, NY 11050
516 883-8800

Video camera lenses.

TANBERG OF AMERICA

1 Labriola Ct., Armonk, NY 10504
914 273-9150

Audio cassette recorder/players; 2-1/4-track
studio ATRs; CD players; preamps, monitor/
power amps; tuners & receivers. Audio
cable.

TANGENT

8206 N. Dreamy Draw Dr., Phoenix, AZ
85020

602 997-4308

Mic mixers; portable & stereo studio
consoles.

WILLIAM B. TANNER CO.

2714 Union Ext., Memphis, TN 38112
901 320-4212

Music library; radio & TV audio production.

TANNOY/NORTH AMERICA

97 Victoria St. N., Kitchener, Ont., Canada
N2H 5C1

519 745-1158

Studio playback monitors & amps.

TAPE-ATHON/CAVOX CORP.

13633 Crenshaw Blvd., Hawthorne, CA
90250

213 676-6752

Audio cassette player/recorders; SCA pro-
gram automation systems; line amps,
monitor/power amps.

TASCAM

7733 Telegraph Rd, Montebello, CA 90640
213 726-0303

Mic mixers; portable, stereo studio & audio-
for-TV consoles; audio cassette player/
recorders; 2-1/4-track studio ATRs; multitrack
ATR; audio cassettes, test tapes & leaders,
empty reels & carts, tape erasers &
degaussers; digital efx & reverb; electret/
condenser mics; line amps. Audio & video
cable, cable connectors, jackfields & patch
panels.

See ad on pg. 25.

Circle No. 113.

TBA TECHNOLOGY

Box 302, Walnut Creek, CA 94596
415 932-8134

Magic Lantern HMI & CSI fixtures; Imagine
lighting control boards.

TBS FIELD OPERATIONS

1050 Techwood Dr., Box 105264, Atlanta,
GA 30348

404 827-1746

Mobile production facilities rental.

TDK ELECTRONICS CORP.

12 Harbor Park Dr., Port Washington, NY
11050

516 625-0100

Open-reel audio tape, audio cassettes, emp-
ty 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

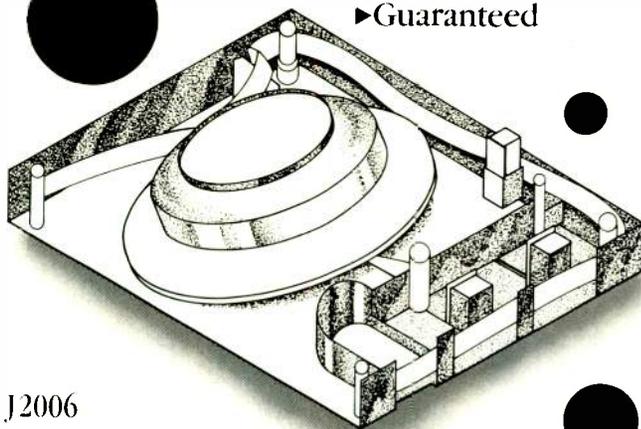
MORE THAN JUST RADIO SPOTS

►The Best Phase Stability

►The Flatest Frequency Response

►Dramatically Increased Tape Life

►Guaranteed



J2006

We've tilted the turntable
on our new ARISTOCART
2006 cartridge. This is the most important design advance
in 10 years of cartridge technology, and in combination
with our new ARISTOCART HOLN 2006 tape gives you
the finest tape/cart combination available today.
We guarantee it.

WIC Manufactured by:
Western International Communications Ltd.
1950-505 Burrard Street, Vancouver, B.C. Canada V7X 1M6
Telephone (604) 526-3214 Telex 04-54639

OUR GUARANTEE
If any ARISTOCART cartridge should fail to meet
NAB AM/FM performance specifications on a
properly aligned cart machine, we will replace it
at our sole expense.

ARISTOCART

Circle 226 on Reader Service Card

Lamps, quartz fixtures, cyc lighting, lighting stands & rigging, lighting control boards, dimmer packs.

TECH ELECTRONICS

6000 Peachtree Rd. N.E., Atlanta, GA 30341
404 455-7626

Programmable videotape controllers; DubMaster 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.

TECHNISPHERE CORP.

29 E. 19 St., New York, NY 10003
212 777-5100

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

TECHNOLOGY SERVICE CORP.

2950 31 St., Santa Monica, CA 90405
213 450-9755

Weather graphics displays, satellite displays, radar displays.

TECHNOV INDUSTRIES

3974 Amboy Rd., Staten Island, NY 10308
718 356-4700

Portable production switchers; two-machine editor/controllers; 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

1216 Alamo Way, Pittsburg, CA 94565
415 458-5500

Diplexers, multiplexers.

TEKSKIL INDUSTRIES

#108 15290 103A Ave., Surrey, BC, Canada V3R 7A2
604 589-1100

Monitor-based, scroll entry, keyboard entry & ENG/EPF 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. NTSC decoders, comb filter decoders. NTSC, RGB & high-resolution video monitors. Photometers.

Audio test signal generators, harmonic

distortion meters, spectrum analyzers, MTS test equipment. Video test signal generators, waveform monitors, vectorscopes, combination waveform/vectorscopes, blanking width meters & displays, burst phase meters. Demodulators, modulation monitors. Oscilloscopes, delayed sweepscopes, voltmeters, multimeters, dB meters, logic analyzers.

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 Rich Lyons, Box 8500, Woodland Hills 91365 818 999-1711

CA John Nielson, 3451 Vincent

Rd., Pleasant Hill 94523 415 932-4949

CO John Kelley/Ron Barnes, 393 Inverness Dr. S., Engelwood 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

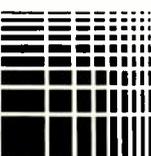
MD Jim Capps, Box 6026, Gaithersburg 20877 301 948-7151

MA Tom Christenson, 482 Bedford St., Lexington 02173 617 861-6800

NJ Jim Quinn, 40 Gill Ln., Woodbridge 07095 201 636-8616

NY Bhaskar Pant, 100 Crossways Park W., Woodbury 11797 516 364-9060

NY Bill Denne, 1 Northern Concourse, N. Syracuse 13212 315 455-6661



quiet

MODULAR STUDIOS
for broadcast control, recording,
on-air



**ACOUSTIC
SYSTEMS** BY TRACOUSTICS

415 East St. Elmo Rd. • P.O. Box 3610 • Austin, Texas 78764 • 512-444-1961 • 800-531-5412 • TELEX 767119

Circle 191 on Reader Service Card

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

See ad on pg. 37.
See ad on pg. 125.

Circle No. 121.
Circle No. 185.

TELCOM RESEARCH

1163 King Rd, Burlington, Ont., Canada
L7R 3X5

416 681-2450

SMPTE time code generator/readers; VITC
reader/generators.

See ad on pg. 131.

Circle No. 190.

TELECTRO SYSTEMS CORP.

96-18 43 Ave., Corona, NY 11368
718 651-8900

Audio cassette player/recorders; open-reel
audio tape; monitor speakers; hardwired inter-
coms; amp power supplies.

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 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 facili-
ties; mobile production facilities rental.

TELEMATION PRODUCTIONS/ DENVER

7700 E. Iliff, Denver, CO 80231
303 751-6000

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

Field Offices:

AZ 834 N. Seventh Ave., Phoenix 85007
602 254-1600

WA 1200 Steward St., Seattle 98112
206 623-5934

TELEMET, DIV. GEOTEL

185 Dixon Ave., Amityville, NY 11701
516 842-2300

RGB & encoded chromakeyers. Parallel in-
terface video routing switchers. Color bar
generators. NTSC decoders. comb filter de-
coders, video/cable equalizers. Video & au-
dio DAs, pulse amps. Modulators, fiberoptic
systems. Spectrum analyzers, video test sig-
nal 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 sys-
tems. Cranes & jibs, remote pan/tilt systems.

TELEPAK SAN DIEGO

4783 Ruffner St., San Diego, CA 92111
619 268-8559

Padded nylon transportation cases

TELEPROMPTERS ARE US

325 W. 56 St., New York, NY 10019
212 582-5066

Teleprompter rental service.

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.

TELESOURCE COMMUNICATION SERVICES

730 E. Highland Ave., Phoenix, AZ 85014
602 265-1232

Radio & TV newsroom computers.

TELETECH

Box 924, Dearborn, MI 48121
313 562-6873

RF consulting for AM/FM/TV transmission;
turnkey transmission system construction;
contract engineering; application
preparation.

TELEVISION ASSOCIATES

2410 Charleston Rd., Mountain View, CA
94043

415 967-6040

Video production & post-production facili-
ties; mobile production facilities rental; crea-

A Legend in Time



T5010. The SMPTE Time Code Generator/Reader

Legends are made to face
the test of time. The T5010
is no exception. Our most
versatile Time Code Reader/
Character Generator, the
T5010 leads the industry with
its user oriented features.

Discover a legend in time.
Contact your local Telcom
dealer, or call us for details.
We'd like to share our time
with you.

The Telcom T5010.

telcom
research

1163 King Road, Burlington, Ontario. L7R 3X5 (416)681-2450

Circle 190 on Reader Service Card

You're all set with the Toshiba full-auto PK-501.



Making great programs takes many things. A talented cast, good script, reliable staff and careful coordination are vital. The camera you use is also quite important because it decides just how creative and efficient production will be.

Our 2/3-inch tube PK-501 color TV camera excels in studios and the

field. It delivers remarkable picture quality while freeing the operator to concentrate on creativity with full-auto ease.

Automatic functions include microprocessor-controlled digital scan registration and multiple real-time correction for high-resolution picture quality. Operating ease and program production capabilities are enhanced by the common

*PK-50 Series Camera Control Unit (CCU) and versatile Master Control Panel (MCP).

The Toshiba PK-501. It expands creativity and picture quality with ease.

...Three...Two...One...Go for exciting camera action!



*2/3-inch tube PK-501, 1-inch tube PK-502 and 1-1/4-inch tube PK-503

TOSHIBA

TOSHIBA CORPORATION TOKYO JAPAN

ELECTRONIC SYSTEMS DEPARTMENT

1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO, 105, JAPAN

TELEX: J22587 TOSHIBA CABLE: TOSHIBA TOKYO PHONE: 457-3246-8

Circle 192 on Reader Service Card

tive services/preproduction; equipment rental services; facilities design & engineering services.

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 & hardwired intercoms. Elcon videotape cleaners & evaluators. Matthey video delay lines, filters, video/cable equalizers, video DAs. IRT monitor calibrators.

Field Office:

CA 213 271-9570

See ad on pg. 137. Circle No. 198.

TELEVISION TECHNOLOGY CORP. See TTC

TELEX COMMUNICATIONS

9600 Aldrich Ave. S., Minneapolis, MN 55420

612 882-4051

Tape duplicators. Audiocom hardwired intercoms. Dynamic, electret/condenser, RF & lavalier mics. Tape-based loggers.

TELFAX COMMUNICATIONS

502 Bank St., Box 31, Webster City, IA 50595

515 832-1263

Mic mixers, portable consoles. Audio routing switchers, 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

452 Five Farms Ln., Timonium, MD 21093
301 561-1999

Broadband FM & TV HP panel antennas.

TENTEL CORP.

1506 Dell Ave., Campbell, CA 95008
408 379-1881

Tentelometer tape tension gauges. Head tip protrusion gauge, spindle height & alignment gauges.

TEPCO CORP.

Box 680, Rapid City, SD 57709
605 343-7200

Jones FM translators; VHF translators. RF amps, filters.

TERMINAL SYSTEMS CORP.

901 Columbia Circle, Merrimack, NH 03054

603 424-5033

Acorn radio & TV newsroom software for IBM computers. Election day newsroom system rentals.

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; FM, AM & TV SCA equipment. MTS test equipment; modulation monitors, frequency monitors & controllers.

THEATRE SERVICE & SUPPLY

1792 Union Ave., Baltimore, MD 21211
301 467-1225

Lamps, HMI & CSI fixtures, quartz fixtures, cyc lighting, diffusion & efx material, lighting stands & rigging, lighting control boards, dimmer packs. Curtains, scenery rigging, props, materials.

THERMODYNE INTERNATIONAL

20850 S. Alameda St., Long Beach, CA 90810

213 603-1976

Foam insert & rack configuration transportation cases.

THIRD COAST VIDEO

501 North I. H. 35, Austin, TX 78702

512 473-2020

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

THOMSON BROADCAST

37 Brownhouse Rd., Stamford, CT 06902
203 965-7000

Field & ENG cameras; recorder/cameras. Betacam VCRs. Solid state telecine systems, telecine color correctors. Vidifont character generator/graphics systems. Graphic Store digital art/paint system, Vidifex 3D modeling & manipulation. Weather graphics displays. Digital production switchers.

Field Offices:

AL Phillip J. Smith, 5016 Northumberland Dr., Birmingham 35210 205 956-4932

CA Michael W. Clayton, 517 Prospect Terr., Pasadena 91103 818 849-2188

FL Martin J. McGreevy, 5778 Grande Lagoon Blvd., Pensacola 32507

904 492-0666

MN Louis J. Kesten III, 4022 Howell Ferry Rd., Duluth 30136 404 476-2997

NJ Robert J. Grassi, T-8 Avon Dr., E. Windsor 08520 609 448-4307

NY Thomas P. Moore, 104 Oakridge Dr., Solvay 13209 315 487-6710

THOMSON ELECTRON TUBES & DEVICES

Box 6500, Dover, NJ 07801
201 328-1400

Camera pickup tubes. RF tubes. Vacuum tubes.

THOMSON-LGT

1, Rue de l'Hautil, Zone des Boutries, F78700 Conflans Ste. Honorine, France 33.3

34.90.31.00/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.

See ad on pg. 151.

Circle No. 249.

TOA ELECTRONICS

480 Carleton Ct. S., San Francisco, CA 94080

415 588-2538

Portable recording consoles.

Field Office:

CAN 10712 181 St., Edmonton; Alta. T5S 1K8 408 489-5511

TODAY VIDEO

45 W. 45 St., New York, NY 10036

212 391-1020

Video production & post-production facilities.

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

2441 Michelle Dr., Tustin, CA 92680

714 730-5000

Studio, field & ENG cameras. Production switchers. Digital effects processors. Frame synchronizers. Audio/video delay systems.

See ad on pg. 132.

Circle No. 192.

TOTAL SPECTRUM MANUFACTURING

See TSM

MEANS IT'S VERIFIED

TOWNSEND ASSOCIATES
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.

TPC COMMUNICATIONS
Production Plaza, Sewickley, PA 15143
412 771-4700

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

TRANS-AMERICAN VIDEO/TAV
1541 N. Vine St., Hollywood, CA 90028
213 466-2141

Video production & post-production facilities.

TRANSMISSION STRUCTURES
Box 907, Vinita, OK 74301
918 256-7883
Towers.

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 93291
209 651-2171
Tower masts, rigging, hardware, lighting

TROMPETER ELECTRONICS
8936 Comanche Ave., Chatsworth, CA 91311
213 882-1020
Audio patch panels, jackfields. Video patch fields. Coaxial transmission line, RF connectors. Video cable, cable connectors.

TSM/TOTAL SPECTRUM MANUFACTURING
20 Virginia Ave., W. Nyack, NY 10994
914 358-8820

Titling stands, color graphics stands; camera pan/tilt systems; MultiController camera motion control system; Monobrace camera stabilizing system; ENG accessories.

See ad on pg. 128. Circle No. 189.

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) & 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
Video delay filters; transformers.

TUI COMPUTER SERVICES
Trademark Square III, Metro Center, 240 Great Circle Dr., Nashville, TN 37228
615 242-4477
Newstech software for TV newsrooms.

TURNER ENGINEERING
14 Morris Ave., Mountain Lakes, NJ 07046
201 263-1000
Facilities design & engineering services; engineering consultants; mobile vehicle construction. Studio consoles.

TVC VIDEO
225 E. 43 St., New York, NY 10017
212 397-8600
Video production & post-production facilities; audio post-production facilities; film-to-tape transfers.

TVI
5426 Fair Ave., N. Hollywood, CA 91601
818 769-0928
Distributor of hardwired intercoms, lighting equipment, support equipment, cases, tower masts. Equipment rental services, studio design services.



COMBINING ART AND TECHNOLOGY



In the business of professional audio, new products and ideas are being applied to expand the boundaries of creativity.

ART products are being used creatively in a growing number of studios, commercial installations, touring companies and broadcast/post-production facilities. This is the result of our dedication to the professional

audio industry - providing quality high technology performance.

When you're in a demanding audio situation, keep in mind that ART products are designed to help you achieve superior results with ease and reliability.

ART brings talent and technology together to produce excellence in audio.

We remain devoted to the art of professional audio...today and tomorrow.

ART

Applied Research & Technology Inc.
215 Tremont Street
Rochester, New York 14608
(716) 436-2720

• DR1 DIGITAL REVERB • 01A DIGITAL REVERB • DR2a DIGITAL REVERB • 1500 DIGITAL DELAY • 1/3 OCTAVE EQUALIZER • 2/3 OCTAVE EQUALIZER • PITCH TRANSPOSER PACKAGE

Circle 229 on Reader Service Card

TYLER CAMERA SYSTEMS b
14218 Aetna St., Van Nuys, CA 91401
818 989-4420

Camera stabilizing systems, helicopter rigs

UHER OF AMERICA b
7067 Vineland Ave., N. Hollywood, CA
91605
818 764-1120

Audio cassette player/recorders. Portable
open-reel ATRs.

UHF ASSOCIATES
5625 State Farm Dr. #4, Rohnert Park, CA
94928
707 584-7844
Video filters. Modulators. RF filters.

ULTIMATE SUPPORT SYSTEMS b
Box 470, Ft. Collins, CO 80522
303 493-4488
Ultimate lighting stand.

ULTIMATE CORP. b
18607 Topham St., Reseda, CA 91335
818 345-5525
Ultimate. Newsmatte RGB chromakeyers.
See ad on pg. 147. Circle No. 193.

**ULTRA AUDIO PIXTEC, DIV. AUDIO
INTL.**
Box 921, Beverly Hills, CA 90213
213 651-5563

Mic mixers; portable, studio, audio-for-TV
consoles. Single & multiple cart player/
recorders. Phase control matrixing. Re-
placement audio heads. Alignment & tension
gauges. Bulk erasers, splice finders. Com-
plete program automation systems.

UNION CONNECTOR CO. b
300 Babylon Tpk., Roosevelt, NY 11575
516 623-7461
Digi 1 & 2 lighting control boards, Nitrol
dimmer packs. Lighting/ac cable, cable con-
nectors, jackfields, patch panels.

UNI-SET CORP.
449 Ave. A, Rochester, NY 14621
716 544-3820
Modular studio/set design.

UNITED MEDIA b
4075 Leaverton Ct., Anaheim, CA 92807
714 630-8020
Time code synchronizers, two-machine
editor/controllers, Comm-Ette A/B roll edi-
tors; Commander II & Mini-Comm
multisource editors; SMPTE time code
generator/readers. Parallel & serial interface
video routing switchers, vertical interval
systems.

UNITED PRESS INTERNATIONAL
220 E. 42 St., New York, NY 10017
212 850-8600
Wire services, radio news networks, photo
services.

UNITED RESEARCH LAB
16 E. 52 St., New York, NY 10022
212 751-4663
Auto-Tec solid state conversion for tube am-
plifiers. Distributor of full line professional au-
dio equipment.

UNITED ROPEWORKS (U.S.A.) b
Box 306, 20 Commerce Dr.,
Montgomeryville, PA 18936
215 368-6611

Nonmetallic, electrically transparent tower
guys.

UNITEL VIDEO b
515 W. 57 St., New York, NY 10019
212 265-3600

Video production & post-production facili-
ties; mobile production facilities rental; re-
cording studios; teleconferencing services.

UNIVERSAL ELECON b
903 S. Lake St. #102, Burbank, CA 91502
818 846-6220

Component production switchers; title
keyers; parallel interface video routing
switchers; multisource video editors; SMPTE
time code generator/readers; frame syn-
chronizers. Nicad batteries & chargers. MTS

stereo generators, TV modulators, TV IF
modulator, RF converters. MTS test
equipment.

URSA MAJOR
See AKG

UTAH SCIENTIFIC b
1685 W. 2200 South, Salt Lake City, UT
84119

800 453-8782/801 973-6840
Manual, automated & business automation
interfaced master control switchers; serial in-
terface routing switchers; serial interface
machine control/technical automation. Au-
dio & video DAs; audio routing switchers.
See ad on pg. 109. Circle No. 195.

FM Antennas
FCC Directionals • Multistations
Rigid Transmission Line
Pattern Studies
Combiners



MULTISTATIONS

From two to nine or more stations,
Shively offers multistation
components which have the
industry's best specs. Branched or
balanced combiners, side mount or panel
antennas; whatever the requirements,
Shively can supply.

SPECIAL ENGINEERING

Such as helping you to conform
to the new FCC/ANSI standards for
non-ionizing radiation. We offer
half-wave spaced FM antennas at
all power levels designed to significantly
and economically reduce downward radiation.

PATTERN WORK

In over a dozen years of providing
formal directional patterns to both
the FCC and DOC, Shively has
never had a pattern rejected; ever. We've earned
the trust of the industry in all aspects of pattern
work. What are your requirements?

Shively Labs

a division of Howell Laboratories, Inc.

51 Harrison Rd
Bridgton, ME 04009
(207) 647-3327

TWX-710-223-8910 SHIVELY BRGT

call or write for more information

UTILITY TOWER CO.
Box 12369, Oklahoma City, OK 73157
405 946-5551

Tower masts, rigging, hardware & construction equipment; tower lighting.

VACUUM TUBE IND.
Box 2009, Brockton, MA 02403
617 584-4500

RF tubes; vacuum tubes.

See ad on pg. 150.

Circle No. 247.

VALENTINO MUSIC LIBRARY
151 W. 46 St., New York, NY 10036
212 869-5210/800 223-6278

Production music library.

VALLEY PEOPLE
Box 40306, 2817 Erica Pl., Nashville, TN

37204
615 383-4737

Audio console automation. ALC & AGC amps, AM & FM compressor/limiters; Maxi Q parametric equalizer; Kepex & Gatex audio noise reduction; mic preamps; audio level matching interface.

VANNER
745 Harrison Dr., Columbus, OH 43204
614 272-6263

Ac/dc converters, inverters.

VARIAN, EIMAC DIV.
301 Industrial Way, San Carlos, CA 94070
415 592-1221

RF amps, RF tubes. Vacuum tubes, RF cavities.

Field Offices:

AL 500 Wynn Dr., N.W. #302, Huntsville
35816-3429 205 837-9225
CA 818 Oak Park Rd., Covina 91724
818 967-3834
CA 6375 Auburn Blvd. #N, Citrus Heights
95621 916 725-7989
FL 1240A Clearmont St. N.E. #1, Palm Bay
32905 305 767-3183
GA 106 Olympia Dr. #D, Warner Robins
31093 912 922-2202
IL 205 W. Touhy Ave., Park Ridge 60068
312 825-6686
MA 83 Second Ave., Burlington 01803
617 272-8532
MD 939 Elk Ridge Landing Rd. #195,
Linthicum 21090 301 850-5010
NJ 25 Commerce Dr., Cranford 07016
201 276-9050
NJ 307 Fellowship Rd. #100, Mt. Laurel
08054 609 235-6800
NY 2504 Brewerton Rd., Syracuse 13211
315 455-2810
OH 4130 Linden Ave. #255, Dayton 45432
513 258-3930
TX 13531 N. Central Expy. #2343, Dallas
75243 214 235-2385

**VARIAN MICROWAVE
EQUIPMENT DIV.**

3200 Patrick Henry Dr., Santa Clara, CA
95050

408 496-6273

Klystrons; high power amplifier klystrons.

**VARIAN, MICROWAVE TUBE
DIV.**

611 Hansen Way, Palo Alto, CA 94303
415 493-4000

UHF-TV klystrons, satellite uplink klystrons,
studio transmitter communications reflex
klystrons.

VARICOM

350 Townsend St., San Francisco, CA
94107

415 543-7218

TV business automation software.

VARITEL VIDEO

350 Townsend St., San Francisco, CA
94107

415 495-3328

Video post-production facilities; mobile pro-
duction facilities rental.

VCA TELETRONICS

231 E. 55 St., New York, NY 10022
212 355-1600

Video production & post-production facili-
ties; mobile production facilities rental; audio
post-production facilities; facilities design &
engineering services; engineering
consultants.

VECTOR TECHNOLOGY

203 Airport Rd., Doylestown, PA 18901
215 348-4100

Diplexers, traps; RF loads, switches; anten-
na tuning units. RF phasing equipment. Mica
transmitting capacitors.

VECTRIX CORP.

2606 Branchwood Dr., Greensboro, NC
27408

919 288-0520

Color graphics frame buffers. Weather
graphics & imagery systems. Color Card
two-board graphics package for IBM PC &



RON SCHILLER ASSOCIATES
BROADCAST SYSTEMS CONSULTANTS
140 COUNTY ROAD TENAFLY, NJ 07670
201-568-1552 201-567-9279

*Engineering
for today and tomorrow.*

Radio
Television
Post Production
Multi-Media

Business Analysis
Market Analysis
Project Planning
Facilities Design

Operations Effectiveness

Cost Control
Transmission Quality
Technical Efficiency

New Technologies

Transmission Systems
Control Systems
Data Management

Bottom
Line Costing

*Projects impact the bottom line.
Shouldn't you ensure
they have a profitable impact?*

Circle 196 on Reader Service Card

XT computers. High-resolution two-card graphics package for IBM AT & XT.

VERTEX COMMUNICATIONS 
2600 Longview St., Box 1277, Kilgore, TX 75662
214 984-0555
Transmit/receive, receive-only & transportable satellite earth stations.

VIDCOM
2426 Townsgate Rd., Westlake Village, CA 91361
818 991-1974

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

VIDCOM INTERNATIONAL CORP. 
3 West End Ave., Old Greenwich, CT 06870

203 637-8666
Radio & TV business automation software; Datapoint business automation hardware.

VIDEO AIDS OF COLORADO 
2450 Central Ave. #H, Boulder, CO 80301
303 443-4950

Hardwired intercom systems. Character generator/graphics systems. Sync, black burst, color bar generators. Image enhancers. Audio & video DAs, pulse amps. Video squelchers, video & audio alarms. RF amps. Burst phase meters.

VIDEO ASSOCIATES LABS
3933 Steck Ave. #B109, Austin, TX 78759
512 346-5781

Microkey add-on board giving NTSC output from Apple & IBM computers for graphics applications.

VIDEO DATA SYSTEMS
205 Oser Ave., Hauppauge, NY 11787
516 231-4400

Microsystem II message display system. Teletext decoding equipment. Vital Communication data communications systems.

VIDEO HI-TECH/ADWAR VIDEO
2370 Merrick Rd., Bellmore, NY 11710
516 785-1200

Video post-production facilities; equipment rental services; engineering consultants.

VIDEO INTERNATIONAL
1280 Sunrise Hwy., Copiague, NY 11726
516 842-1815
Portable, digital TV standards converters.

VIDEOLAB 
1978B Del Amo Blvd., Torrance, CA 90501
213 618-9046/800 548-4466

Time code retrofit kit & fast shuttle retrofit kit for 3/4-inch U VCRs.

VIDEO MAGNETICS
3515 Edison Way, Menlo Park, CA 94025
415 365-0125
Half-inch & 3/4-inch video cart/cassette changers.

VIDEOMEDIA 
211 Weddell Dr., Sunnyvale, CA 94089
408 745-1700

Time control synchronizers; two-machine editor/controllers, A/B-roll editors, multisource editors, SMPTE time code generator/readers, VITC reader/generators. Computer automation controllers; complete program automation systems. Video animation controllers. Parallel & serial interface ma-

chine control/technical automation, vertical interval systems. Distributor of full line audio & video equipment.

VIDEO PLANNING PLUS!
325 W. 56 St., New York, NY 10019
212 582-5066

Video production facilities; mobile production facilities rental.

VIDEOPLEX 
2 World's Fair Dr., Somerset, NJ 08873
201 469-9038

Video multiplexers.

VIDEO POST & TRANSFER
Box 53, Love Field Terminal, Dallas, TX 75235
214 350-2676

Video & audio post-production facilities; engineering consultants.

VIDEOSTAR CONNECTIONS
3390 Peachtree Rd., Atlanta, GA 30326
404 262-1555

C-band & Ku-band satellite networking & transmission services; videoconferencing services, earth station site selection; satellite time brokers

THE VIDEO TAPE CO.
10545 Burbank Blvd., N. Hollywood, CA 91601
818 985-1666

Video post-production facilities; video duplication & distribution services; satellite delivery of syndicated programs.

VIDEOTEK 
243 Shoemaker Rd., Pottstown, PA 19464
215 327-2292

Monochrome, NTSC, RGB, high-resolution & battery-powered portable video monitors. Sync, black burst & color bar generators. Waveform monitors, vectorscopes; demodulators. Audio & video DAs; rackmount audio program monitors.

See ad on pg. 141. Circle No. 236.

VIDEO WEST
Broadcast House, 5 Triad Center, Salt Lake City, UT 84180
801 575-7400

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

VIDEOWORKS
24 W. 40 St., New York, NY 10018
212 869-2500

Video production & post-production facilities.

VID VIDEO 
3919A W. Magnolia Blvd., Burbank, CA 91505
818 845-1515

Shuttle I & Shuttle II zero-frame offset address track time code modification for Sony Type 5 3/4-inch VCRs.

VIF INTERNATIONAL
Box 1555, Mountain View, CA 94042
408 739-9740

Audio head cleaners, degaussers, alignment & tension gauges. Test tapes, leaders. Relay sequencers. Monitor/power amps. Tape recorder motor remanufacturing.

VIKING CASES 
10480 Oak St., St. Petersburg, FL 33702
813 577-1216

Foam insert & rack configuration transportation cases; editing/production consoles. Equipment racks.

Another of PERROTT'S "Take Me Along Series"

The Professional
Choice Since 1978

The
90



Powers Cameras,
VTRS, Lites, & more

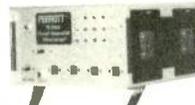
The Complete Clip-on



The PE 200

Our Clip-on with
The Built-in Charger

Only one charger
has it all—



The 8204

• Microprocessor • Portable
• Sequential • Affordable

The Perfect Mate
for your Betacam



Built-in 4 hr
Fast Charger The
52-4
Betacam is a TM of Sony Corp

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(703) 532-0700
PERROTT ENGINEERING LABS, Inc.
7201 Lee Highway
Falls Church, VA 22046
Circle 197 on Reader Service Card

NEW DELAYS HIT U.S. T.V. INDUSTRY

→ ZERO LOSS

→ 1 VOLT 'IN'
1 VOLT 'OUT'

→ Auto Gain
Compensation

→ 75ohm 'IN'
75ohm 'OUT'

→ 5ns Delay Trlm
at front

NEW
Matthey ZERO LOSS DELAY
RACK FRAMES BY
GRASS VALLEY GROUP INC
FITS INTO 3400

Television Equipment Associates, Inc.
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Tel. 914-763-8893
In California phone 213-271-9570

Circle 198 on Reader Service Card

VINTEN EQUIPMENT

39 Cain Dr., Plainview, NY 11803
516 694-8963

Tripods & heads, pedestals, ENG braces, dollies, cranes & jibs, remote pan/tilt systems.

VISCOUNT INDUSTRIES

105 E. 69 Ave., Vancouver, BC, Canada
V5X 2W9
604 327-9446

Manual master control switchers. Compact studio/mobile production switchers. Special effects generators.

VISNEWS INTERNATIONAL (USA)

630 Fifth Ave., New York, NY 10111
212 307-7315

Video production & post-production services; international video services & satellite coordination.

VISUAL INFORMATION INSTITUTE

719 Lower Bellbrook Rd., Box 33, Xenia, OH 45385-0033
513 376-4361

Video test signal generators, test charts.

VITAL INDUSTRIES

3700 N.E. 53 Ave., Gainesville, FL 32601
904 378-1581

Compact studio/mobile & large automated production switchers. Standalone efx generators, chromakeyers, title keyers. Digital efx processors. Manual, automated & business automation interfaced machine control/technical automation. Serial interface routing switchers. SMPTE time code generator/

readers, time code synchronizers. Pulse amps, video & audio DAs.

WALLACH & ASSOC.

Box 18167, Cleveland, OH 44118
216 575-0765

Cabinets; equipment racks; cart/tape storage. Reelmobile empty audio reels & carts.

WARD-BECK SYSTEMS LTD.

841 Progress Ave., Scarborough, Ont., Canada M1H 2X4
416 438-6550

Mic mixers, portable, mono & stereo studio & audio-for-TV consoles. Parametric equalizers. Hardwired intercoms. Preamps, line & monitor/power amps, amp power supplies. Audio DAs, audio routing switchers, audio patch panels, jackfields. VU & PPM meters. Audio test signal generators.

Field Offices:

MA William McFadden, 10 Page St., Danvers 01923 617 777-7228
TX Duke McLane, 4012 Mendenhall Dr., Dallas 75234 214 241-5999

See ad on Cover 4

WASHBURN VIDEO PRODUCTIONS

701 W. California St., Blythe, CA 92225
619 922-2201

Remote video production services; video post-production services.

WAVEFRONT TECHNOLOGIES

1421 State St., Santa Barbara, CA 93101
805 962-8117

3D modeling & animation systems.

MEANS IT'S VERIFIED

WAVETEK INDIANA

5808 Churchman, Box 190, Beech Grove, IN 46107

317 788-9351

Two-way communications equipment. RF attenuators, filters. Microwave signal generators. Sweep generators. Video test signal generators. Oscilloscopes.

WEATHERBANK

2185 S. 3600 West, Salt Lake City, UT 84119

801 973-3131

WeatherBrief weather graphics displays; WeatherCheck satellite-delivered custom weather service.

WEGENER COMMUNICATIONS

150 Technology Park/Atlanta, Norcross, GA 30092

404 448-7288

Multiplexers, modulators. Transmit/receive & receive-only satellite earth stations; upconverters, downconverters; satellite network controllers. Intercity microwave systems. STLs, TSLs.

angēnieux

THE DAWN OF A NEW GENERATION IN VIDEO

By replacing conventional gears which control the zoom and focus servos with modern nylon belts, Angenieux has made yet another breakthrough in the design and construction of its broadcast lenses.

Substantially lighter, mechanically quicker, and dramatically quieter, with sophisticated internal hood soundproofing, recessed hood handles, an internal heater, digital readouts for iris position, extender position, and a three lamp diascope all standard, Angenieux's New Generation of broadcast lenses are at the crest of the industry's future wave.

Among Angenieux's New Generation of ENG zoom lenses are the 14x7 ultra wide angle, the 14x8 with a non-rotating front focusing element, and the 14x9, all with a maximum relative aperture of f/1.6—the fastest in the industry.

For studio and outside broadcast use Angenieux's New Generation includes the new 15x HP series—15x13 HP 1" format and 15x17 HP 1 1/4" format—and the high quality studio/O.B. 18x12.5 1" format and 18x16.5 1 1/4" format lenses.

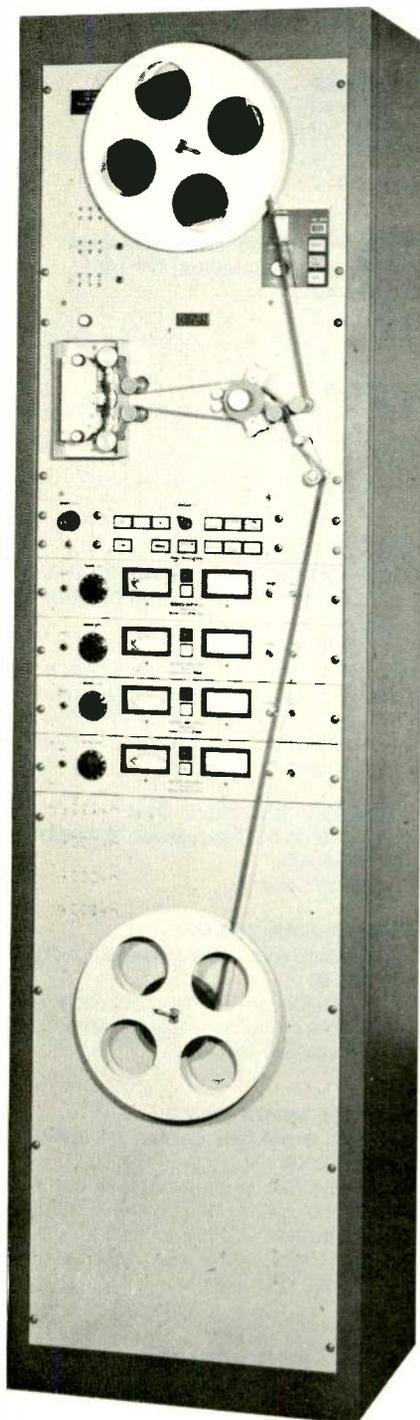
And that's not all. Angenieux's highly skilled engineers are working harder than ever before to meet the industry's demand for more and better broadcast lenses.

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ANGENIEUX. The New Generation. The Heritage Of Excellence.

Corp. of America 7700 No. Kendall Dr., Miami, FL 33156 • Tel: (305) 595-1144 • Telex: 80-8425 • FAX: 305-595-4636
Opticam SA, 4, Rue Pedro Meylan, Case postale 91, 1211-Geneva-17, Switzerland • Tel: 22-36-22-66 • Telex: 27670 Optic CH • FAX: 22-86-12-49

Circle 235 on Reader Service Card



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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

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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 Boisdé 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

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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 238 on Reader Service Card

WESTINGHOUSE ELECTRIC, IGT DIV. b
Westinghouse Circle, Horseheads, NY 14845
607 796-3211
Vacuum tubes.

WESTLAKE AUDIO, PROFESSIONAL PRODUCTS GROUP b
2696 Lavery Ct. #18, Newbury Park, CA 91320
805 499-3686
Audio reference monitors.

WGN CONTINENTAL PRODUCTIONS CO. b
2501 W. Bradley Pl., Chicago, IL 60618
312 528-2311
Video production & post-production facilities; mobile production facilities rental.

WHEATSTONE CORP. b
5 Collins Rd., Bethany, CT 06525
203 393-0887
Mono & stereo studio consoles, audio-for-TV consoles.

WHITE INSTRUMENTS b
Box 698, Austin, TX 78767
512 892-0752
Graphic equalizers. Real time analyzers, pink/white noise generators.

WIDE BAND ENGINEERING b
Box 21652, 1838 E. University Dr., Phoenix, AZ 85036
602 254-1570
RF amps, terminations, comparators, splitters, directional couplers. Impedance bridges.

WIDE RANGE ELECTRONICS CORP. b
140 Sun Valley Cir., St. Louis, MO 63026
314 343-9191
Digital audio recorders; replacement audio heads, head cleaners & degaussers. Audio & videotape erasers, degaussers. SMPTE time code generator/readers.

WILL-BURT TMD DIV.
See TMD

H. WILSON CO. b
555 W. Taft Dr., S. Holland, IL 60473
312 339-5111
Studio consoles, cabinets, cart/tape storage.

WILTRON CO. b
490 Jarvis Dr., Morgan Hill, CA 95037
408 778-2000
RF test signal generators, sweepers; VSWR impedance bridges; scalar analyzers.

WINDSOR TOTAL VIDEO
565 Fifth Ave., New York, NY 10017
212 725-8080
Video production & post-production facilities; mobile production facilities rental; recording studios; audio post-production facilities; equipment rental services; set/studio design services; engineering consultants; music libraries; standards conversion.

D.E. WINGET, INC.
12205 S.E. 67 Pl., Bellevue, WA 98006
206 641-0297
Air Sentry off-air monitor & end-of-tape sensor.

WINSTED CORP. b
9801 James Circle, Minneapolis, MN 55431
612 888-1957
Studio furniture, cabinets, studio consoles, equipment racks, cart/tape storage.
See ad on pg. 150. Circle No. 248.

WOLD COMMUNICATIONS b
10880 Wilshire Blvd. #2204, Los Angeles, CA 90024
213 474-3500
Satellite time brokers; fixed & mobile uplink & downlink services; TV & radio satellite transmission, domestic & international, stereo & mono; videoconferencing; video production facilities; facilities design & engineering services; engineering consultants; earth station site selection.

WOLF COACH b
7 B St., Auburn Ind. Pk., Auburn, MA 01501
617 791-1950
Mobile vehicle construction.

FRANK WOOLLEY & CO.
529 Franklin St., Reading, PA 19602
215 374-8335
Polarization polarized graphics effects system, Motionmaster video animation system.

WORLD TOWER CO. b
Box 405, Mayfield, KY 42066
502 247-3642
Tower masts.

WORLD VIDEO
27 N. Washington St., Box 117, Boyertown, PA 19512
215 367-6055

Monitor/power amps; audio program monitors. Video test signal generators; SCH verification module.

WPHL PRODUCTIONS b
5001 Wynnefield Ave., Philadelphia, PA 19131
215 878-1700
Video production & post-production facilities; mobile production facilities rental.

WSI CORP. b
41 North Rd., Bedford, MA 01730
617 275-5300
On-line, real-time computerized weather data & color weather graphics.

WXXI PRODUCTION SERVICES b
280 State St., Rochester, NY 14601
716 325-7500
Video production & post-production services; mobile production facilities rental.

XIPHIAS b
13470 Washington Blvd. #203, Marina del Rey, CA 90292
213 821-0074
Videograph digital art/paint systems.

YAMAHA INTL. CORP., PROFESSIONAL PRODUCTS DIV. b
6600 Orangethorpe Ave., Buena Park, CA 90620
714 522-9011
Mic mixers; portable & stereo studio audio consoles; graphic equalizers; digital efx & reverb, digital delay, music synthesizers; monitor speakers; dynamic mics; monitor/power amps.

YARDNEY BATTERY DIV. b
82 Mechanic St., Pawcatuck, CT 06379
203 599-1100
Silver-zinc batteries.

YES PRODUCTIONS
916 Navarre Ave., New Orleans, LA 70124
504 486-5511
Video production & post-production facilities; mobile production facilities rental; audio post-production facilities.

THE ZEI-MARK CORP. b
Box 182, Brookfield Center, CT 06805
203 355-0008
16/35 mm telecine projectors, 35 mm slide projectors, optical multiplexers, telecine control systems. Telecine lenses, neutral density filters Automatic light controls, telecine lap-dissolves

ZELLAN ENTERPRISES b
15 W. 26 St., New York, NY 10010
212 213-0620
Aaton cine cameras. Cooke, Angenieux, Zeiss lenses. Camrail light tracking system. Portamount vibration filtering system for helicopters.
Field Office:
CA 905 N. Cole Ave., Hollywood 90038
213 463-8151

ZENITH ELECTRONICS CORP.
699 Wheeling Rd., Mt. Prospect, IL 60056
312 699-2100
STV encoders & decoders.

SAFETY FIRST!

THE POLAR SAFE AREA GENERATOR
from
LISTEC VIDEO



LISTEC VIDEO Corp
SAFE AREA GENERATOR
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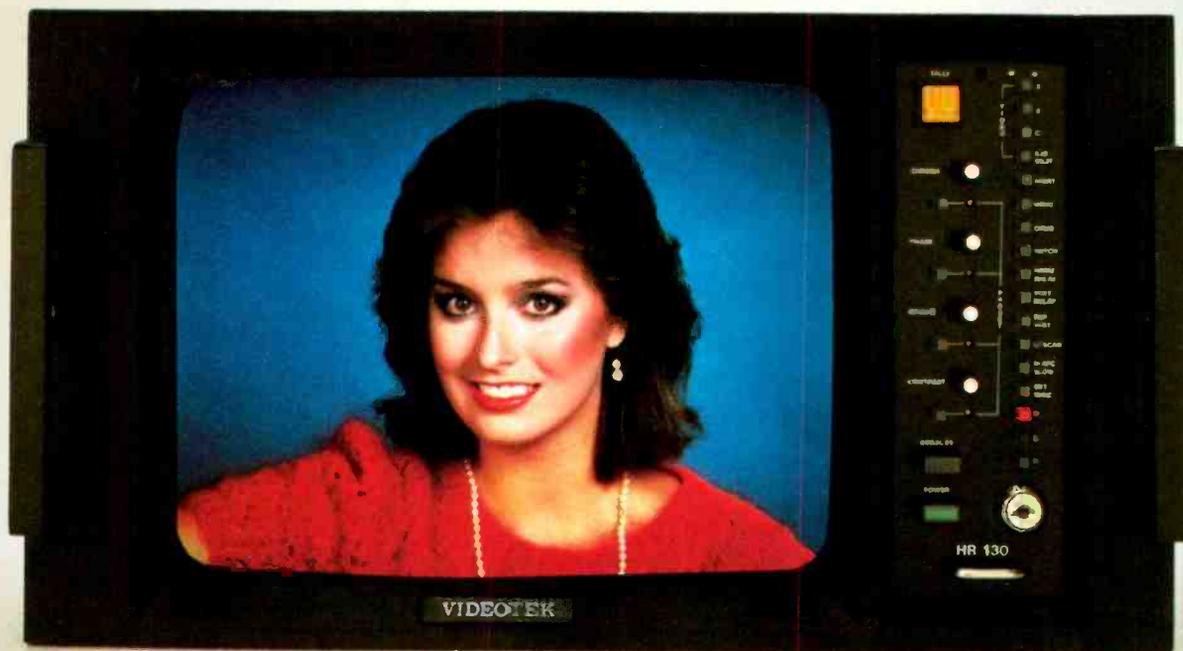
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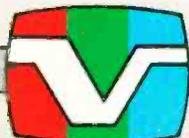
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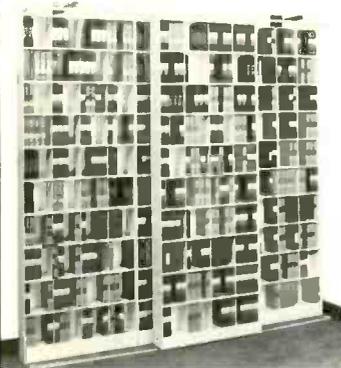
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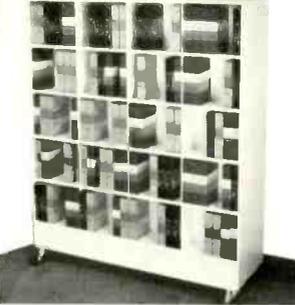
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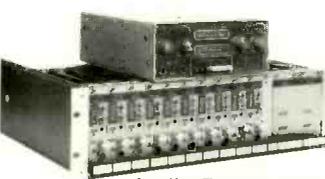
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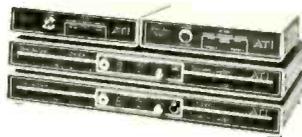
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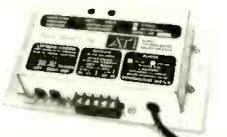
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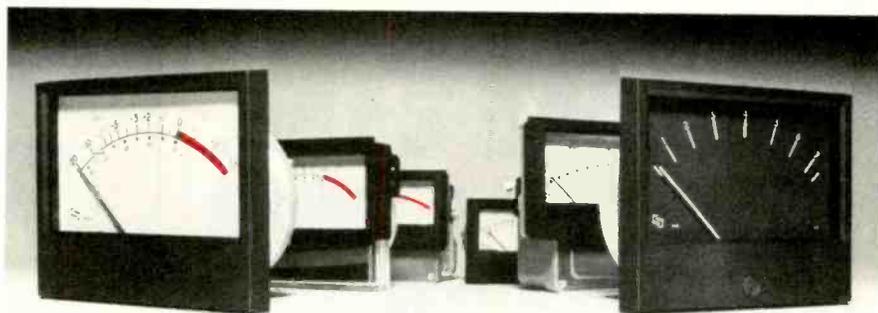
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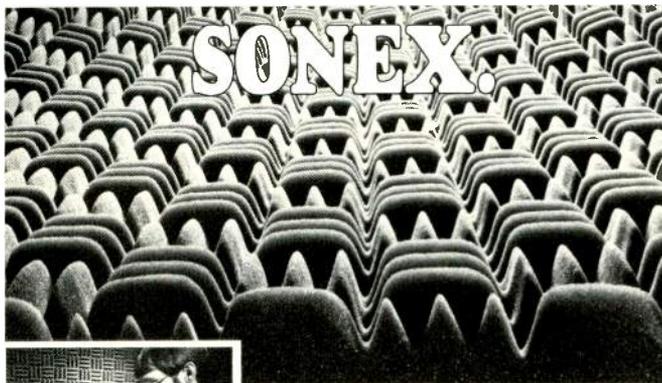
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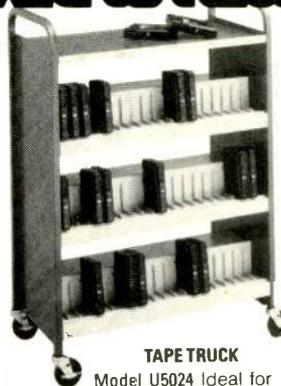
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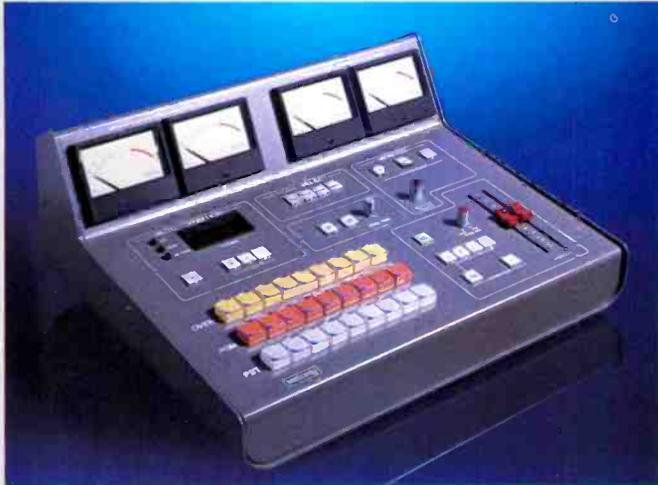
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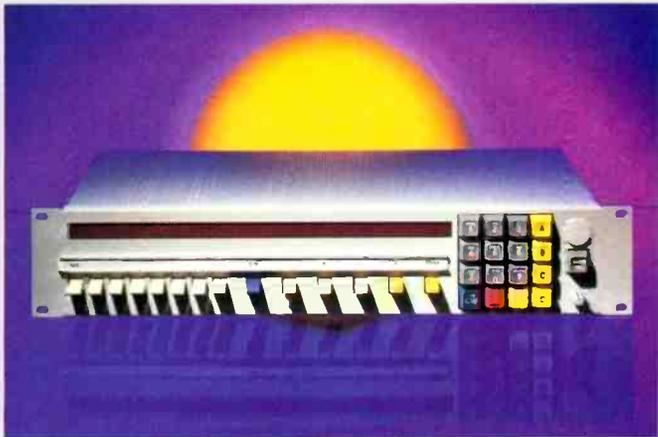
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