

APRIL 1982
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THE RECORDING INDUSTRY MAGAZINE

Mix[®]

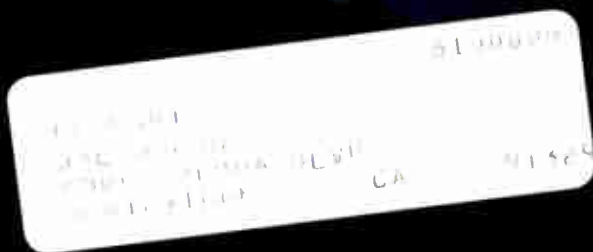
Interview
Mike Nesmith

**VIDEO FOCUS
SPECIAL ISSUE**

**Audio/Video
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**Music Video
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APRIL 1982



Cover:
One of New York's largest video/audio production/post-production facilities, National Video Center & Recording Studios will soon celebrate the first anniversary of their move into the former West Side Airline Terminal Building at 460 West 42nd Street.

Photo by:
Robert Wolsch Designs

VOLUME SIX, NUMBER FOUR

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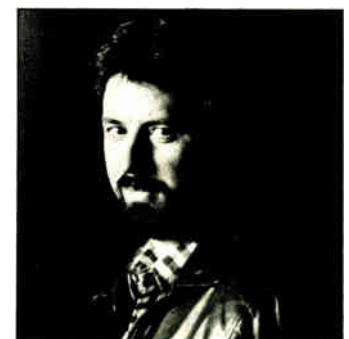
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INSIDE

Video is our special focus for this issue. Many of us have been watching the developments in this creative techno-art form to determine where the opportunities lie for music and audio technologists. And though the audio/video technology partners have yet to spawn the business bonanza some had hoped for in our ailing economy, there has been steady growth in many areas and there remains a promising potential.

If anything has been learned from video in the past couple of years, it may be that video does not equal easy money. The business of video requires long term planning, professional operations and a healthy dose of imagination.

There is and will continue to be a growing demand for high quality audio as the technology of video advances with high definition images, video 'component' marketing, stereo programming and higher broadcast standards. It is also clear that now is the time to explore the challenges and opportunities that video has to offer, while it is still in its formative stage.

Much of the editorial in this issue is built around those who have been exploring these opportunities and making progress. This month's listings consist of video production facilities and audio studios equipped to handle video assignments. If this is the direction you are headed, stay tuned. ■

TRACKS

Coming in May

Special Report:
Digital Recording
Manufacturers Forum

Listings:
Southwest Studios

plus

- Fantasia's new Digital soundtrack
- Jeff Baxter
- Quarterflash

Dear Mix,

In your February issue (Vol. 6, No. 2) that wonderful Special Report on digital synthesizers failed to tell us how to get in touch with the various manufacturers. Could you pass along this info?

Jeff Shulkin
Hermosa Beach, CA

Dear Jeff,
Sure. Here they are:

Synergy
Music Technology Inc.
105 Fifth Ave.,
Garden City Park, NY 11040
Attn: Dennis Briefel

Prism
Kinetic Sound Corp.
11 Maryknoll Drive,
Lockport, IL 60441
Attn: Joyce Deem

Synclavier
New England Digital Corp.
Main Street,
Norwich, VT 05055
Attn: Bradley Naples

GS 1 and GS 2
Yamaha Corp.
Combo Division, Box 6600,
Buena Park, CA 90622
Attn: John Gatts

alphaSyntauri
Syntauri Corp.
3506 Waverly Street,
Palo Alto, CA 94306
Attn: Ilana Wiedhops

ARP Chroma
CBS Musical Instruments
1300 E. Valencia Drive,
Fullerton, CA 92631
Attn: John Shykun

Prophets 5 and 10
Sequential Circuits
3051 North 1st Street,
San Jose, CA 95134
Attn: Dave Smith

OBX A
Oberheim Electronics
2250 S. Barrington Ave.,
Los Angeles, CA 90064
Attn: Russ Jones

The Source
Moog Music, Inc.
2500 Walden Ave.,
Buffalo, NY 14225
Attn: Herb Deutch

E-mulator
E-mu Systems
417 Broadway,
Santa Cruz, CA 95060
Attn: Marco Alpert

Fairlight CMI
Fairlight Instruments, USA
1616 Butler Ave.,
W. Los Angeles, CA 90025
Attn: Suzanne England

Con Brio
975 San Pasqual St., Suite 313,
Pasadena, CA 91106
Attn: Brian Horner

McLeyvier
Hazelcom Industries Ltd.
39 Hazelton Ave.,
Toronto, Ontario,
Canada M5R 2E3
Attn: Karen Boulton

Editors Note:

Roland's Jupiter-8 synthesizer was originally intended to be included in the February Special Report, however their information had not been received by our editorial deadline. For information on the Jupiter-8 you may write to:

Hue D. Wyrick
Roland Corporation
2401 Saybrook Ave.,
Los Angeles, CA 90040

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Ed Seay
Producer/Engineer
Paul Davis
Melissa Manchester
Peabo Bryson



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World Radio History

CURRENT

CALIFORNIA STUDIOS THREATENED

The California State Board of Equalization has imposed a retroactive sales tax on all independent producers, engineers, production companies, and recording studios. All monies received prior to 1976, including royalties, are subject to a retroactive 6% sales tax, 10% penalty for failure to file, and 1% per month interest. All production expenditures between 1976 and the present that were in any way connected with the "fabricating" of a tape (i.e., hotel expenses, rental cars, airplane fares, AFTRA scale, meals) are also subject to the same taxes, penalties, and interest. Independent engineers who charge by the hour are now being told that they should have been charging sales tax on their time since 1976, and are now required to pay those retroactive fees.

Capitol Records, Warner Bros. Chrysalis, and A&M, as well as major production companies, have already received sales tax bills. Many have had to pay and are now in court. State law requires paying the tax before being able to fight the issue in court. The Board of

Equalization is now expanding its pursuit of these "lawbreakers" to include individuals, as well as the smallest independent companies.

Since the State accumulates a major portion of its information via its audits of major record companies, any independent producer, engineer, production company or studio who has done business with them during the 1970's can expect a call and eventual audit from the Board of Equalization. Non-residents of California are not exempt, as anyone who has done business in the state since 1974 is liable.

As a result of this action, the California Entertainment Organization (CEO), a non-profit corporation, has been formed to take action against these tax statute interpretations and to bring the problem to the attention of the public and the industry at-large. For information about C.E.O. membership and financial support, contact: California Entertainment Organization, P.O. Box 512, Van Nuys, CA 91408, (213) 906-2080.

NAB Features TV Technology

The National Association of Broadcasters has announced today that 462 associate members will be exhibiting their products during the 60th annual convention in Dallas April 4-7. The exhibits will cover more than 208,270 square feet in the Convention Center.

The technical sessions to be presented at the convention will include such topics as Direct Broadcast Satellites, High Definition Television, One-half inch VTR Standards, Multichannel Sound, and a SMPTE workshop that will focus on digital techniques for broadcast and recording. "Minority Programming for Profit and Progress," a special workshop on minority radio which will cover successful and innovative approaches to serving particular community needs while making a profit, will also be a feature of the show.

Julius Barnathan, ABC president of broadcast operations and engineering, New York City, will receive the National Association of Broadcasters' 1982 Engineering Award; and CBS News Special Correspondent Walter Cronkite will receive the National Association of Broadcasters' 1982 Distinguished Service Award, the industry's highest honor, during the closing session of NAB's 60th annual convention on April 7 at the Dallas Convention Center.

The NAB serves a membership of over 4,600 radio and 660 television stations including all the major networks.

Video 'Magazine' Launched

Media Concepts has begun producing VideoJournal, a fifty minute video program which is sold by subscription. Produced six times a year, VideoJournal contains 10-15 segments varying in length from 30 seconds to eight minutes. The program is a magazine format video publication designed for people in North America working for corporations in video and audio-visual departments.

Managing Editor Bob Aristarco says the program shies away from the typical 30 second commercial advertising in favor of "informercials."

"Advertisers are asked to give information which shows viewers something useful in the course of demonstrating a product," Aristarco says. "We provide up to 90 seconds for an advertiser's infomercial. This allows plenty of time to demonstrate a production technique, give a preventive maintenance reminder, or explain how to use a piece of equipment in a unique way."

A typical edition of the program contains segments on new technologies in video, managing a video department, background on a program produced for a non-broadcast audience, excerpts from the featured program, tips on how to handle troublesome production situations, and trends for the future of video.

For more information, contact: Media Concepts, Inc., 331 N. Broad Street, Philadelphia, PA 19107.

notes...

Alpha Audio, of Richmond, VA, has been designated as the sole distributor of **Sonex** acoustical foam for the U.S. market... New people at **Altec**: **Roy Cizek**, former President of Cizek Audio and Speaker Division Manager for Audio Dynamics Corporation, has joined Altec's engineering department; and **Janine Fromm** has been appointed District Manager for Altec's Industrial/Professional Sound Product lines in the Southeastern U.S.... The new **Bay Area Jazz Society** was formed after the merging of Bay Area Loft Jazz and the San Francisco Bay Area Jazz Foundation. For more information, contact: Bay Area Jazz Society, Fort Mason Center, Bldg. C Room 225, San Francisco, CA 94123, (415) 540-6345... **Larry Phillips** has been named President of **Cerwin-Vega International**, a totally new company set up to market and distribute pro-audio, musical instrument and hi-fi products throughout the U.S. and worldwide... **Paul R. Kelly**, music business program director at Elmhurst College, Elmhurst, IL, led a 15-day tour of the music and entertainment industry in Los Angeles as part of a short-term January course. A similar tour of Japan is planned for next year... **Lew Barrett**, of North Shore Marketing, Seattle, WA, has been named "Pro Rep of the Year" by **IBL**... **Sony Corp.** is planning a major exhibit of video-interactive technology for the 1982 World's Fair at Knoxville, TN. Visitors to the exhibit will be given answers to their energy-related questions by touching a panel which will trigger answers supplied directly by videodisk... **Dennis Woywood** has been appointed Division Vice-President, Broadcast Video Systems, for **RCA's** Commercial Communications Division... **Inter-Magnetics Corp.**, a worldwide manufacturer of audio and video tape machinery and a specialist in building tape plants, has been acquired by **Agra International**, a trading and industrial conglomerate headquartered in Dubai, United Arab Emirates... **Stanley W. Faught**, general manager of the Magnetic Tape Division, has been elected Vice-President of the corporation by the **Ampex** board of directors. Also, **Michael O. Felix** has been appointed General Manager of Ampex's Advanced Technology Division, to direct the company's extensive research and development programs... **Alfred E. Smith** has been named vice president of **3M's** Magnetic Audio/Video Products Division, succeeding John E. Povolny who becomes industry relations vice president, Memory Technologies Group/3M.

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*1981-1982 Billboard Magazine
Brand Usage Survey

SESSIONS

NORTHEAST

At **Rose Hill Studios**, Syracuse, NY, **Meatloaf** guitarist **Mark Doyle** has completed production on singles for the **Natives** and the **New York Flyers**.

At **Audio Innovators** in Pittsburgh, PA, **Al Mossburg** is recording new material with **Noel Paul Stookey** of Peter, Paul, & Mary fame producing. Chief engineer **John Struthers** is engineering the session with **Danny DiCarlo** assisting.

Soundwave Recording Studios in New York City, has just completed mastering projects for **Omni Jazz** label. They include a **Harry Leahey** and **Steve Gilmore** album. Also **John Coates Pocono Friends**, Vol. 2 with **Yoshio Inomata** producing.

Jon Miller Sound Studios in Bath, PA, announces the release of a brand new album entitled, "Sad Songs" by **Mark Wayne Glasmire**, a local singer and songwriter. The studio did all of the recording, mixdown, and mastering and the photography for both the front and back of the album jacket. It is on **Right Track Records** label and is available at the studio.

At **Spectrum Recorders**, Lanesborough, MA, **Fear of Strangers** completed their self produced album for **Faulty Products/an I.R.S.** agency. **Down Time** recorded 4 original tunes for demo purposes. **Harpo Charles** did some pre-production work for his forthcoming album. All engineering by **Peter Seplow**.

Kevin Tracey Studios of Manchester, New Hampshire, has recently completed recording and mixing down songs for an upcoming **Dave Stahl Band LP**. Producer was **Dave Stahl**. Engineering was done by **Bill Tracey**, assisted by **Jon Chase**. This was the first project at the new 24-track studio.

Blotto is busy recording their first full-length album at **North Lake Sound** in North White Plains, NY. **Blotto** is producing, **Chris Cassone** engineering. No record label is set yet.

SOUTHEAST

Recent activity at **Southern Tracks Studio** in Atlanta, GA, includes: **Eddie Floyd** recording tracks with **William Bell** and **Mike Stewart** pro-

ducing. Engineering the sessions have been **Mike Clark** and **Doug Johnson**.

At **Quadrafonic Studios** in Nashville, TN, **Steve Gibson** producing **Sea Level** for **Arista Records**, **Rich Schirmer** engineering. **Michael Clark** (co-writer of *Slow Hand*) producing **Lynn Anderson**, **Willie Pevear** engineering.

At **Coley Recording Studio**, Carrollton, GA, **Phil Coley** has written and recorded a new jingle for **Hardee's**, and has arranged and recorded soundtracks for **Hardee's Nightrider TV** commercials. **Tom Beggs** engineering.

Twelve Oaks Studio in Atlanta, GA, reports complete album projects for **Teddy Huffman** and **the Gems**, **His Ambassadors**, **Babbie Mason**, and a various artist album, "Alleluia Atlanta", along with commercial work for **Ma Bell** and **Ronald McDonald**.

At **Strawberry Jamm** in West Columbia, S.C., The "Five Singing Stars", started production of an album, **The Seduction Band** was in recently for more demos, and **Zeeny Cobb** and **and The "Loggin' Road Band"** are in production of a demo.

MorriSound Recording in Tampa, FL, is recording an album for jazz pianist **Robert Kostreva**, engineered by **Tom Morris**. **Deep South**, with **Jim Morris** engineering and assisted by **Rick Miller** and **Tom Morris**, has begun mixdown for their new EP.

NORTH CENTRAL

At **Faithful Sound Studios** in Champaign, Urbana, IL, activity includes **PM Magazine** shooting a series on singers; **Andy Gunsberg** recording his 2nd LP for **Folkways Records**; **Memphis Phase Two**, **Rumble Records**, **Kristen Lems** and **Austrian Rocker Walter** all recording new singles.

At **Solid Sound Recording Studio** in Hoffman Estates, IL, projects include a 45 for the **T.C. Walker Band** on **Statesboro Records**. Engineered by **George Minol** and produced by **Tom Griffin**. A session with **The Balsamello Bros.** engineered by **Judd Sager** and produced by **Wayne Gilpin**.

Activity at **5th Floor Recording Studios** in Cincinnati, Ohio includes **Bootsy Collins** mixing an album for **Warner Brothers**, **Bootsy** producing, **Rich Goldman** engineering, **Bob Craig** assisting. **Roger Troutman** of **Zapp** and **Roger** is

in doing overdubs, **Greg McNeily** engineering.

At **Timbre Studio** in Alsip, IL, a brand new soul group from **Louisville, KY** has just finished their first album project. The group goes by the name of **Calculus II**, and bass player **Ronald Booth** is producer. The project was engineered by **Jerry Muzika** and **Scott Rowley**.

Recent recording projects at **Pinebrook Studios** in **Alexandria, IN**, include: **The Cathedral Quartet**, produced by **Bill Gaither**, and engineered by **Steve Archer** for **Word Records**. **Paul Stilwell** and **Bob Krogstad** for **Good Life Productions**, engineered by **Toby Foster**.

NORTHWEST

At **Commercial Sound Studio** in **Las Vegas, NV**, **Bo Coulter** is finishing an album for **Gold Sound Records**, also **Tommy Bell** preparing two singles to go on his future album. Both are being produced by **Tommy DeVito**, founder and original member of the **Four Seasons**.

CoraSound Recording in **San Rafael, CA**, has nearly completed the first album recorded on their new **Neotek** console engineered by **Mikey Razor** for **Red Asphalt**.

At **Harbor Sound Recording** in **Sausalito, CA**, **Merl Saunders**, producing with his son, **Merl Saunders Jr.**, "San Francisco After Dark," on their own label **Suemerton Records** with **Bob Hodas** and **Nancy Evans** engineering.

At **Different Fur Recording** in **San Francisco, CA**, **The Tommy Tutone Band** was recently working on tunes for their next album on **CBS Records**, with **David Blossom** engineering and **Don Mack** assisting.

At **Prairie Sun Recording** in **Cotati, CA**, **High Noon**, featuring **Mickey Hart**, **Norton Buffalo**, **Vicki Randel**, **Merl Saunders** and other **Bay Area** greats, have begun a self produced project, **Bob Hodas** and **Allen Sudduth** engineering.

The **Sonoma, CA**-based **Houston Recording** remote truck recently recorded **Earth, Wind & Fire** at the **Oakland Coliseum** for future video release. Engineering was handled by **Maurice Leach** and **Rich Houston**. Assistant engineers were **Fred Runner** and **Kathy Meyer**.

SOUTHERN CAL.

At **Bijou Recording Studios** in **Hollywood, CA**, **Michael LesBarres** and **Holly Knight** have been working on an album project backed up by members of the **Knack**. **Joe Borja** was the engineer.

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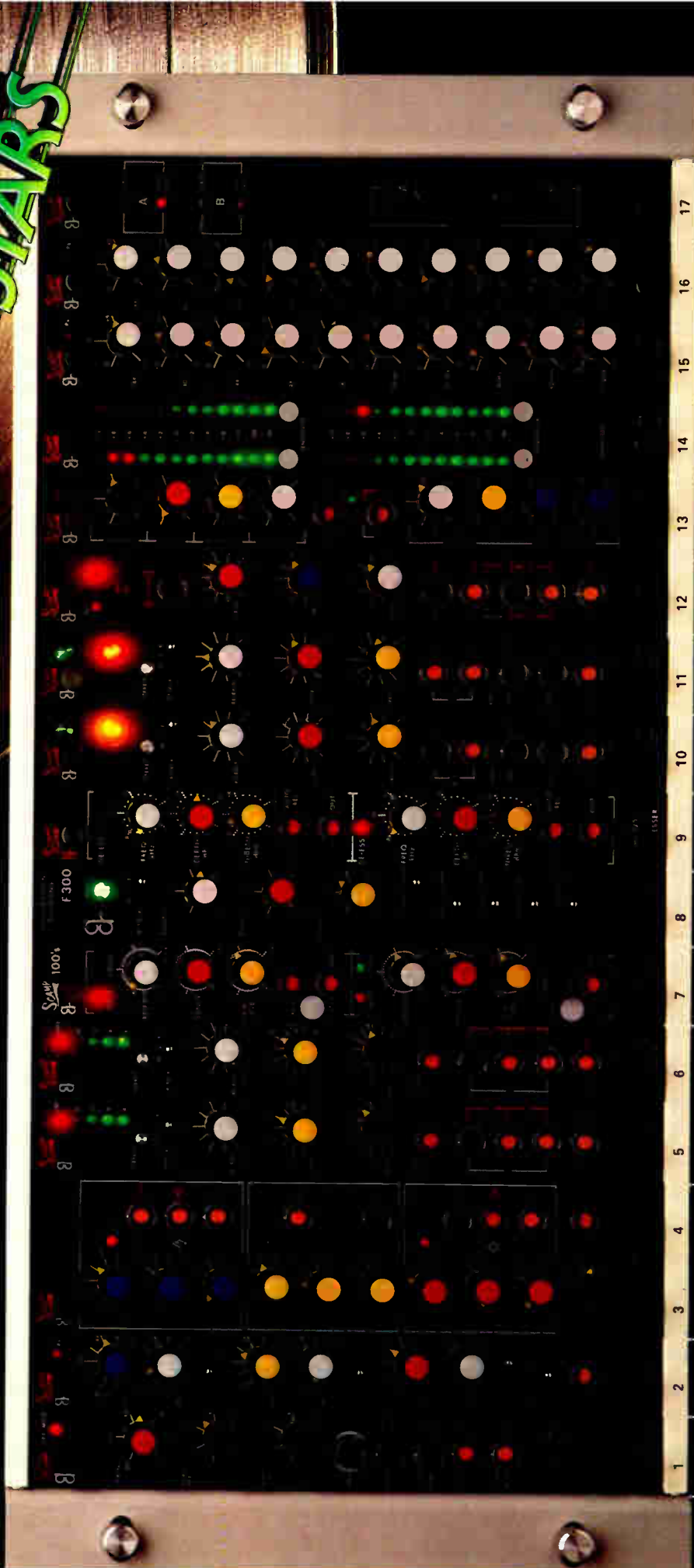
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VIDEO SESSIONS

Recent activity at **Kendun Recorders** in Burbank, CA includes **Gladys Knight**, producer and artist, recording instrumental and vocal overdubs for her new CBS LP with **Barney Perkins** at the console in Studio D, assisted by **Steve MacMillan**.

Kawai America Corporation has completed the recording of a premier album featuring **Hector Olivera** on their new DX-1800 and DX-1900 electronic organs at **Piper Recording Studio** in Carson, CA, with **Allen Kaufman** engineering.

Activity at **Rusk Sound Studios** in Hollywood, CA includes **Elisabeth Daily** doing basic tracks and overdubs for Marco Juniore Enterprises with producers **Marco Juniore**, and **Juergen Koppers**. Juergen Koppers is also handling engineering chores with **John Kavarek** assisting.

At **Monterey Sound Studios** in Glendale, CA, **Kenny Errair** and **David Goldstein** are producing **Section 8's** debut LP for Teem Productions, **David Goldstein** handling engineering.

Studio happenings at **Britannia Studios** in Hollywood, CA include **Rex Allen Jr.'s** album for Warner Bros. Records produced by **Snuff Garrett**, engineered by **Greg Venable**, with assistant, **Russ Bracher**.

Mastering activity at **Artisan Sound Records**, Hollywood, CA, by Disk Mastering Engineer **Gregory Fulginiti** include albums by **Sammy Hagar** with producer **Keith Olsen** on Geffen; **Dan Fogelberg** with **Larry Hamby** on Epic; **Trower & Bruce** with **Thom Trumbo** on Chrysalis.

Century III Teleproductions, Boston, MA, has just completed the video production for "Freeze Frame," by the J. Giles Band. The promo clip, based on the title cut from their worldwide number one album, was directed by Paul Justman, whose credits include the Giles' "Centerfold" as well as two videos for the Cars. Now armed with three video cuts from the album, Justman and the band are seriously considering the expansion of the highly successful album into a complete video disk.

Recent video sweetening projects at **Fantasy Studios**, Berkeley, CA, include: The American Conservatory Theatre's two hour production of "A Christmas Carol," for ABC Cable, a Peggy Fleming special for ABC-TV's The Wide World of Sports, and "Up and Coming," a ten-show series for KQED (public broadcasting) to be syndicated nationally.

Cineman, Inc., a new production company specializing in promotional films and videos for the record and music industry, has been formed in Los Angeles. Producer/director Stephen L. Lewis (from the TV series "Solid Gold") has teamed with director of photography Michael Jones, and production designer Roger Collins to provide complete script-to-screen services. Cineman is currently working on a promotional piece for Handshake Records' hot new group, Sneaker.

Sound Smith Studios, Inc., Portland, OR, has begun producing industrial video tapes in stereo,

having completed a 16 minute program for freightliner Corporation. This video piece is the first industrial use of stereo video reported to the Industrial Television Association (ITVA) and was time coded with Sound Smith's new BTX Shadow interlock system.

Unitel Video (New York City) mobile units have completed production on "Gemini," the fourth-longest running non-musical play in Broadway history, for an up-coming telecast on "Showtime." The play, which closed late last year, was restaged for video at New York's Lehman College by Ron Abbott of Erizoe Productions, and was directed by Barnet Kellman.

Horizontal Editing Studios, in Burbank, CA, is handling the post-production work on the religious documentary television series "Crossfire." The award-winning program "Skid Row" was produced by Rick Connors of Cross Current Communications of Ventura and was edited in Horizontal's 1" suite by Jon Stromp.

Video Music Group, Inc., a Los Angeles, CA, production company in a joint venture with **Criteria Recording Studios**, Miami, FL, is now producing video music programs for Metromedia syndication. One such program is the Woody Herman Show, shot in New Orleans, which will feature three major artists per show, including: Al Hirt, Ray Charles, Rita Coolidge, Natalie Cole, Lola Falana, Jack Jones, Pete Barbuti, the Heritage Hall Jazz Band, and many other top acts. Video Music Group is currently seeking other projects to develop and produce.

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record companies and recording studios. By the time of the AES convention in 1967 there were about 19 users of the system.

The idea of a users list occurred to me during that convention because I came armed with all kinds of test instruments such as signal generators, white noise generators, tape recorders, loudspeakers, etc. I had everything to prove that the system would do what I claimed: namely that it would reduce noise, yet wouldn't degrade the signal. I was surprised to find that most people were satisfied rather quickly that the system worked, but they didn't want to know how it worked or the inner workings of it at all. They just wanted to know, "who's using it?" I quickly put together the first users list. For the rest of the convention we could then forget about the elaborate test equipment and things like that.

It was difficult getting the A-system started because of the chicken and egg phenomenon. When I was trying to sell this, people in studio after studio would say it seems to work, but we can't use it because none of the people we exchange tapes with are using the system. I realized then that the system had to get established everywhere or it wasn't going to go anywhere. That was the hard part. I didn't get too discouraged at the time, because I could hear the advantages of the system and other people could too! One thing that you must have if you are going to introduce a new idea, is that you must hang on when other people tell you that it is a hopeless situation.

When did you start work on the consumer type-B Dolby?

I always had the idea for the B-system right from the beginning, but it was just a matter of time until we got to it. I started work on this system in 1967, which was only two years after I had started the company. This was earlier than I had wanted, as I felt that the first thing should be to get my company established on a firm footing.

Henry Kloss of KLH speeded things up. He phoned me in London and said he thought the noise reduction concept was very interesting to him as a consumer audio equipment manufacturer and would I consider designing a system as fast as possible for consumer use. He hopped on a plane and we spent the whole weekend talking and speculating on consumer noise reduction. So KLH became the first licensee and they manufactured reel to reel tape recorders with the B-type noise reduction under an exclusive license for two years. They wanted to extend this exclusive arrangement, but I said no, as I felt the best way to get the system going was to make it non-exclusive.

In late 1968 or early 1969, we were experimenting with eight track cartridges and cassettes. We thought the higher speed and the wider tape width would make the eight track cartridge the best consumer hi-fidelity tape medium, so we did a lot of work trying to make a hi-fi eight track. We got good technical results but became very frustrated with the lack of quick access. In an act of desperation, we sent one of our lab people to a local hi-fi store to buy the best cassette that they could get their hands on. He came back with a TEAC and we were astonished with how good it was. In 1969 there were tremendous developments going on in the compact cassette technology, especially with respect to transports, heads and tapes.

By October of 1969, we were in a position to demonstrate the B-type system with a modified Harmon Kardon cassette recorder. I took this to the AES convention that year and invited several people to listen to it. More or less simultaneously Fisher, Harmon Kardon and Advent resolved to go into manufacturing high fidelity cassette recorders utilizing the B-system which they commissioned Nakamichi to build.

Since then, licensing has become an important part of our business and we take it very seriously. We have a lot of people who work with our licensees to make sure that the products work correctly by assisting manufacturers with their quality control, etc. We put a lot back into this program to make sure that it continues to be successful.

Since Dolby A and B are so firmly ingrained in the audio industry, why did you start the new C-Dolby system?

I was always skeptical that **more** noise reduction was necessary. We started conceptually developing the C-system at the beginning of 1977 because... whenever our licensing engineers would come back from a trip, they would say that the licensees really want a better noise reduction system or one that gives them better specs. I tended to "poo-poo" this idea because I didn't feel that most listeners would care very much. Most people do not play their sound loud enough to hear any hiss because they use it as background music. In a normal family lifestyle, the presence or absence of hiss makes little difference.

The requests for an improved consumer system had been building up by the licensees. Finally, I decided to say OK, and develop the C-system and introduce it. The system was introduced in September of 1980 and things have moved surprisingly fast since then. Last week at the 1982 winter CES (Con-

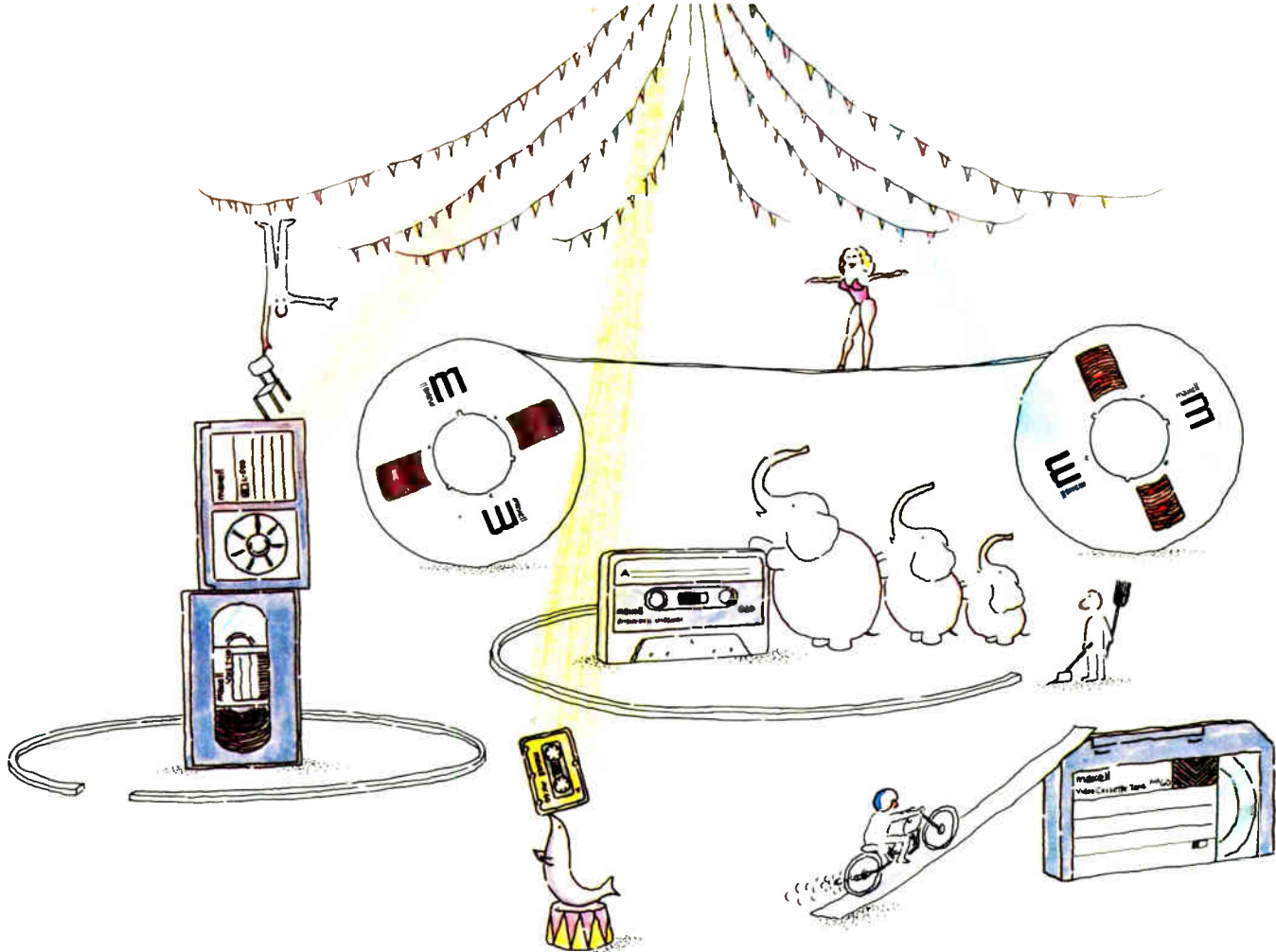
sumer Electronics Show) there were some 89 models on display with the C-system. Today a lot of companies are experimenting with the idea of making pre-recorded cassettes encoded with the C-system.

What changes do you see in the future of this industry?

It is my feeling that there will be a co-existence of digital and analog recording for a long time to come. I think the digital manufacturers are doing the only thing they can do and that is to "give it their best shot," see what happens, and let the marketplace decide. By any means I do not feel that digital will become the standard recording method for either professional or consumer applications. If an operation can be confined to a box (i.e. no need to store information on a storage medium, or go into the outside world and come back again) you can do all kinds of wonderful things with digital because there is no need for a bandwidth restriction. However, channel space or spectrum space comes at a cost and as a result, there are costs/performance tradeoffs inherent in the signal handling methods used in satellites, land lines, communications systems, and recording systems. The whole thing becomes a different ballgame when the bandwidth is not free. Because of this, analog and digital will continue to co-exist.

I feel that this audio/visual synthesis thing is a bit overblown. I know a lot of studios are moving in the direction of a marriage of audio and video. But I feel there is a difference in the quality of the two experiences. When you are watching a television program, it is an activity that requires your undivided attention. With audio, you can be doing other things while you are enjoying the music. I think that this is one reason why people play the same records again and again. But they will not watch the same television program on a video cassette or a video disk again and again. I don't think we will ever have this ultimate synthesis where the **only** format for home entertainment will automatically include both picture and sound.

Therefore I think that there is hope for the sound recording industry as such. In a way it is similar to the fight that gas and electricity had for their place in the home. There was gas in use for home lighting until the end of the last century and then electricity was introduced. The gas companies fought back with improved lamps, etc. At the time there was no clear outcome, so home builders installed both systems. Now in retrospect we can see quite obviously that gas is better for some things and electricity better for others. ■



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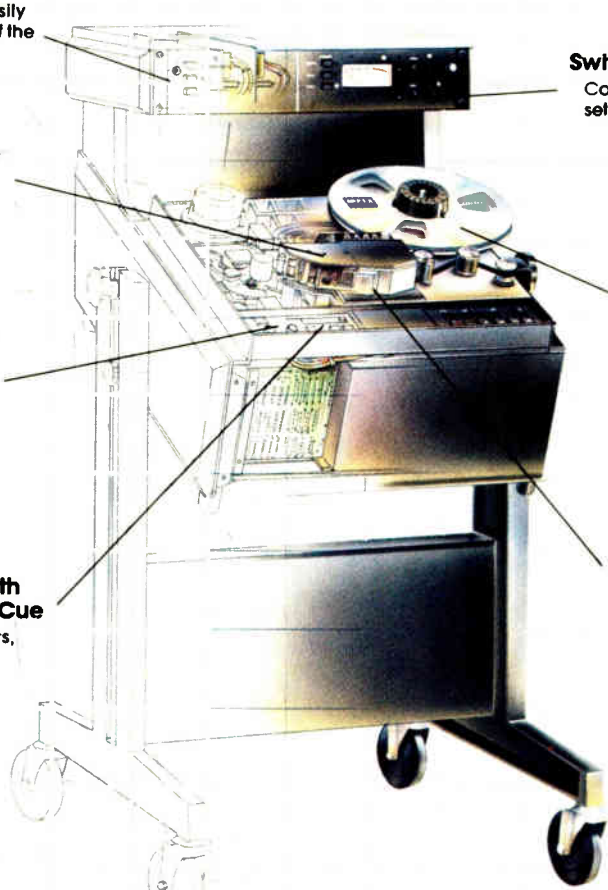
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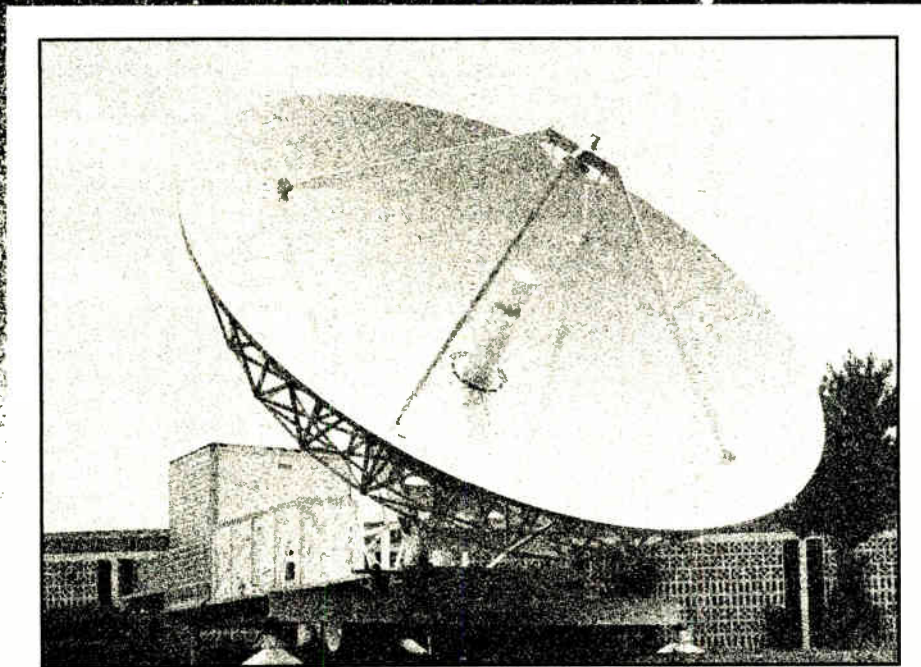
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World Radio History

SATELLITE MUSIC



the 45,000-mile connection

by Mark Schubin

A satellite earth station is an antenna and receiver package that can process signals from a satellite. According to some estimates, there are more than 100,000 such earth stations in the United States. At any time of day or night, on any day, virtually any one of those earth stations could be used to receive a television show being transmitted with high-fidelity, stereo audio. That's pretty incredible!

As recently as 1976, no U.S. domestic communications satellite had ever carried a stereo signal. As recently as 1974, there was no such thing as a U.S. domestic communications satellite. Before 1962, there was no such thing as a communications satellite, and prior to October 4, 1957, there was only one

satellite orbiting the earth. Most English-speaking people called it "the moon." On that fateful date, not quite 25 years ago, the earth acquired a second satellite, this time called "Sputnik."

On Christmas of the following year, a satellite transmitted President Eisenhower's greetings from space. In 1960, a satellite called Echo was able to relay messages from one part of the earth to another. Then came Telstar.

Besides being a hit record, Telstar was the first active communications satellite. It could even handle television signals. Unfortunately, Telstar was in a low earth orbit, which meant it never stayed in one part of the sky very long. The antennas transmitting to and receiving from the satellite had to track it across the sky, and once it dropped below the horizon the signal would disappear, even if David

Brinkley was in mid-sentence.

In 1963, a satellite called Syncom was placed in an orbit 22,300 miles above the equator. At that height, it takes 24 hours to make a single orbit of the earth, meaning the satellite seems to hover at one point in the sky. An orbit at that height is called geosynchronous earth orbit.

Early Bird, launched into geosynchronous orbit in 1965, was the first commercial communications satellite, selling time to all comers, for traffic across the Atlantic Ocean. Many communications satellites followed Early Bird, some joining it over the Atlantic, while others were positioned over the Pacific or Indian Oceans to complete global satellite coverage. A typical earth station had a parabolic reflector about 100 feet in diameter, balanced by a 16 ton weight, the whole assembly sitting on

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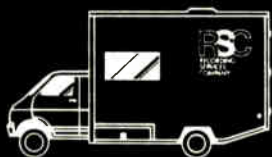
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a ten-story tower, and costing multi-millions of dollars.

In 1972, Canada launched the first domestic communications satellite, Anik. In 1973, they loaned it to some U.S. groups for a demonstration. The demonstration took place at Washington, D.C. and Anaheim, California, right across the street from Disneyland. House of Representatives Speaker Carl Albert said a few kind words to the members of the National Cable Television Association. His image and voice were transmitted by a government earth station up to the Anik satellite. They were received, however, by an earth station a mere 26 feet in diameter, sitting on the back of a flat-bed truck, with a projected cost of just \$100.00

In 1974, Westar, the first U.S. domestic communications satellite, was launched, but it was to work only with earth stations located near New York, Chicago, Dallas, Los Angeles and Atlanta (and the latter couldn't even be used for television programs). In the following two years, however, things really started moving. In 1975, Home Box Office, a supplier of premium television programming, decided to put its signals on a satellite so any cable television system that purchased an earth station and signed an agreement with HBO would be able to receive them. In months, the number of earth stations in the United States doubled. Soon thereafter, the number of satellite earth stations receiving Home Box Office exceeded the total number of earth stations in the world, prior to 1975,

To really appreciate the 1976 event, it's useful to go back a few more years to the evolution of stereo simulcasting. Even before 1971, there were a few stereo simulcasts. Most of these were taped shows. There were difficulties getting a tape recorder at an FM station to play in synchrony with a videotape recorder at a television station (the SMPTE time code wasn't created until 1971). Another problem was attempting to obtain high fidelity stereo audio from a videotape recorder barely suitable for high fidelity mono. A few of the stereo simulcasts were live, but these were restricted to a single city, since the telephone company had no means for carrying high fidelity audio between cities.

On February 28, 1971, *NET Opera* presented "The Queen of Spades" as a stereo simulcast in Boston, New York and Washington, simultaneously. The signals were fed live from New York, using a technique called "diplexing."

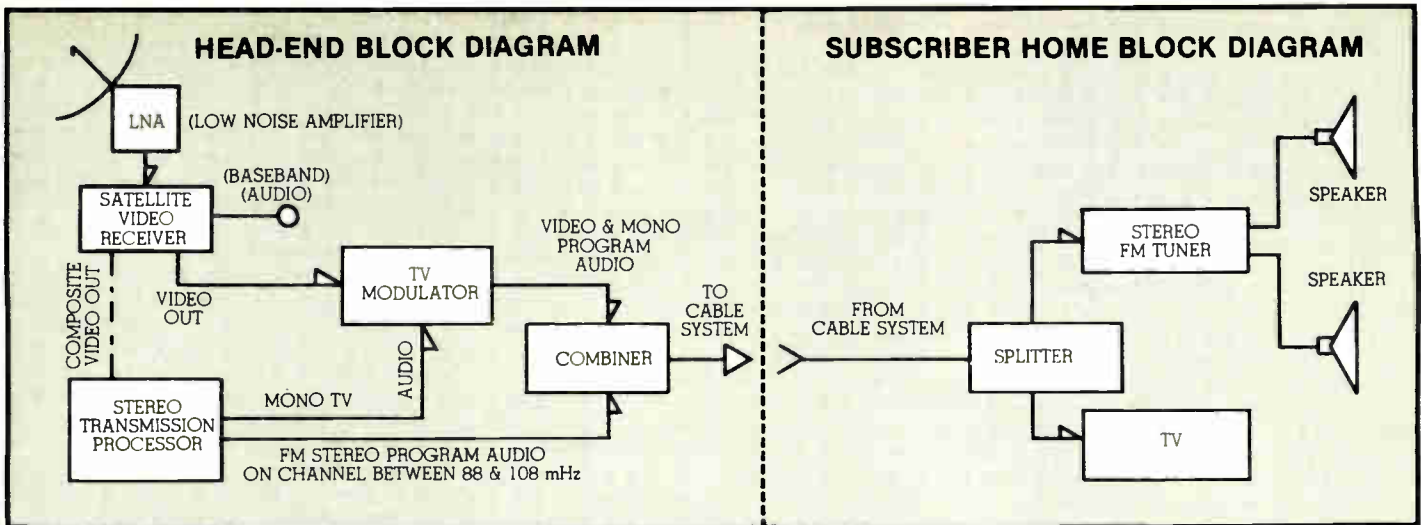
Video signals are limited to 4.2 MHz in bandwidth by U.S. television

transmitters. However, the microwave channels which carry television signals are capable of dealing with much greater bandwidths. Therefore, the diplexing technique modulates an FM carrier with an audio signal, and then superimposes that carrier above the video signal before it is transmitted. For the "Queen of Spades" simulcast, AT&T had obtained diplexing equipment from Leaming Industries (Costa Mesa, CA), that created two FM subcarriers, one for each audio channel, deviated by as much as 300 MHz from center frequencies of 5.8 and 6.6 MHz. The enormous deviation (four times larger than an FM broadcast station uses for both channels) ensures a good signal-to-noise ratio, even after passing through multiple microwave relays.

By 1973, AT&T had sufficiently increased their stock of diplexing receivers that they were able to carry the Metropolitan Opera's Saturday afternoon radio broadcasts to 11 cities up and down the east coast, in stereo. Although these radio broadcasts had no associated video, they had to utilize a video circuit for transmission, since only such circuits had sufficient bandwidth to carry the FM subcarriers. Operational problems occasionally occurred when an AT&T technician tried to "borrow" what seemed to be an unused video circuit for a television transmission.

Although communications satellites are 22,300 miles above the equator, they are otherwise similar to any other microwave relay station, even using the same frequencies. Therefore, it seemed that the same diplexing scheme used on AT&T's microwave video circuits should work on Western Union's Westar Satellite video circuits. Unfortunately, Western Union had no stereo diplexing equipment.

In January of 1976, World Stage (Hollywood, CA) performed an experiment using the Westar satellite. World Stage's Bob White had obtained a six-month experimental permit to try adding his own subcarriers to AT&T-carried video signals while he was at Direct Video in 1974. Using the same diplexing transmission and reception equipment, White sent video and stereo signals from Los Angeles to Los Angeles via satellite. When all went well, White shipped the transmission equipment off to Lincoln Center in New York City and provided the reception equipment to KCET, the PBS television station in Los Angeles. On January 30, 1976, a few days after the experiment, the first "Live From Lincoln Center" telecast was carried in stereo to AT&T's 11 east coast cities,



and to KCET in Los Angeles. It was the first live, nationwide, stereo simulcast network.

Meanwhile, Home Box Office and other cable television programming services caused tremendous growth in the number of earth stations (which were now down to 15 feet in diameter, and costing perhaps \$25,000 each).

The Public Broadcasting Service began satellite transmission and, along with video and mono audio, transmitted four high fidelity audio channels digitally, through a

process called DATE (digital audio transmission equipment), designed originally to provide higher sound quality for their old, land-based network.

While PBS was simulcasting operas and symphonies, NBC took advantage of AT&T's capability to begin simulcasting such shows as "Peter Pan" and "Neil Diamond" in stereo. Then radio networks began using satellite distribution, too. National Public Radio offered its member stations, (which formerly had a single, low-fidelity circuit) 12 high

fidelity channels, with built-in, modified dbx noise reduction.

Home Box Office was the first premium cable television service to try simulcasting with radio stations, again, using AT&T facilities. By that time, however, AT&T was able to offer a new form of stereo transmission service. Telephone calls are usually carried around the country in bunches of 12 calls, called "groups." In 1978, utilizing some Siemens equipment, in conjunction with the British Post Office, AT&T was able to replace the 12 telephone calls

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of a New York to London group with two 15 kHz audio channels and a level-defining signal. This "Siemens" or "multiplexing" technique made possible the first international stereo simulcast, NBC's "Horowitz: Live," seen and heard in stereo simultaneously in the United States and in Britain.

Since AT&T was able to offer hi-fi stereo transmission service without tying up video facilities, they actually lowered the price of stereo transmission in 1979, simultaneously introducing a new form of audio-for-video transmission diplexing. ("new" only in the sense that they now offered it on a non-experimental, regular basis).

Officially recognized diplexing meant any video signal might have accompanying high fidelity, stereo audio. Stereo simulcasts, however, are still few and far between. That is, except for *MTV: Music Television*, the Warner Amex Satellite Entertainment Company's 24-hour, satellite-fed music channel which went on the air on August 1, 1981. Each of these is transmitted to the satellite in stereo, and the more than 300 cable television systems that carry MTV to more than 2½ million subscribers offer an FM channel carrying the stereo portion of the signal.

Dom Stasi, Warner Amex Satellite's Director of Engineering, developed the transmission system used, a form of diplexing, in which one subcarrier carries the left channel plus the right channel, while the other carries the left channel minus the right channel. All audio signals are transmitted with Dolby-B noise reduction encoding, from the Network Operations Center in Smithtown, NY to each cable television system. Official MTV reception and decoding equipment is presently available from either Learning Industries or Wegener Communications (Norcross, GA) and may soon be available from other companies. The reception equipment applies an equalization curve to the audio signals such that, even though they are fed into FM and television modulators which would normally apply a treble boost of 75 microseconds, the audio signals will end up with 25 microsecond pre-emphasis (treble boost), plus Dolby-B noise reduction.

The combination of Dolby-B noise reduction and 25 microsecond pre-emphasis is not uncommon in FM broadcasting, but is totally unique in television broadcasting, where not a single tv set yet exists with Dolby-B decoding. Nevertheless, the Dolby-B, 25 microsecond processing seems to provide good results, even for

television listeners.

Transmission is only a small part of stereo simulcasting, however. Consider the complications that occurred when MTV carried Frank Zappa's 1981 Halloween concert live, to its affiliated cable television systems across the country. As a live concert, the show required house and monitor mixing. Recorded on multi-track tape machines, it required recording mixing (from more than 90 microphones). To add MTV's "video jockey" introducing the show and interviewing Zappa, required a television mix, and, since the show was also being carried on the Starfleet Blair Radio Network, it required another mix for the radio announcer. Each mix took place in a different location, but all shared the same music microphones.

Since the Starfleet Network was simulcasting with MTV, complicated arrangements had to be made to ensure that each network's breaks would last the same length of time and that, while talking to each other, the feeds from Starfleet's announcer's mike and MTV's VJ mike would be available to the other's mixer.

MTV was carried that night on RCA's Satcom F-1 satellite. Starfleet was carried on Western Union's Westar III. Starfleet was using a Wold Communications earth station, to which they had purchased AT&T lines. MTV found it actually easier to get from New York City's Palladium to their Smithtown network center by satellite than by any other means, so their AT&T video and stereo circuits took them to Western Union for a quick ride on the Westar I satellite.

The fact that three satellites were being used to carry this one show did not cause any problems. The fact that MTV was using two, and Starfleet only one satellite did create difficulties. Even at the speed of light, a round trip to a satellite located 22,300 miles above the equator takes about a quarter of a second. Thus, the Starfleet signals would be a quarter of a second out of sync with the MTV signals. A 256 millisecond delay line had to be inserted into the Starfleet feed to keep them in sync. To ensure proper stereo phasing, the delays for each channel had to be strapped together to run off a common digital clock. Then, there were the few Starfleet stations that were being fed by AT&T instead of by satellite. For those, another two delay lines had to be used, this time installed at Wold Communications' operating center in the Empire State Building, the only place where that portion of the

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Lene Lovich at Studio 54.

network was accessible.

In its earliest days, distributing audio by satellite and video by land-based networks, "Live From Lincoln Center" was often also faced with the need for a delay line, but for video, rather than audio. A 256 millisecond video delay is not easy to come by, however (in those days, as little as 17 milliseconds went for about \$20,000). Therefore, Lincoln Center used the satellite itself as a delay line, sending video signals to the satellite from New York and then receiving them at the very same point, before shipping

them off to PBS. Now that PBS is carried by satellite, the problem has vanished.

Delays are only part of the problem in stereo simulcasting. Another problem is mixing. Should the mix be designed for television listeners or for radio listeners? When the British Broadcasting Corporation does stereo simulcasts, it solves that problem by having two entirely separate mixes for radio and for television, often using completely separate microphones. In some cases, in fact, there might be four mixes—a music mix for radio, where fidelity and balance are paramount; a production mix for radio, where timing and continuity are important, and similar production and music mixes for television.

The Metropolitan Opera uses only one music mix, but their "Live From The Met" television shows have a separate production mix. In the music control room, only the music can be heard. In the production control room, blaring intercoms and ringing telephones provide announcer cues, videotape rolls and network demands.

"Live From Lincoln Center's" custom mixing console is designed to

offer some compromises for the problems of mixing simultaneously for radio and television. The console offers left, right and mono outputs, all three available both with and without the announcer mixed in (the latter for foreign feeds and recordings). The mono feeds, however, may be derived in one of two ways—either an auxiliary bus may be fed a separately measured level from each input channel, post fader, or, since the mixing channels of the console are configured as left, center, and right, rather than left, right and mono, a summing matrix can create a mono signal comprised of varying levels of the left, center and right channels. In either case, the goal is the reduction of "center channel buildup," something which occurs when left and right signals are simply combined into mono.

The new Type C videotape recorders offer three high quality audio tracks, so that left, right and mono might be treated separately all the way from the mixing console to the home. However, most facilities use the third audio track for time code, *(continued on page 54)*

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PART 1

LEGAL ISSUES in Music and Video

by Edward R. (Ned) Hearn

Ned Hearn, a partner in the law firm of Harrison, Hearn and Berthold in San Francisco and San Jose, California, is a business attorney who specializes in the entertainment and computer industries. He is a co-author of "Musician's Guide to Copyright" and the "Musician's Manual: A Practical Career Guide" and has published several articles and lectures on the subject of music law. He is a former president and current director of Bay Area Lawyers for the Arts.

The past few years have seen dramatic growth in the video market and in the efforts of the video industry to stimulate consumer interest and purchases. Most of the product that has been made available for consumers in video cassette and disk formats have been movies and a few attempts at packaging music projects, such as Blondie's "Eat to the Beat" and the recent Olivia Newton-John's "Physical." The use of video clips to promote artists and their albums has also increased substantially on cable, in clubs and with in-store promotion at record retail outlets.

The entertainment industry is currently exploring ways to shape its productions in the video market. Music will play a very important role in this development.

BEING RETAINED TO CREATE AND/OR PERFORM MUSIC MATERIAL FOR A VIDEO PROJECT

Producers of video projects for home entertainment, educational purposes and in-house business training will sometimes hire individuals, including musicians, to create original material for use in the video production. This approach saves the need to obtain permission from the owners of existing material in order to use that material in the proposed project. In approaching the terms of the relationship between the

producer and musician/composer, there are a number of points that must be thoroughly discussed and set out in writing. While an oral agreement would most likely be enforceable, time has the effect of dulling people's memories and frequently one party may "conveniently" forget certain details. Consequently, it is much better to reduce the oral discussions to a written agreement. Some of the more important points (but not every possible angle) that should be explored are set out below.

1. The musician should obtain from the producer a clear description of the video project and its purpose. Examples would include whether it is intended for home entertainment, school instruction, documentary, or business/industrial training; the duration of the final product; the length of time available for its production; and the budget. The purpose of the project will usually dictate the market for the final product. These factors will have an impact on the level and manner of compensation.
2. Once the purpose of the project has been identified, the musician should obtain a clear description of the duties that the producer expects the musician to satisfy, including, for example; writing music, performing that music, creating a sound recording of that music, synchronizing the music to the video program itself, arranging for the hiring of musicians, writing the arrangements for the music, and satisfying any union requirements that may be relevant.
3. The musician and producer also should establish a time schedule during which the musician's duties would be performed. The timing often will depend on the schedule for the other aspects of the video project, such as the shoots themselves, and the post-production of the tapes into final product. Frequently, the music is

- not developed until the post-production phase. On occasion, however, a producer may want a segment of the music in advance to create moods that may be useful during the shoots.
4. As a part of establishing a schedule, it is useful to plan meetings at various intervals with the musician and producer reviewing the project at each stage for consistency and acceptance. They also should establish a criteria for acceptance of music that is being prepared.
5. A procedure should be established to allow the musician to make alterations or revisions to the music, if necessary, in the event the producer is not satisfied or new developments require changes, additions or deletions with the music prepared by the musician.
6. Preparing a delivery schedule will facilitate establishing a payment schedule. Frequently, if the payment schedule is structured to coincide with the delivery and acceptance schedules, then payment can be made in progressive stages with final payment made once the producer has accepted the musician's completed work.
7. The amount the musician will charge the producer requires an analysis of the projected amount of time the musician would be required to spend, the scope of his/her duties (see Item 2), the budget for the project, and what costs are to be covered out of the money paid to the musician. Payment could be a fixed fee, or on an hourly basis, by composition, by percentage of gross or net income (be careful how you define those terms) or by some combination of all of these elements.
8. With respect to the costs, it is important for a budget to be established and an agreement reached on whether the costs are to be paid by the producer or by the musician.
9. The musician, of course, would want to be recognized with proper credit as the creator of the music and, if relevant, as the performer and/or producer of the sound recording. Credits normally appear on a card at the end of the production. They also may appear in the introductory credits, depending on the kind of project involved.
10. Another very critical consideration is identifying who will be the owner of the music

used in the project. Frequently, the producer will want the musician to transfer ownership in the music to the producer. If that is the case, then the musician would be in a position to demand more money for performing the work, since he/she would be transferring ownership in the music. Under the United States Copyright Act, unless the musician is in the normal employ of the producer, or signs a written agreement by which the musician agrees that his/her work is being done as a "work for hire," the copyright ownership in the music will vest in the musician. If the former two situations prevail, then the copyright ownership will vest in the producer. Consequently, it is very important to establish the relationship between the producer and musician, namely, as to whether it is a commissioned work, in which case the musician will own the copyright, or a "work for hire" in which case the producer will own the copyright.

11. When music is first created for use in a film or video, and it appears on the soundtrack for that project, there is a

presumption that the music is part of the copyright in the overall project. If that is not the situation, then to rebut this presumption, the parties should agree in writing that the copyright for the music stays separate and apart from the copyright in the video. Also, a separate copyright notice (© 19__ [year of publication] _____ [name of owner] for the music should appear on a card when the video (or film) is performed to the viewer. If it is determined that the musician will retain the ownership in the music, then the copyright notice could appear on the same card that shows the credits for the musician.

12. Another part of the copyright issue concerns the scope of rights in the use of the music. If the ownership in the music is going to vest in the producer, then the producer would have unlimited right to use that music in any way he/she would care. If that is the case, then in addition to the fee paid for the work on the project, arrangements should be made for payment of writer's royalty (generally speaking, 50% of

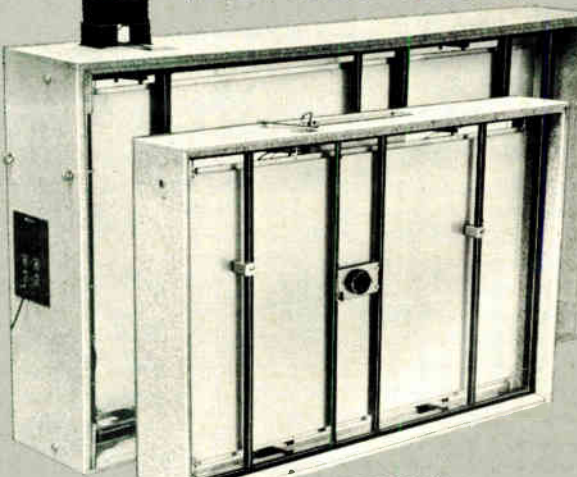
whatever income the producer gets from the separate publication and exploitation of the music) to be paid to the writer for the life of the copyright in the work (life of author plus fifty years, unless the music was a work for hire, in which case it would be the sooner of 75 years from the date of publication or 100 years from the date of creation).

If the ownership vests in the writer, then the writer should clearly establish in the written agreement how much usage of that music can be made by the producer, whether only with the video and its exploitation, or whether the producer could use the music in other contexts. At the same time, it should be made clear that the musician may exploit the music in any other way he/she wants. Determine also whether the producer will receive any share of additional income from that exploitation.

As you can see, there are a number of issues that have to be explored. Each project requires careful examination and thought.


In Part II we will discuss obtaining rights to use existing music.

ECOPLATE™



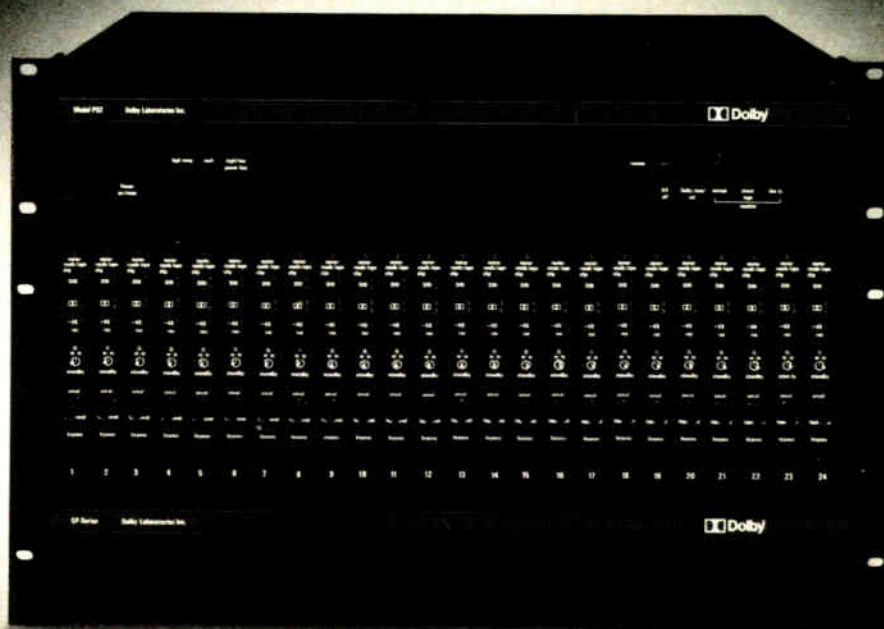
When so many famous studios and recording engineers choose ECOPLATES for their exceptional musical qualities, isn't it time you thought about owning one?

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George Massenberg Studios for Earth, Wind and Fire

STUDIO TECHNOLOGIES 

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ECOPLATE \$5000 THE FAMOUS ORIGINAL
ECOPLATE II \$2750 THE MOST COST EFFECTIVE REVERB IN THE WORLD



New from Dolby Laboratories:

The Dolby SP Series Multi-track noise reduction unit

Dolby noise reduction is an integral part of professional multi-track recording practice in music, radio and TV broadcasting, and film studios throughout the world. A new noise reduction unit, the Dolby SP Series, has been developed for these and other applications, and provides up to 24 tracks of Dolby A-type noise reduction in only 12¼" of rack space. The SP Series' combination of compact size, ease of operation, and new features makes it ideal for equipping new recording facilities and upgrading existing ones.

For further information on the SP Series and other professional noise reduction equipment, contact Dolby Laboratories.

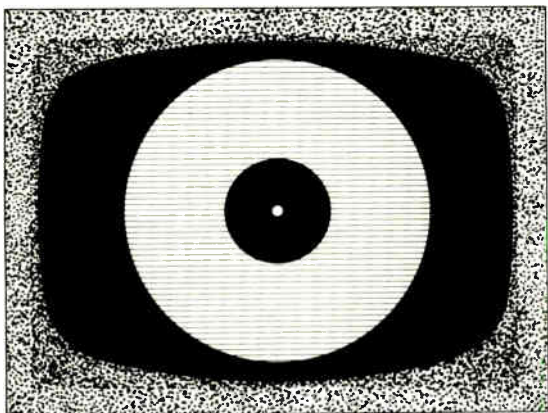
Highlights of the Dolby SP Series:

- Up to 24 tracks in only 12¼" of rack space, including power supply.
- Dolby A-type noise reduction characteristics utilizing standard Dolby Cat. No. 22 modules.
- Separate regulated power supply unit with electronically-controlled output protection.
- Low-noise fan cooling.
- LED display for each track permits accurate Dolby level calibration (within ± 0.1 dB if desired) by matching intensity of LED pairs; further LEDs

indicate the presence of signals and clipping, and assist alignment with high-level reference tapes.

- Front-panel "UNCAL" control for each track permits rapid resetting of Dolby level for playback and punch-in on nonstandard-level tapes, then instant restoration of preferred preset studio Dolby level without recalibration.
- User-selectable option of "hard" or electronically-buffered bypass of individual tracks and of all tracks simultaneously.
- Snap-fit connectors on rear panel for rapid disconnection and reconnection.
- Balanced and floating input stages.
- Output stages drive either single-ended or balanced 600-ohm loads at levels up to +28 dB (19.5 V) before clipping.
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- Remote ground-sensing output configuration minimizes hum pickup when driving single-ended loads.
- Discrete FET switching for reliable, noise-free routing of audio signals.

Dolby Laboratories, 731 Sansome Street, San Francisco, California 94111, Telephone 415-392-0300, Telex 34409. 346 Clapham Road, London SW9, Telephone 01-720-1111, Telex 919109. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation. S81/3621



VIDEO MUSIC

Production and Post Production Facilities

The following studios span the spectrum from audio recording studios with basic video interfacing equipment to full video production centers with audio sweetening capabilities. We have included this list as a basic guide for those readers involved with the growing field of video music production.

As this area is in a dynamic growth and

update period, we have chosen not to list detailed information and we encourage readers to contact the facilities directly for specifics.

If you are involved with or know of a facility that was omitted from this list, please get in touch so we can include them in the next update.

NORTHEAST Full Service Video Production

ALL MOBILE VIDEO
630 Ninth Ave., New York, NY 10036
(212) 757-8919
Contact: Anton Duke, Enc Duke.

CCR POST
135 East 55th St., New York, NY 10022
Contact: Steven Swartz.

CAROB VIDEO
250 W. 57th St., New York, NY 10017
(212) 957-9525
Contact: Bob Salomon.

CENTEL/CENTURY III FILMS
651 Beacon St., Boston, MA 02115
(617) 267-6400
Contact: Lee Rubenstein.

DEVLIN PRODUCTIONS
150 W. 55th St., New York, NY 10019
(212) 582-5572

EAST COAST VIDEO SYSTEMS, INC.
548 Broadway, New York City, NY 10012
(212) 431-7453
Contact: Paul Krusk.

LE STUDIO
201 Perry, Morin Heights, Quebec,
Canada JOR-1H0
(514) 226-2419
Contact: Andre Perry

MATRIX VIDEO
727 Eleventh Avenue, New York, NY 10019
(212) 265-8500
Contact: Maury Beaumont.

MULTIVISION, INC.
31 Old Randolph St., Canton, MA 02021
(617) 828-8866
Contact: Jay Roewe.

**NATIONAL VIDEO CENTER
& RECORDING STUDIOS**
460 W. 42nd St., New York City, NY 10036
(212) 279-2000
Contact: Jeff Pastolove (video),
Kim Llorente (audio).

NORTHEAST PRODUCTIONS
Wilkes-Barre/Scranton International Airport
PA 18641
(800) 233-4777, (717) 824-6666 (in PA).
Contact: Peter P. Kozloski.

PHASE TWO VIDEO
609 W. 50th St., New York, NY 10019
(212) 246-5940
Contact: Tom Smiley.

**PROFESSIONAL VIDEO SERVICES/
LOCATION VIDEO INC.**
206 East 29th St., New York, NY 10016
(212) 683-3636
Contact: Richard Namm.

E.J. STEWART, INC.
525 Mildred Ave., Primos, PA 19018
(215) 626-6500, (212) 288-0525
Contact: Hal Lipman.

TELETRONICS
231 East 55th St., New York, NY 10022
(212) 355-1600
Contact: Geoffrey Kelly, Will Roth.

TPC COMMUNICATIONS, INC.
Production Plaza, Sewickley, PA 15143
(412) 771-4700
Contact: Joanne Flannery.

UNITEL VIDEO
510 W. 57th St., New York, NY 10019
(212) 265-3600
Contact: Rich Kearney, Phil McEneny.

NORTHWEST Full Service Video Production

ALCON VIDEO/FILM PRODUCTIONS, INC.
950 Battery St., San Francisco, CA 94111
(415) 397-0490
Contact: Steve Gamble.

BONNEVILLE PRODUCTIONS
130 Social Hall Ave.,
Salt Lake City, Utah 84111
(801) 237-2400
Contact: Dave Michelsen.

**EAR RESPONSIBLE STUDIO
& REMOTE VIDEO PRODUCTION**
4 Strathmoor Drive, Berkeley, CA 94705
(415) 841-4979
Owner: Ted Oliphant.

MOBILE VIDEO PRODUCTIONS
888 Post St., San Francisco, CA 94109
(415) 386-1188
Contact: Dany Walker.

ONE PASS AUDIO
One China Basin Bldg., 185 Berry St.,
San Francisco, CA 94107
(415) 777-5777
Contact: Vance Frost.

OSMOND COMMERCIAL PRODUCTIONS
1420 East 800 North, Orem, Utah 84059
(801) 224-4444
Contact: Dave Anderson.

PACIFIC VIDEO RESOURCES
2339 3rd St. M-4, San Francisco, CA 94107
(415) 864-5679
Contact: Steve Cotton.

SARGENT AUDIO/VIDEO PRODUCTIONS
1655 Laurel St., San Carlos, CA 94070
(415) 592-8678
Contact: Greg Sargent.

SKIDMARKS PRODUCTION GROUP
550 Bryant St., San Francisco, CA 94107
(415) 495-5595
Contact: Andrew Conn.

THE SKID ROW MOBILE
(Skid Row Studios, Inc.)
25 Solano Business Park, 1717 Solano Way,
Concord, CA 94520
(415) 676-2154
Contact: Tony Van Lit.

SOUNDSMITH STUDIOS/MAGIC MEDIA
426 NW 6th Ave., Portland, OR 97209
(503) 224-7680
Contact: David Tower.

SPEED OF LIGHT VIDEO PROD.
2430 Jones St., San Francisco, CA 94133
(415) 441-7806
Contact: Joe Van Witsen.

3RD RAIL MEDIA
3435 Army St. Suite 213,
San Francisco, CA 94110
(415) 821-3623
Owner: Dan Wagner, Cordt Holland

TRIPLE AAA VIDEO
Government Way & Hilgren,
Hayden Lake, Idaho 83835
(208) 667-6822, 772-4827
Contact: Mike Schettler

VERSATILE VIDEO
151 Gibraltar Court, Sunnyvale, CA 94086
(408) 734-5550
Contact: Brian Garcia,
Debbie Whiting, Barbara Shelber

VIDEO WEST
(A division of Bonneville Prod.)
130 Social Hall Ave.,
Salt Lake City, Utah 84111
(801) 237-2526
Contact: Al Henderson, V P

NORTHEAST Audio Studios with Video Sync

ATLANTIC STUDIOS
1841 Broadway, New York, NY 10023
(212) 484-6093
Contact: Paul Sloman

AUDIO INNOVATORS, INC.
216 Blvd. of the Allies,
Pittsburgh, PA 15222
(412) 471-6220
Contact: Craig Hubler

AURA SONIC
140-02 Poplar Ave., Flushing, NY 11355
(212) 886-6500
Contact: Steve Remote.

AUTOMATED SOUND STUDIOS
1500 Broadway, New York, NY 10036
(212) 869-8520
Contact: Harvey Gordon

DAWN RECORDING
756 Main St., Farmingdale, NY 11735
(516) 454-8999
Contact: James J Bernard

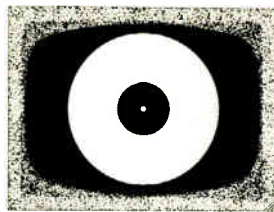
DIMENSION SOUND STUDIOS
368 Centre St., Jamaica Plain, MA 02130
(617) 522-3100
Contact: Klare Hollender

FEDCO AUDIO LABS
310 Greenwood Ave., Providence, R.I. 02916
(401) 272-3157
Contact: Jeff Eustis

HI-FIVE RECORDING STUDIOS
237 West 54th, New York, NY 10019
(212) 684-3766
Contact: Moogy Klingman

MASTER SOUND PRODUCTIONS, INC.
921 Hempstead Tpke.,
Franklin Sq., NY 11010
(516) 354-3374
Contact: Maxine Chren

MINOT SOUND
19 South Broadway, White Plains, NY 10601
(212) 828-1216, (914) 428-8080
Contact: Thom Cimillo



VIDEO MUSIC

Production and Post Production Facilities

NEXUS PRODUCTIONS, INC.
10 East 40th St., New York, NY 10016
(212) 679-2180
Contact: Jack Shults

PHANTASMAGORIA SOUND STUDIOS, INC.
630 9th Ave. #801, New York, NY 10036
(212) 586-4890
Contact: Russell Fager

REGENT SOUND STUDIOS
25 W. 56th St., New York, NY 10019
(212) 245-2630
Contact: Elissa Kline

HOWARD SCHWARTZ RECORDING, INC.
420 Lexington Ave., New York, NY 10017
(212) 687-4180
Contact: Gerne Jablonski

SECRET SOUND STUDIO, INC.
147 West 24th St., New York, NY 10011
(212) 691-7674
Contact: Dianna Alleyne

SOUNDMIXERS
1619 Broadway, New York, NY 10019
(212) 245-3100
Contact: Neil Ceppos, Bob Schaffner.

SOUNDTRACK
77 N. Washington St., Boston, MA 02114
(617) 367-0510
Contact: John or Rob

WORKSHOPPE RECORDING
40-35 235th St., Douglaston, NY 11363
(212) 631-1547
Contact: Rob Bengston

WORLDWIDE AUDIO ENTERPRISES
(Division of Fred Weinberg Prod., Inc.)
16 Dundee Road, Stamford, CT 06903
(203) 322-5778
Contact: J.R. Weinberg

NORTHWEST Audio Studios with Video Sync

AUDIO PRODUCTION STUDIO
7404 Sand Lake Rd., Anchorage, AK 99502
(907) 243-4115
Contact: Bruce Graham,
V.P./chief recording engineer

BAYSHORE STUDIOS
871-F Industrial Rd., San Carlos, CA 94070
(415) 591-3503
Contact: Keith Hatschek

ROBERT BERKE RECORDING
San Francisco, CA
(415) 661-6316
Contact: Mark Escott

CATRACS STUDIO
727 Caliente Ave., Livermore, CA 94550
(415) 443-2205
Contact: David Mac Millan

FANTASY STUDIOS
10th & Parker, Berkeley, CA 94710
(415) 549-2500
Contact: Roy Segal

HEAVENLY RECORDING STUDIOS
620 Bercut Drive, Sacramento, CA 95814
(916) 466-3088
Contact: Jim West.

HOUSTON RECORDING
(Remote audio for video)
2355 Sobre Vista Rd., Sonoma, CA 95476
(707) 996-8881
Contact: Rich Houston.

THE LITTLE MOUNTAIN SOUND STUDIOS
201 W. 7th Ave., Vancouver, B.C.
Canada V5Y 1L9
(604) 873-4711
Contact: Bob Brooks

LUXURY AUDIO WORKSHOP, INC.
2570 E. Tropicana Ave., Las Vegas, NV 89121
(702) 451-6767
Contact: Lee Watters.

NOVA RECORDING
1001 4th St. #3618, Seattle, WA 98154
(206) 477-1696
Contact: Paul Speer

PANORAMA PRODUCTIONS
2353 De La Cruz Blvd.,
Santa Clara, CA 95050
(408) 727-7500
Contact: Gary Moore

RANDALL SCHILLER PRODUCTIONS
1207 5th Ave., San Francisco, CA 94122
(415) 661-7553
Contact: Randall Schiller.

RUSSIAN HILL RECORDING
1520 Pacific Ave., San Francisco, CA 94109
(415) 474-4520
Contact: Jill Sheree Bergin, Bob Shotland

SAUSALITO RECORD PLANT
2200 Bridgeway, Sausalito, CA 94965
(415) 332-6100
Contact: Terry Delsing

SEA-WEST RECORDING STUDIOS/HAWAII
P.O. Box 30186, Honolulu, HI 96820
(808) 293-1800
Contact: Donna Alexa

THE SOUND SERVICE
860 Second St., San Francisco, CA 94107
(415) 433-3674
Contact: David Dobkin

STUDIO N
10115 S. De Anza, Cupertino, CA 95014
(408) 996-2055
Contact: Dave Nodiff

WATER STREET SOUND & FILMWORKS, INC.
342 Water Street, Vancouver, B.C.
Canada V6B 1B6
(604) 689-4333
Contact: Larry Baker

THE WINERY RECORDING STUDIO, LTD.
240 Kaupakalua Rd., Haiku, Maui, HI 96708
(808) 572-1560
Contact: Dorothy V. Bets

SOUTHWEST Audio Studios with Video Sync

COOKSOUND PRODUCTIONS, INC.
6626 Hornwood, Houston, TX 77074
(713) 772-1006
Contact: Shotgun Cooke

INERGI RECORDING STUDIO
15825 Memorial Drive, Houston, TX 77079
(713) 493-1533
Contact: Danny Ward

OMEGA AUDIO AND PRODUCTIONS
8036 Aviation Place, Dallas, TX 75235
(214) 350-9066
Contact: Paul Christensen

RAINBOW SOUND
1320 Inwood, Dallas TX 75247
(214) 638-7712
Contact: Phil Allison

REELSOUND RECORDING
P.O. Box 280, Manchaca, TX 78652
(512) 472-3325
Contact: Malcom Harper

STUDIO SOUTH
308 W. 6th St. Austin, TX 78701
(512) 472-4807
Contact: James Tuttle

**UNITED AUDIO RECORDING
UAR PRODUCTIONS**
8535 Fairhaven, San Antonio, TX 78229
(512) 690-8888
Contact: Robert Bruce

WESTWOOD RECORDING STUDIOS
964 West Grant Rd., Tucson, AZ 85705
(602) 622-8012
Contact: William Cashman

SOUTHWEST Full Service Video Production

BUCKBOARD PRODUCTIONS
904 Keller Street, Benbrook, TX 76126
(817) 249-3092
Contact: Ron Dilulio

SPINDLETOP POST
1328 Inwood, Dallas, TX 75247
(214) 634-7206
Contact: Mike Hardin

THIRD COAST VIDEO
501 N. Interregional Hwy., Austin, TX 78702
(512) 473-2020
Contact: Jeff Van Pelt

SOUTHWEST Full Service Video Production

TULSA FILMS
6314 E. 13th, Tulsa, OK 74112
(405) 836-8164
Contact: Ellen Galvin

SOUTHEAST Audio Studios with Video Sync

ALPHA AUDIO
2049 W. Broad St., Richmond, VA 23220
(804) 358-3852
Contact: Mary Anne Turner

ARTISAN RECORDERS, INC.
1421 SW 12th Ave., Pompano Beach, FL 33060
(305) 786-0660
Contact: Scott Strawbridge

BROKEN DOOR STUDIO
5404 Stanford Drive, Nashville, TN 37215
(615) 269-0727
Contact: Peter Keeble, Richard Achor

CREATIVE REDIFFUSIONS AUDIO & VIDEO
7019 Big Daddy Drive, Panama City, FL 32407
(904) 234-3793
Contact: Paul Bailey

CRITERIA RECORDING STUDIOS
1755 Northeast 149th St., Miami, FL 33181
(305) 947-5611
Contact: Jack Davis

DOPPLER STUDIOS
1922 Piedmont Circle, Atlanta, GA 30324
(404) 873-6941
Contact: Pete Caldwell

FANTA PROFESSIONAL SERVICES
1213 16th Ave. S., Nashville, TN 37212
(615) 327-1731
Contact: Johnny Rosen

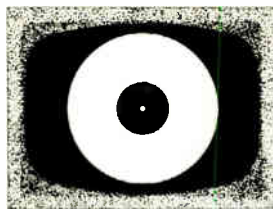
LIVE OAK SOUND, INC.
110 College Place, Norfolk, VA
(804) 627-5545
Contact: Jim Mikles

QL MOBILE RECORDING
314 Romano Ave., Coral Gables, FL 33134
(305) 446-2477, 665-3487
Contact: Rod Ball

RKM SOUND STUDIOS
1200 Spring Street, NW, Atlanta, GA 30309
(404) 874-3667
Contact: Jeffrey T. Kinder

TRIAD RECORDING STUDIOS, INC.
5075 N.E. 13th Ave., Ft. Lauderdale, FL 33334
(305) 771-1431
Contact: Douglas Weynck

TRI-STATE RECORDING
2006 E. Center St., P.O. Box 3860,
Kingsport, TN 37664
(615) 246-9701
Contact: Rick Salyer



VIDEO MUSIC

Production and Post Production Facilities

WISHBONE RECORDING STUDIO
Webeter Avenue, Muscle Shoals, AL 35660
(205) 381-1455
Contact: Lee Daley

SOUTHEAST Full Service Video Production

ARDENT RECORDINGS, INC.
2000 Madison Ave., Memphis, TN 38104
(901) 725-0855
Contact: Johy Fry

BULLET RECORDING
49 Music Square West, Nashville, TN 37203
(615) 327-4621
Contact: Piers Plaskitt

LE DOUX RECORDERS
989 Arden Ave. SW, Atlanta, GA 30310
(404) 758-4045
Contact: Utamu

SHOE PRODUCTIONS, INC.
P.O. Box 12025, Memphis, TN 38112
(901) 458-4496
Contact: Warren Wagner

SOUTHERN RECORDING AND VIDEO PROD.
1123 Jackson, Alexandria, VA 71301
(318) 473-0779
Contact: Bill Gabour, Dennis Murdock

SPECTRUM RECORDING SERVICES
(Formerly SRS)
536 Huffman Rd., Birmingham, AL 35215
(205) 833-6906
Contact: Noah L. White

LEE HAZEN'S "SUMMER PLACE"
204 Shoreline Dr. Rt. 2,
Hendersonville, TN 37075
(615) 824-2311
Contact: Lee Hazen

NORTH CENTRAL Audio Studios with Video Sync

AMBIENCE RECORDINGS INC.
27920 Orchard Lake Rd.,
Farmington Hills, MI 48018
(313) 851-9766
Contact: Jerry Silecchia

CHICAGO RECORDING CO.
528 N. Michigan Ave., Chicago, IL 60611
(312) 822-9333
Contact: Joe Sturm, Susan Divita

HIGH FIDELITY RECORDINGS
1059 Porter, Wichita, KS 67203
(316) 262-6456
Contact: James Strattan

RON ROSE PRODUCTIONS
29277 Southfield Rd., Southfield, MI 48076
(313) 424-8400
Contact: Don Wooster

ROUND SOUND STUDIOS, INC.
357 Ormont Drive, Weston,
Ontario, Canada M9L 1N8
(416) 743-9979
Contact: Jamie Sutherland

SOUND PATTERNS DXM
38180 Grand River,
Farmington Hills, MI 48018
(313) 477-6444
Contact: Pelly Dallas

SOUND RECORDERS, INC.
3947 State Line, Kansas City, MS 64111
(816) 931-8642
Contact: Jim Wheeler

SOUND RECORDERS, INC.
206 South 44th St., Omaha, NB 68131
(402) 553-1164
Contact: John Boyd

UNIVERSAL RECORDING
46 E. Walton, Chicago, IL 60611
(312) 642-6465
Contact: Foote Kirkpatrick

NORTH CENTRAL Full Service Video Production

ASTRO VIDEO SERVICE
61 West Erie St., Chicago, IL 60610
(312) 280-5520
Contact: Mark Adler

EDIT/CHICAGO
160 E. Grand Ave., Chicago, IL 60611
(312) 280-2201
Contact: Doug Cunningham

HUBBARD STREET STUDIOS
11 East Hubbard St., Chicago, IL 60611
(312) 644-0589
Contact: Jerry Lee Davidson

OPTIMUS
161 E. Grand Ave., Chicago, IL 60611
(312) 321-0880
Contact: Michael Fayette

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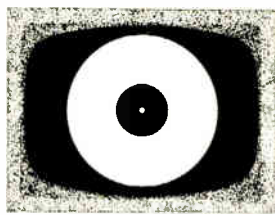
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CORRECTION: In our March 1982 issue (Vol. 6, No. 3) we incorrectly identified the photo of the Neumann U-89i microphones on pages 28-29 as U-87's.

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VIDEO NEWS

COMPANIES: Spotlight on Texas

by Mia Amato

Those of you visiting Dallas this month for the NAB show might investigate two new studios which have successfully integrated audio and video services. One such is **Omega Audio** which recently "co-located" its studio with **Video Post and Transfer**. Video Post, run by **Neil Feldman**, offers one-inch video editing with a CMX system. Omega, run by **Paul Christensen**, provides mixing, synching, and sweetening for video and a recording studio and 24-track mobile unit. The two companies have set up shop at Love Field, a commuter airport, to give regional producers easy access from other points in the southwest.

"Our bread and butter is agency work and industrials," says **Russell Hearn**, Omega's vice-president and chief engineer, "we have a recording clientele coming in at night to cut records. But we feel that the future of audio is connected to video so we co-located."

Hearn uses the BTX "Shadow" synchronizer when mixing to picture; its main advantage, he says, is that the video stays visible when in the jog or chase modes. "A lot of our commercial directors have worked in film, and they're most used to this approach." Having a video studio next door has been beneficial not only to clients but to Omega, whose investment in video gear has been minimal: playback equipment, time code reader, and monitors on the speaker bridge above the console and on rollable casters in the studio.

Omega's most interesting innovation in film and tv post work is **Codefx™**, a computerized sound effects system. According to Hearn, their entire sound effects library is recorded and time-coded for recall through a proprietary device that utilizes the search capacity of time-code. "All the engineer has to do is look up the time-code 'address' in a log for the door slam or hammer sound, then program the system, which tells the four track to find it and lay it in on the 24-track," he ex-

plains. "If the producer says, 'that's a couple of frames too late,' all it takes is a single command to do it over."

Omega, Video Post and a third company, **Clearwater Teleproductions**, have also collaborated on a number of remote video productions of C&W acts at Gilley's Club, Billibob's, and other large clubs.

The Dallas Communications Complex in Las Colinas timed its grand opening to coincide with the NAB Convention. Along with 150 acres of "back lot" the teleproduction center boasts several sound stages from 3,000 to 15,000 square feet and rooms and rooms of rentable office space. **TriCom** and **Tele-Image**, two well established Texas video houses, have already taken up residence, as have **Brimstone Films**, **Ruff Cedar Sound Recording**, the film and video post house **Spindletop**, and a catering service. "A producer will be able to come here with an idea or concept and leave with a finished product," says **Pat Wolfe**, director of the facility. She added that other buildings on the lot will be refurbished to house graphics, casting, and other service firms. Well-placed Ruff Cedar is a 48 track sound studio owned by **Russell Whittaker**, and will provide recording and sweetening for the center's clients, according to Wolfe.

In New York, construction continues on **Metropolis**, a vast studio complex taking shape on Tenth Avenue. Studio architect **John Storyk** has designed two large soundstages, each with its own video control room and digital audio control room. Storyk calls the stages VARMS—Video Audio Recording and Mixing Stage. His prototype mini-Varms can be seen at **Lion's Gate Films** in L.A.

At **National Video Center**, New York City, the modular setup there divides post-production functions (editing, film-to-tape, audio post) into triangle-shaped clusters around a central master control room. "Right now our busiest room is the one with the Q-Lock," reports operations executive **Bill Kelly**. "We've been doing a lot of

work mixing and remixing audio for ABC's **ARTS** and **CBS Cable**, two cable channels which are in stereo."

The Q-Lock is a 24 track synchronized audio mixing system which can interlock four record decks. National's video post-production "Room C" was the site of final edit for the **Grateful Dead's** videodisk/cassette concert. Special effects for the show, titled **Dead Ahead**, were created by engineers **Joe Schwartz** and **Mark Negreann**.

E.J. Stewart of Philadelphia provided mobile video for the Nashville taping of **Charlie Daniel's** annual Volunteer Jam. **Stanley Dorfman** directed and the special guests included **Dickie Betts**, **Crystal Gayle**, **Leon Russell**, and the **Winter** brothers. Other projects at EJS are promo work for **CBS Records** and post-production for an **MTV** special, while a video version of **Rolling Stone Magazine** is in development. The publication has been messing around with the idea of a television series since 1978, but is expected to take the plunge since MTV expressed an interest. **Denny Somach**, who created the syndicated **Rolling Stone** rock history series for radio, is in charge.

ART MEETS INDUSTRY

Video Expo, which presents a semi-annual equipment exhibition and technical seminars for the non-broadcast market, has further broadened its scope to include regular screenings of video art. February's Expo, held in San Francisco, featured, for the second year, a video cafe complete with checkered tableclothes, refreshments and color monitors. Highlights from the **San Francisco Video Festival** were screened, including works by **Chip Lord**, **Max Almy**, **Dara Birnbaum** and **Juan Downey**.

The east coast show held last fall used a video theatre format to display works overseen by the **New York Media Alliance**. The interface between artists and commercial video users was initiated by San Francisco

Video Festival director **Steve Ageststein**, who's well known for his efforts to bring video art to a larger audience (this month the organization will fete four artists at sites around the city). But the pat on the back belongs to **Elliot Minsker**, president of Knowledge Industries Publications, which sponsors the Expo and provides space and promotion for the art screenings.

Night Flight, the late-night programming block on the satellite cable service **USA Network**, has begun integrating video art programs into its mix of rock music specials and movies. *Night Flight* producer **Stu Shapiro** has arranged through **Electronic Arts Intermix** in New York to air the work of video artists. Participants include **Nam June Paik**, **Stephen Beck**, the **Vasulkas** and **Twinart**.

Intermix is also experimenting with home video sales of art tapes, with little success so far. Increased exposure to different kinds of video would certainly benefit future forms of video music, but the likeliest avenue to a broader audience remains cable television. **ATI Equities**, which produces *Night Flight*, demonstrates a commendable commitment to alternative television. Two independently produc-

ed musical series were renewed this year: *New Wave Theatre*, produced by **David Jove** in Los Angeles, and *Take Off*, produced by **Video West**.

MORE ON CABLE

A Federal judge ruled that the **Director's Guild of America (DGA)** has the right to prevent any of its members from working for a pay television service—even if he or she wants to. The ruling stems from a lawsuit brought upon the DGA by **Home Box Office**, which does not have a contract with the Guild. Since 1978 the DGA has specifically banned any of its members from working with HBO, ostensibly because the pay-cable firm would not agree to pay scale and working arrangements required by the Guild.

In Hollywood they're gloating and calling this "a major victory" but I can't see why. What the Guild has done is cut off its 1,200 members—some of the brightest talents in film and television—from participation in a growing and potentially lucrative market. The DGA has even gone as far as to fine a director \$14,000 for daring to direct an HBO program.

In the meantime non-DGA directors are establishing a foothold in origi-

nal cable programming. **Arrivistes** lacking feature film or network credits seem content to take smaller salaries now in order to build their reputations, "In a way I'm glad HBO lost the case," commented one determined individual, "I was afraid that a lot of heavy talent coming in would squeeze me out. Now I still have time to build a track record in this business."

Playboy Productions in New York is looking for short subjects to air on its racy pay-cable program launched earlier this year. According to creative director **Bob Shanks**, the (you-guessed-it) magazine-format show seeks "witty and sensuous subject matter" in lengths from sixty seconds on up, to wrap around "Playboy Interview" segments and a centerfold lady that (gasp!) actually moves.

Playboy's magazine-of-the-air is more predictable than imaginative, but company spokesman **Jim Merrill** has said that musical programming would be considered. Businesswise, the program is anchored firmly in **Escapade**, an established "adult" pay cable channel with roughly 200,000 subscribers in 90 communities and a successful history of marketing blue movies in a late-night pay tier. ■

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by Gary Schultz

Gary Schultz, a product specialist for CMX Medium Scale Editing Systems, has been a TV and film writer/producer for fifteen years. He has produced programs for corporate, educational, and instructional TV clients nationwide, and his credits include; "Paint the Rain" (Cine Golden Eagle Award, 1973), and "Unitas: Hope on a Street" (1978).



edit list is generated only for the special effects or highly complex audio mixing which are done at an outside post production house with the correct audio equipment.

Since most of the large post production facilities are CMX houses, most medium-priced systems' lists try to be "CMX-compatible." Some are, some are not. Therefore, it is worth the time to test an edit list on an outside post production setup before actually buying "compatible" edit-list equipment (be it floppy disk, paper

MEDIUM-PRICED VIDEO EDITING SYSTEMS

Computer-assisted editing is a comparatively new field, having started in the broadcast television industry less than 15 years ago. Since then, dramatic advancements in editing have drawn together the previously separate fields of TV, film and audio post-production. Within the last three years, many of these advancements have become available in "medium-priced" editing systems.

PRICE

Comparing the cost of medium scale systems is made much easier by first determining what features you need, and then comparing the costs of those features.

For example, if you've already determined the VTRs you want to buy, make certain to price an editing controller that interfaces with those machines, including machine modifications (if any). If you're buying only a basic "cuts-only" system don't pay for any expansions until you need them. If you have already selected ATRs, get a trigger-control device (sometimes called a "General Purpose Interface") in the editor that will roll an ATR on cue. Also, be sure to include the cost of modifying VTRs or ATRs (if any). It may be worth the price of a VTR modification to preserve the life of the VTR transports. Options like time code reading, edit decision list capability and A-B roll should be priced separately.

EDIT DECISION LIST

The Edit Decision List or Edit List can make the difference between an average and an outstanding show. Typically, using SMPTE time code to mark the in/out points for all cuts, dissolves, fades and special effects, the list provides the editor a means to go back later and refine a show or a part of a show. Since many editors work in sections or by shots (i.e. the show title



CMX Edge Computer Assisted Editor.

or the shot number), often the list gets separated, worked on in sections and later assembled in its final form from several (sequential) lists.

Some editors do a rough cut or a work print of a show on a medium scale system and the final version on a large scale or "full capacity" system across town. Sometimes the (cuts-only) list of a work print is used later to do the final edits or edit list revision on a full capacity system. Sometimes an

punch or printer). This may be burdensome, but it will save a lot of time and grief to know your list works on a CMX system.

SMPTE TIME CODE ON VTR'S

Most SMPTE time code is pre-recorded on one of the audio tracks of the VTR (or on a separate track of a multi track ATR). This is often called longitudinal time code. In C-format one-inch machines, the time code

track is usually called the "third audio" track. Audio track two on 3/4" U-matic machines is usually used for time code.

Although one inch VTRs usually have a separate "address track" or "3rd audio track" available for longitudinal time code, some post production facilities now use "vertical interval" time code as a means of freeing up that extra audio track. Vertical interval time code has the extra advantage of providing highly accurate slow-speed and still-frame time code reading ability.

However, because no (SMPTE) standard exists for Vertical Interval Time Code, the buyer should be aware that one company's vertical interval time code may differ from another's.

TECHNICAL ISSUES: Installation, Maintenance & Expansion

More major editing is done after 5:00pm than before 5:00pm, whether the chief engineer is in the editing room or not. A system that doesn't work after dark means lost revenue and lost customers. The solution to this is to buy an editor that is technically easy to understand, operate, and trouble-shoot. Some systems, like the CMX Edge, have a self-diagnostic function which explains where, if any, a problem exists.

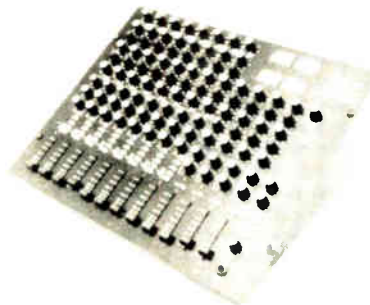
MODULAR VS. BLACK BOXES

Most medium-priced editors come in "modular" form so that functions can be added or changed with a single board. Once the system is installed on your premises, routine tweaking and "board switching" should be easily performed by existing technical personnel with the proper training. Modular design has the added benefit of defying obsolescence (you just substitute a new board for an old one) and saving space (there's no need to add boxes and reroute cables with a modular system).

The best thing about a modular system is that it is lightweight and spares are easy to ship (crosstown or across the border). This makes service easier and faster when you need it, and saves on the total weight of the equipment if you need to carry it in the cramped quarters of a van.

To the contrary, black boxes decrease reliability, increase space requirements, and sometimes require the switching of the contents of the black boxes to work. Often, service is more cumbersome and parts take longer to transport.

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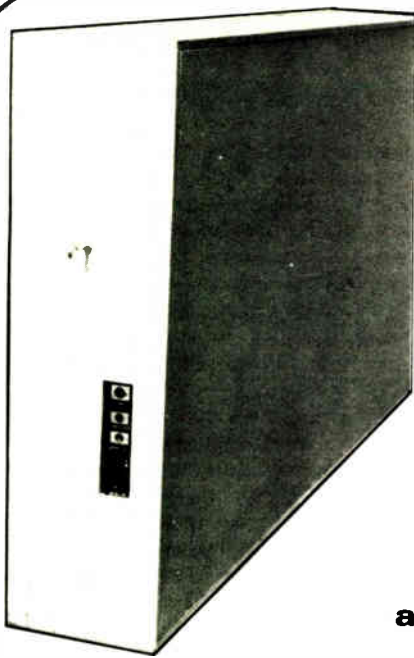
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(continued from page 33)

OPERATING FEATURES

Avoid fancy gimmicks that aren't really needed. The important question is "Does the system fulfill the *editing* needs in a way that editors can relate to and learn easily?" This is significant, given that editors will need to use the equipment for many hours at a stretch.

The editor or operator should be able to learn to do basic cuts within a couple of hours. They should not be confused by an intimidating keyboard or an illogical layout of keys.

A basic medium-priced system also should perform "on-the-fly" editing that allows marking edits while the tape is running in either direction. Probably most important is the issue of creature comfort and speed. The editor should not have to reach or strain to use the keyboard or read the CRT (time code) displays. When the editor changes his/her mind, the ability to trim an edit (add or subtract frames) immediately with the minimum amount of keypunching and hand movements is a plus. Fast editors like to make changes and review updated edits rapidly to maintain the creative flow.

In short, no two editors or editing situations are the same. The operating features of a system must be designed with maximum flexibility and the long range happiness of the editors in mind.

SERVICES SUPPORT

"Medium-priced" editors range from \$10,000 to \$40,000. Included in this price should be services support when and where and in the form the customer needs it.

Services support ranges from the company's field service personnel, service hotlines, technical and operational training classes (on a regular and regional basis, if possible), regular technical notes and updates, high quality operator's and maintenance manuals, and on-site installation and training. A good company should provide all of these plus a standard warranty on all of its equipment.

One thing is certain about the post production business which all serious equipment suppliers know and respect: it's a highly competitive business with high client expectation and where change is a constant. The company that has taken great pains to carefully think through what a medium-priced editor should do in this very important market niche is the one that will establish and build a solid customer base. ■

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THE ELVIS FACTOR

by Mr. Bonzai

(Mr. Bonzai, Smilin' Deaf Eddie, Garf and The Incredible Shrinking Heads have just entered Impact Video, a production facility under the direction of...)

"Harry Liebman! I haven't seen you since 'God's Cable', that underground media conference you organized in '69. What've you been up to, and where's Andy Kaufman?"

"We'll get to Andy later, Mr. B," he began. Harry had changed since our student days. The beard was gone and his black hair was short with a shock of grey that stuck up like a cockatoo's topknot. Deep laugh lines crinkled from his eyes and he wore severe black-rimmed glasses. "I've been running a video research facility for ten years and decided to come to Hollywood to make some bucks and have some fun."

"How'd you find me?" I quizzed.

"I saw your production of The Incredible Shrinking Heads," he continued, "and thought we might be able to work together. I called that studio you used to manage, Ryan Recording, and they gave me your number. By the way, I'd like you to meet somebody."

Harry punched a code into a nearby wallbox and a panel slid away. It reminded me of 'This is Your Life' when Layla stepped out and greeted me.

"Mr. Bonzai!—Great to see you again. How's the rock video biz?"

"Oh, we're hangin' in there," I bluffed. Actually the bucks had stopped before they reached my bank account. "How are things at the studio?"

"Fine—Cart just won a Whammy for engineering Johnny Terrific's last album—but I'm not working there anymore. I'm programming with Harry."

"We're into something that's bigger than rock video," Harry interjected. "Video games."

"I heard there was a big market

there," I added.

"Are you kidding? Last year, video games generated more money than films and records combined: 7 billion dollars, in *quarters*."

"We've combined rock, video, and games," Layla informed me. "Come back to the lab and let us show you."

We walked through dimly lit hallways to the rear of the building where Layla introduced us to a computer.

"This is ELVIS—that's short for Electronic Laser Video Integrated Synthesizer. Harry invented it and I've been developing some software. Here, take a look."

Layla punched a few buttons and an image appeared on a 100-inch TV screen. It was the Sex Pistols performing "Anarchy in the U.K." She punched in a new command and Johnny Rotten turned into Prince Charles. The effect was quite startling.

"How'd you get a tape of him lip-synching that song?" I asked.

"We didn't," Harry explained. "All we did was feed some stock footage into the computer, digitized the Prince from two angles for a 3-D analysis, and replaced Johnny with Charles. We can do it with anyone."

"So how does this fit in with video games?" I queried.

"Here's our first prototype." Harry pointed to a video arcade game which had been modified by adding a clear plastic bubble equipped with stereo speakers. "We call it 'Celebrity Chase.' We shot a few minutes of a guy running down Hollywood Boulevard, and then programmed in fifty famous personalities."

Harry dropped a quarter in the slot and stepped on the electronic gas pedal. The runner dodged traffic and tried to escape. He pushed a code selector and the runner became Regis Philbin. He pulled a trigger and a laser beam shot out and tickled the runner to quicken his pace. "Look at this... we can change the image to Alexander Haig, Frank Zappa,

Richard Simmons—anybody. It gets a lot of aggression out. And listen to the sounds!"

Harry pushed yet another button and a barrage of crunches and realistic groans combined with "Born to Be Wild" blasted out of the bubble dome. "The only thing that's missing is a really good way of programming in different vocals. I'd love to hear Ronald Reagan singing "Fire all of your guns and explode into space."

Smilin' Deaf Eddie blurted out, "Hey, Larry, I can fix you up. Just give me a sample of a person's voice, then I digitize it and use the voice code to synthesize a new vocal by programming from the original. Of course, I need a 30 ips master of the original..."

"That's great, Eddie," said Harry. "This could be bigger than I'd thought. Take a look at these plans for more games... and they're all programmed through fibre optic phone lines from our central computer. No way to bust our software."

Harry described his other games. There was "Wipe Out," which played Beach Boy's music while a tiny camera photographed the player and superimposed his head on the body of a surfer on the TV screen. If you could stay on the board, you got another tune. If you ate the soup, Brian Wilson laughed hysterically. Harry also had a new version of the old "Pong" game, with the old blips replaced by superimposed images of the persons playing the game. Sure to be successful was "Stripteaser," a game in which a choice of famous men and women disrobe to the J. Geils song "Centerfold." If you, the player can catch their clothes, the strip continues. If you miss, they put them back on.

"And this is the one that will really shake up the market," Harry finished. "We call it 'Rockheads,' and that's where you and the band fit it."

"So what's the deal?" I asked.

"We need lots of original audio and video, various versions of the same material—the player will actually play the music as he bombards the band. In return, we'll let you use our equipment and ELVIS to make your rock videos."

"Sounds pretty fair, but how 'bout some of those 7 billion quarters?" I bargained.

"Sure—you can have a quarter of the quarters."

"OK, it's a deal," I said, "but where's Andy Kaufman?"

(to be continued)

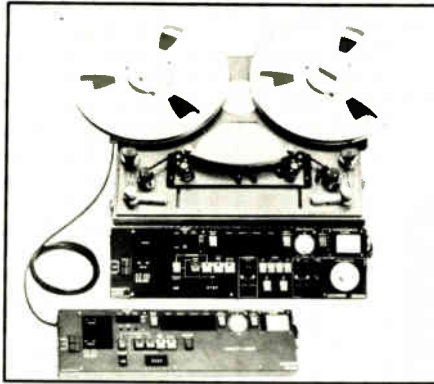
The situations and characterizations in this column are purely fictional and do not reflect anything relating even vaguely to reality, living or dead.

PREVIEW

Nagra Introduces New Studio/Remote Recorder

The Nagra T-Audio, a new twin capstan, four-speed audio tape recorder, developed by the Nagra-Kudelski Group of Switzerland, for studio or remote use, is now being marketed in the U.S. by Nagra Magnetic Recorders, Inc. Offered in several stereo head configurations, with or without sync, this high-performance machine features a detachable, individually-controlled keyboard for fully operational remote capabilities. The keyboard also provides recording calibration selections for speed, tape type, and standard, as well as an electronic digital counter. The T-Audio features an interchangeable head assembly and utilizes servo-controlled editing and transport systems, and a variable playback speed control. The recorder operates on AC current, but can also be DC-powered by an external 12 or 18 vdc source. The Nagra T-Audio Studio/Remote Recorder makes its debut at the Dallas NAB convention, and may also be inspected at the company's New York and Hollywood facilities. Prices range

from \$9,000 to \$14,000, depending upon configuration and option selection. For more information, contact: Nagra Magnetic Recorders
19 West 44th St. Room 715
New York, NY 10036



Nagra T-Audio

TC2 Digital Delay Processor From Audio/Digital Inc.

An Oregon based corporation, Audio/Digital Inc., have unveiled their TC2 Digital Delay Processor. Designed with the flexibility to satisfy both the studio and live performance markets, the TC2 features a new effect, dynamic pitch tracking, which allows delay time

to be controlled by the pitch of the input signal. This permits pitch-controlled flanging and other new effects.

Also featured are a second memory tap for triple tracking and simultaneous positive and negative flanging, a four digit, real-time numeric display with leading zero blanking, a preset flange mode with 4:1 sweep ratio, and a low frequency control oscillator section. An unprecedented feature of the TC2 is its delay time of over 1 second at full bandwidth (20-16 kHz). Internal expander modules are available to extend the delay time to more than 2 seconds at full bandwidth.

For the first time on a unit of this size and at this price (under \$1,500), the TC2 includes a user adaptable digital I/O port for extensive user and/or computer control of delay time, output muting, VCO, bypass, digital hold, and flange presets.

For more information, contact: Audio/Digital Inc.
85335 Sarvis Berry Road
Eugene, OR 97405

Sony On-Location Mixer

Designed for on-location broadcast application in ENG/EFP situations, the MX-P42 mixer combines up to four separate audio sources to stereo outputs and features onboard compression/expansion for greater dynamic range capabilities.

Features include solo functions on all four inputs, as well as low cut filters selectable at either 80 or 160 Hz, and 11 kHz high cut filters. All filters provide attenuation of 18 dB octave.

The MX-P42 is approximately 10 1/2 inches x 8 inches x 3 inches in size and weighs only 7.7 pounds complete with three C cell batteries.

For more information, contact: Jim Guthrie
Sony Professional Audio
9 West 57th Street,
New York, NY 10019

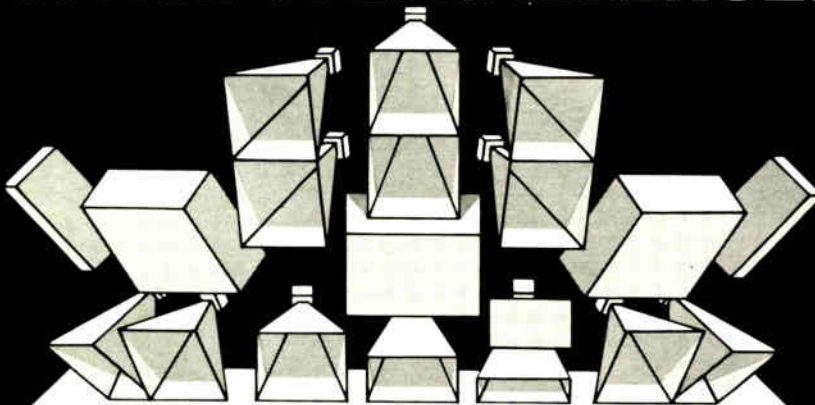


Sony MX-P42 Mixer

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available to the U.S. market. These stereo units range from 100 to 400 watts per channel, and are capable of high frequency performance beyond 50 kHz, resulting in lower distortion in the audible band. Some of H.H. Electronic's current customers include: Stanley Clark, A&M Studios (Hollywood), Supertramp, and Lion's Share Studios (Beverly Hills).

For more information, contact:
H.H. Electronic, Inc.
2500 E. Fender Avenue, Unit I
Fullerton, CA 92631



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Renkus-Heinz has introduced new 125 watt, two-way speaker systems which incorporate their new SSD 1801 high frequency driver. Three compact and roadworthy systems are available: the SMS 1281 stage monitor, the FRS 1581 full range system (both with road handles and carpeted exteriors), and the FRS 1581-U, which comes in a black utility cabinet without handles. The SSD 1801 compression driver has a frequency response of 500 to 25,000 Hz, and features a field-replaceable diaphragm/voice coil assembly.

For more information, contact:
Renkus-Heinz, Inc.
17851 AB Sky Park Circle
Irvine, CA 92714



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PRODUCERS DESK

JOHN BOYLAN



by James Riordan

John Boylan is one of the most versatile producers in pop music, having worked with a great variety of acts. He has achieved success in almost every style of music because his producing philosophy is geared towards bringing out the best in an individual act rather than being a "star" on the boards.

"I like to think that producers shouldn't be stylized. I don't believe in asserting my own stylistic ideas onto any act. I like to think the only common denominator on my records is quality. There's really no correlation between Boston and Charlie Daniels or even between The Little River Band and Marcie Levy, whom I'm doing now. Or between Quarterflash and Pure Prairie League. My two hues and crys are massive amounts of pre-production and my obstetric production stance. I try to deliver the brainchild rather than put my stamp on it. My pre-production goes even as far as to try to force the band to play all their material live before they

record it, if possible. That can be difficult sometimes because of circumstances, and they all hate it too. But most of them who do it are glad they did. There's something about standing on a stage and playing, and it doesn't matter if the audience reacts or not. It's just like having an idea and mulling it around in your head for a week and then saying it to somebody. It doesn't matter whether they answer you or not. The act of that idea coming out of your mouth gives you an objectivity that you didn't have before, and you can't get it without doing that."

Boylan's background encompasses many phases of music, including being a guitarist, songwriter, actor, and engineer.

"I started producing demos in New York in the mid-sixties when I got out of Bard College. I had a band with my brother, and the club where we were playing burned down and took all our equipment with it; so we went out and got jobs as staff songwriters on Tin Pan Alley. I started producing some of my song demos

because I didn't like the way they were being done. The first real production I did was the Association for a movie soundtrack called "Goodbye Columbus". Then I did The Dillards, and I worked with Rick Nelson in '67 and had a hit with "She Belongs To Me". The band I put together for Rick, The Stone Canyon Band, impressed Linda Ronstadt; so she called me to help her put together a band, which I did, and that band later became The Eagles. I produced and managed her for two years. That was one of the only mistakes I think I've made career-wise. I should never have gotten into management. I really just want to be a record producer. The only act I produced while managing Linda was her. After that I did Brewer and Shipley, Roger McGuinn, Pure Prairie League. In '76 I did Boston's first album, and then I started working with The Little River Band. The only problem with The Little River Band is that they haven't been able to develop an image that totally suits them. They're a pretty hard rocking band, but all of their AM hits have

not reflected that."

Boylan is a most prolific producer, finding time to do several albums each year as well as being vice-president of A&R for Epic Records.

"As a V.P. and staff producer for Epic I'm only allowed one outside project a year; and after three albums with The Little River Band, we sort of decided things had run their course—that's when I started working with Quarterflash. I do about six albums a year—I don't feel you can do anymore than that, given the amount of preproduction and special attention to each project. Creating pieces of art is a single-minded discipline. After you've done all the preproduction and taken all the influences in that you want, then you've got to have a single-minded vision about this one piece of work and not be distracted about something else."

One thing Boylan does share in common with his peers in record producing is the criteria by which he evaluates an act.

"Material, first of all. If the songs are great and there's a really good singer, that's what I go for. Even if the players aren't that good, I can always work on that; but you can't work on songwriting. The guy's either a songwriter or he's not. You can give him a few ideas on what to do with his tunes, but that's about it. They must have those tunes. Also I feel that there's no point in signing an act to a label if you don't have any allies. If you're the only guy there that is the champion of that act, you're doing them a disservice by signing them. Because they're going to get short-tripped. They're not going to get any support. In the record business now, we're going to have to sign fewer acts and spend more time on each act. You've got to have decisive executives with vision to run any business and the record business more than anything else. You have to have the entire label a hundred percent behind the act from the start."

Boylan has also done a few soundtracks, including the tremendously successful "Urban Cowboy" soundtrack which he compiled.

"It was released on Asylum, but I did it for CBS. One of the acts I did was Charlie Daniels. He's already on Epic, so there's no problem for me working with him. The other act that I did was Johnny Lee ("Looking For Love"), and he was a member of Mickey Gilly's band. Mickey's on Epic, and we did it with the sense that Johnny would be on Epic; but when the time came to sign, Asylum made him a better offer, so that was it. CBS didn't penalize me for it because I did it in good faith. I like doing sound-

tracks. Movie producers are going to turn more and more to record producers for soundtracks if they want records from the movies to sell. Guys who just do soundtracks often have no cognizance of how a record has to sound on the radio or what it's got to end up like in order to sell. So they put out a lot of willy-nilly soundtrack albums—some of which sell because the movies are very popular, but none of which will do what "Urban Cowboy" did, where the soundtrack made the movie and, in fact, even outgrossed the movie."

Like most producers Boylan has some favorite studios; and he gives his reasons.

"I work in B at The Record Plant a lot. It's a great sounding room. It was designed by John Storyk with Tom Hidley. Components have been replaced over the years; but the room is essentially the same, which is why I like it. It has the same speakers, the same board, the same shape. It's just a great overdubbing and mixing room because what you get out of there sounds like what you had when you were in there, which gets harder and harder to do. I use a lot of studios. I like tracking in a big, live, open room unless I'm doing something like jazz instrumentals. But, for rock 'n roll I

like a big, open room to track in, and then I can overdub in a room like Westlake "B" which is versatile. It's got a lot of different sounds and some hard surfaces, some dead areas. It has a real fast board and good speakers. And then I like to get in a room that sounds great to mix like Record Plant "B".

His advice to would-be record producers is straight to the point.

"Become something else first. Become a songwriter, a musician, an arranger, or an engineer. Also be as many of those as you can. A musician can also be an engineer, an arranger can also be a songwriter. You have to be a jack-of-all-trades to be a record producer, because you are the stop-gap person on a project. If some hole needs filling, you've got to be able to fill it. The only course I ever took that helped me with record producing was acting. I got a degree in acting and directing at Bard; and almost everything I used in play-directing class, I use in producing records. Drawing a performance out of a singer or musician is the same as drawing a performance out of an actor. I think anything you can learn in any discipline involved with the arts is going to help you as a record producer."

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Artist Studios

OSMOND ENTERTAINMENT CENTER

by Bill Cheney

At the base of the beautiful Wasatch mountain range, in Orem, Utah, lies the Osmond Entertainment Center, one of the world's most complete pre-production, production, and post-production facilities under one roof. The 100,000 square foot building, situated on a twenty-seven acre lot, is equipped with the latest state-of-the-art production gear. "We take pride in having the finest audio and video facility in the country, and enjoy making it available to clients of the same caliber," says Richard Martin, Executive Vice-President of Osmond Entertainment.

The Osmonds built the Riviera Studio in Provo, Utah, which over the years produced many gold records. Original expansion plans called for a small production studio. However, by the time the drawings were completed, a 90,000 square foot building was proposed. After agreeing with ABC television to finish the Donny and Marie series in the proposed facility, the project was started. On April 2, 1977, construction of the Osmond Entertainment Center began. Within six months, the project was completed. The television production facility includes a 17,500 square foot sound stage that has over forty-two feet of vertical travel allowing full flexibility in lighting and scenic design. Martin continued, "One new client recently noted that the facility was like something out of the future."

A Strand-Century Multi-Que computer assisted lighting board controls over a half a million dollars in stage lighting equipment and fixtures. This elaborate system will accommodate a wide range of productions, including television commercials, variety shows, sit-coms, dramatic series, specials and other network productions, as well as motion pictures. "This facility is designed to be time efficient by way of physical layout. For instance, the people oriented areas that include make-up, wardrobe, etc. all are centrally located around the stage. After all, time is money," says Martin.



Air Recording Studio/MCI JH-528.

A seventeen ton acoustical door separates the sound stage from adjoining support areas, allowing easy passage of larger sets and props. Eight hydraulically operated seating platforms enable movement of 280 people into more than sixteen staging combinations.

The electronics within the facility increase the capabilities and overall efficiency during all phases of production. The audio booth employs an MCI 538 mixing console that is accessible through 112 microphone patch points. The outputs of the console are tied to an MCI twenty-four track tape machine that features Dolby noise reduction for each track. Mixdown is accomplished on an Ampex ATR 104 with two track capability for post-production sweeten-

ing. A complete line of outboard effects including UREI limiters, a DeltaLab DL-2, and Eventide H949 Harmonizer, an Adam Smith 605 synchronizer, an AKG BX-10 reverberation system expand the capabilities of the audio control booth. Two sets of Electro-Voice studio monitors, powered by Crown and Yamaha amplifiers, complete the equalized room. The audio control booth is connected to the 48-track recording studio, as well as the one inch and two inch video editing bays. Jerry Huber, chief production engineer says, "The MCI console is more than large enough for most production work, but necessary in big variety shows or large broadcast production. For the future, I feel it is a must with the changing trends in T.V. today."

Production viewing is provided to both video and audio control rooms via twenty-inch Barco color monitors. In addition, twelve 14 inch black and white monitors for input and output feeds are also utilized in the control room. Production communications are provided through a six channel RTS PL system.

The video control is accomplished with a full compliment of Grass Valley and Tektronix terminal equipment. To increase color control, cameras and video consoles are equipped with senior video positions. Twenty-six inch Barco monitors provide exceptional viewing of the video signal.

The Osmond facility uses two video tape edit bays for either one inch or two inch tape formats. Edit Bay One houses five Ampex AVR-3 VTR's capable of super high-band and regular band recording and playback, along with one inch "C" Format capability, including an Ampex VPR II B VTR, a Grass Valley 1600-7K triple re-entry video switcher with E-MEN, and DVE (Digital Video Effects). Edit Bay Two is a one inch editing room that employs five new Sony BVH-1100 VTR's and a Grass Valley 300 with MK II DVE. Both editing bays have Ampex ESS-2 Slomo-Systems, Compositor Graphics, Thompson Color Correctors, and Mach One Computer Editing Systems.

A sophisticated post-production facility with a comfortable offline room has four Sony BVU 800 three-quarter inch video cassette edit recorders supported by a Convergence Editing system. Transfers are done via a Rank-

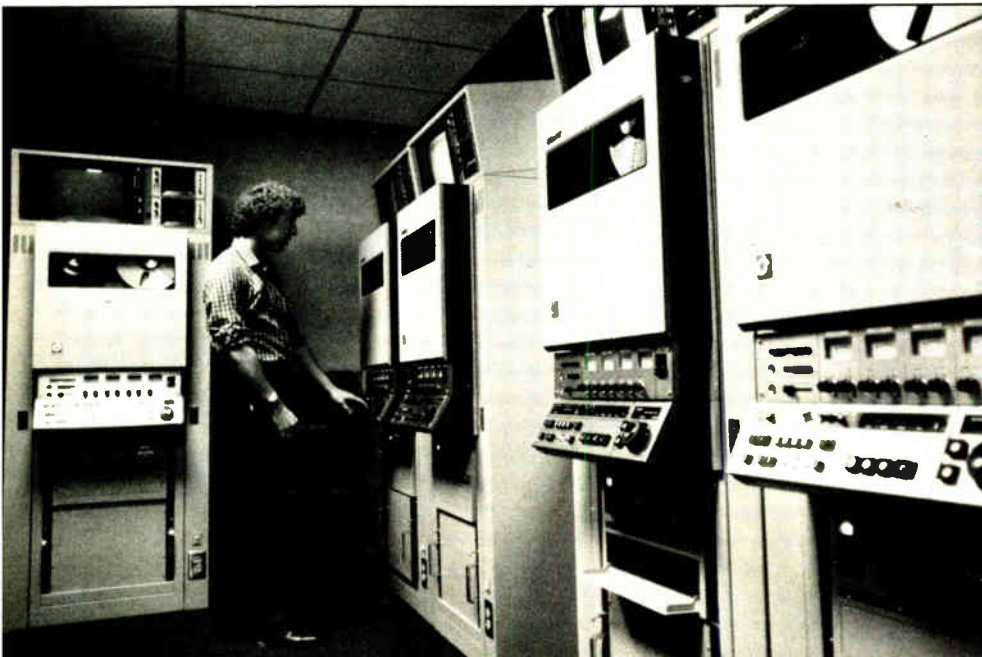
Cintel MKII Digiscan Flying Spot Scanner that is capable of producing film positives or negatives in 16mm or 35mm formats and 35mm slides. A T.O.P.S.Y. computer controls scene by scene correction. The suite is also equipped with a Magnetec 16-35 separate mag record/reproducer. All of the audio and video equipment is interfaced with the latest noise reduction and enhancement equipment.

The equipment within the studio area includes three RCA TK 46 cameras with Fujinon 16:1 lenses, and three servo-controlled drop-in extenders for manual or remote operation. One RCA TKP 46 hand-held camera equipped with a 15:1 Fujinon servo-lens is also available.

The Osmond Production facility also concentrates on maintenance of all audio and video equipment resulting in minimal down-time for all phases of production. Tom Nielson, chief maintenance engineer, feels that the Osmond Entertainment maintenance department is superior to any found elsewhere. "Our expertise in both audio and video maintenance reduces equipment down-time better than anyone in the industry."

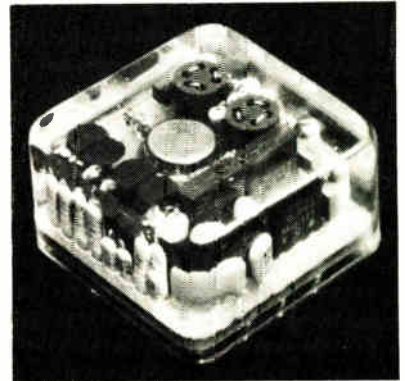
The new Osmond 48 track recording studio was designed and built to be used as either an independent recording studio or to be used in conjunction with the video production facility. The major acoustic and electronic consultant behind the impressive layout was Kent Duncan of Sierra Audio. Duncan utilized what was previously a secondary rehearsal hall, and converted it into a spacious and lux-

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urious recording environment. The oak-trimmed moldings and rock work throughout the studio and control rooms enhance the aesthetic and visual appeal. Jim Gamble, chief engineer at the facility says, "It is our intent to provide world class recording facilities for the engineer, and to capture Merlin's magic for the artist."

The studio employs the largest Neve 8108 Necam II in the United States. The console has fifty-six microphone and line inputs that are routed through 48 output channels. Two A800 series Studer 2" twenty-four track tape machines are interfaced via a cue-lock sync system. "The Neve with Necam II will provide engineers with the ability to precisely repeat difficult mixes. We feel that the Studers are probably the last and greatest 24 track machine of the analog generation." Gamble feels the new automated equipment is a definite "plus for the facility." In addition, two Model A-80 2/4 track tape machines are used for mixdown.

A number of outboard electronics and effects have been included to enhance and further recording capabilities of the studio. The group includes a Lexicon Model 93 Prime Time System, a full Scamp rack with noise gates and limiters, a DeltaLab DL-2, Orban

parametric, ADR Vocal Stressor, as well as a full line of UREI and dbx electronics. Noise reduction is accomplished by four channels of 361 and twenty-four channels of M24-4 Dolby noise reduction. For echo, an EMT Model 240 Gold Foil System is used.

Air Studios is a second Osmond-owned, professional recording studio. The facility is located within ten minutes of the main production studio. Air Studios, like the larger recording studio, was designed by Kent Duncan. The fully-automated MCI JH-528 is terminated to an MCI 24-track, two inch machine. According to Nick Gasdick, manager of Air, "The facility is primarily a studio set up for additional use as an 'overflow' from the larger studio."

Air Studios contain the necessary outboard electronics for quality record and video production. Echo devices include EMT plates, and one Lexicon 224. Additionally, a wide variety of UREI, DeltaLab, and Eventide limiters and effects are easily accessed through the MCI. As with the larger recording facility, Hidley TM-7s are employed. Gamble concluded, "In Utah, the artists will find themselves in an inspiring atmosphere with few distractions, supported by talented, dedicated, helpful technicians." ■

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SOUND ON STAGE

by Pat Maloney

From a sound engineer's point of view, a NAMM (National Association of Music Merchants) convention doesn't have quite the same appeal as an AES convention. However, since we deal with musicians day in and day out, it would greatly behoove us to find out what they are buying and why. More than 1500 manufacturers of musical instruments and related products exhibited at this show, many of whom had new products of specific interest to the sound professional.

The following items were among the many I saw which merit our consideration. If you see anything that strikes your fancy and buy it or suggest its purchase to a musician, drop me a line and let me know what you think of it. In future columns I will pass along any experiences you'd like to share with your fellow engineers and I'll attempt to let you in on what the manufacturers are thinking—hopefully *before* they spend millions of dollars developing yet another 1/3-octave equalizer! Anyway, here are a few products that caught my eye:

Harbinger Audio introduced a two-way speaker to compete with the JBL 4602 "Cabaret" monitor. A compact version of their own popular model 524 monitor, the new "Club Monitor" uses a high frequency driver mounted on a round horn in conjunction with a high power 12" cast frame woofer. A new three-way PA stack is now available which incorporates a distinctive "Cat Eye" or elliptical shaped throat design for the bass and midrange horn loaded cabinets. According to the manufacturer, this unique design improves the presence and transient response in these areas. A modified version of this system is replacing the previous house PA at the Circle Star Theatre in San Carlos, CA. I'll give you a report as soon as I hear it.

Although he didn't actually have one on display, Geoffrey Levy of **Beyer** informed me that by the end of the year they will have their own

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diversity wireless microphone system available. The NE185 receiver is designed to switch between the stronger of two antennae signals, utilize a compander/expander circuit and operate in the 174.27 to 216 megahertz range. A companion U185 transmitter will accommodate the familiar Beyer M500 head, an electret condenser capsule, and a variety of other microphone options as well.

DeltaLab Research previewed their Model DL-6 Harmoniccontroller™ which allows you to use up to three DL-5 Harmoniccomputers™ to create four part harmony in real time from a single source. A decided boon for bands with only one musician who can sing in tune!

Audio-Technica's new AT831 is a unidirectional lavalier condenser mike that allows for mike placement options that we've never had before. McCune sound in S.F. has been using them for a few months now with great results. Let me know any novel uses you find for them and I'll pass the info along.

The familiar 100 watt Hotspot monitor by **Galaxy Audio** has been replaced by a 120 watt version and is available with an optional volume control calibrated in 3 dB steps. The manufacturer claims it is a "little brighter" than the previous model.

JBL displayed a new 1" compression driver—the Model

2425—which they say has a power handling capacity of 70 watts continuous program at 800 Hz. The driver incorporates a newly developed titanium diaphragm instead of a phenolic or aluminum one. I was told that JBL plans to phase out these latter diaphragms for their 1" drivers in favor of the newer titanium ones, so you might want to stock up now if you prefer the older materials.

HH Electronic introduced a new line of MOS-FET power amps in typically rugged and well designed enclosures. I particularly like the bridging XLR connectors and the detent volume controls. New to the USA is the HH Communicator CS160 mixing console which was introduced in Europe in the fall of last year. An optional plug-in special effects unit contains an ADT/Echo module and a Chorus/Flange module that normal to the board's 2 effects send busses. You can, of course, connect your own effects units up via interrupt jacks in the rear. Also standard is individual phantom powering on each mike input as well as a built-in reverb unit. What is getting to be a common sight on consoles lately is the increased use of short throw faders—and this console is no exception. Actually, the convivial HH sales rep and I had a lively discussion on this issue. Personally I don't prefer them. He believes, however, that once levels

are set at the beginning of a show, an experienced sound engineer doesn't muck about with them very much. I'd be very interested in what you mixing engineers think about it. Should we just go back to rotary knobs and forget the whole thing?

Speaking of consoles, the number of them now available with integral power amps seem to be on the rise. **Whirlwind** has addressed this situation with a new line of multi cables called the "Power Series." Available with either 6, 8, or 12 shielded mike lines and a single line level return, the snakes also contain 2 separate speaker lines utilizing a pair of 14 gauge wires.

In a departure from the separate PA components in the rest of their line, **Peavey** introduced the Project 4, an all-in-one integrated three way cabinet. Black Widow 'Superstructure' speakers are used for the 15" woofer and 12" midrange speakers and the highs are reproduced through a 22A driver mounted on a CH3 high frequency horn. Didn't get a chance to hear it—their listening room was always packed with people when I was around—but I've always preferred an integrated cabinet design to separate components if it's executed correctly. A new live mixing console—the Mark IV—will be available this summer and comes with 12, 16, or 24 inputs and 4 submasters. Individual channel patching is available either pre or post fader. But alas, short throw faders again!

Prices on 16 channel mixers seem to be coming down lately, and a new name to the American market, **Audiotrack**, has many features not usually found on other consoles in the under \$4000 price range. Just introduced by **European Audio Distributors** of Torrance, CA, the stereo mixer is equipped with 8 grouping busses for recording or submixing—not just the more common 2 or 4—and comes built into a sturdy flight case as well. Walnut side rails are also available and a separate power supply is standard.

Shure has expanded their SM-81 condenser mike line to include an omnidirectional capsule—the R104A. Also available is the new A81G pop filter grill, considerably smaller than the larger A81WS foam windscreens that has always been available.

My 'Most novel idea of the show' award goes to **Legend**, a manufacturer of musical instrument amplifiers. They've addressed the

problem of consistent mike placement and sound pickup by permanently shock mounting a Shure SM-57 capsule behind the grill cloth and slightly off axis in front of the speaker. Available as an option on all cabinets and self contained amps, the MS-570 Microphone System is wired to an on/off switch and a three pin XLR connector at the rear of the cabinet. Richard Newman of Legend says that there is no choice of mike position or alternative capsules at the moment although he might offer options in the future if the marketplace—that means you!—requests it.

I also found a balanced mike level out on the rear panel of the 'Condor' series of instrument amps manufactured by **Crate**. According to the rep, the signal at this output has been EQ'd to sound like a loudspeaker instead of like the clean direct signal out of an amp.

A price guide to the value of used sound equipment is now available from **Orion Publishing** in San Luis Obispo, CA. Similar in concept to the auto industry's Blue Book, the "Professional Sound Reference Guide" lists high and low purchase prices as well as approximate resale values of over 15,000 products including microphones, speakers, amps, musical instrument amps, and related items.

While many companies are busy designing more elaborate pieces of equipment, **MXR** has just released a simple one-in/one-out delay line that is adjustable in 5 ms. steps up to a total of 320 ms. No flanging, no doubling, no tricks—just a simple delay line for the professional sound installation market. This is one of three new products in MXR's new "Pro Series"—all sporting a black faceplate instead of the familiar bright blue.

The most powerful amplifier I encountered was the new **Crest** Model 5000. At 1600 watts into 4 ohms, this little package weighs in at about 75 lbs.—one "heavy" amp in the truest sense of the word!

Thanks to **AKG**, you'll no longer have to troupe around a separate digital delay line to feed your echo chamber. Their new BX25ED Reverb includes a plug-in pre-echo delay line—the Model 250—which is switchable from 30 to 60 ms. About one third the size of the BX-20, the new two channel reverb is also available without the delay, giving you the option of installing it at a later date.

Bill Thompson, president of **Ashly**, showed me his new 100 watt

per channel into 8 ohm power amp—the FET-200. Having resisted the temptation to build amplifiers until now, Bill felt that the advantages of the new MOS-FET technology were too good to pass up. This is the second MOS-FET amplifier I saw at the show, HH having the other one. Could this be a trend? I'd like to hear from anyone using these or other MOS-FET amps and get your candid reactions. Ashly is also now offering an 18 dB/octave version of their 3 and 4 way crossovers along with their standard 12 dB/octave units.

BGW introduced the Model 6000 Pro Line amplifier rated at 90 watts per channel into 8 ohms. Intended for use by anyone desiring BGW quality at an affordable price, the Pro Line of amps allows for connection to a large variety of speaker loads and can operate safely down to 2 ohms.

The **Cetec/Gauss** Model 5210 and 5380 integrated speaker systems are now available as separate components for ease of shipping and handling. Additionally, a new loudspeaker—the Model 5250—was introduced. Consisting of a 15" woofer and their Model 2080 1" driver mounted on a new aluminum horn, the two-way system is rated at 300 watts rms.

The most fun I had at the convention however, was in the **Lexicon** booth. The new Super Prime Time Model 97 was hooked up to headphones and demo'd to me by a sales rep who had somehow mastered the ability to talk coherently while listening to his voice being processed and echoed ad infinitum. Available with up to 1.9 sec. of delay, the Model 97 incorporated factory presets to produce 8 standard effects such as flanging, doubling, etc. The best part, however, is the availability of 32 user-definable storage registers that will remember any effects you come up with and repeat them with the push of a button or the click of a footswitch. From a live sound mixing standpoint, this facility is priceless! I have often wanted to use three or four different settings on a Prime Time during the course of one song and not been able to do so fast enough or accurately enough in the time given. Well, now I can. The Super Prime Time effectively gives you 32 separate effects sends from your board connected to 32 individual special effects units—all in one package, all instantly repeatable at the touch of a button, and all with a 20 kHz bandwidth! I wanted to steal it. ■

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MUSIC NOTES

Special Edition



MIKE NESMITH & TODD RUNDGREN



PHOTO: DAVID GANS

PHOTO: RALPH GABRIEL

In keeping with the video theme of this issue, this month's edition of Music Notes focuses on two musicians who are doing interesting work in the video field.

Michael Nesmith's Pacific Arts Video Records began as a label and eventually decided to concentrate on video programming. *Elephant Parts*, Michael Nesmith's first "video record," recently won "Video of the Year" honors at the 1982 Grammy Awards.

In an interview at the new Los Angeles offices of Pacific Arts, Nesmith excoriated the record industry's standard practices and spoke of the incalculable potential of the video medium.

Todd Rundgren began working with video equipment at home, and eventually his hobby grew into a full-fledged production facility. *Mix* editor/publisher David Schwartz interviewed him briefly in San Francisco a few weeks ago and elicited the following comments about the state of the video industry.

MIKE NESMITH



by David Gans

In a recent interview, you said, "One of the most important functions of art is to enchant." There doesn't seem to be much enchantment going on in the public media these days—

There's nothing in the notion of enchantment which is preclusive of mass appeal, but I think what you're driving at is that the focus of the arts in America is to sell soap. It's something to bring your attention into focus so they can sell you a product.

Do you have realistic expectations of getting a mass market for your work?

I think that in this particular instance I have the best shot at it, but it's not a motive. It's not something that I desire other than as a part of the downstream creative return.

The important thing is in the doing of it; I don't have any objectives. Objectives are one of the great delusions that society carries around. You never come to a stop; you never get to a place where you've achieved your objectives and now you exist and everything's fine and static. Everything continues to go on.

Probably the most spiritually bankrupt man, and one of the people who has influenced our society for a long time, was Vince Lombardi. His notion that "Winning isn't everything—it's the only thing" is one of the most asinine hoaxes ever perpetrated on the Ameri-

can public.

It went over big because it appealed to the machismo and machisma of the collective psyche, but the reality of it is that it has a very debilitating effect on the well-being—and just the ability to make a living—that all of us have as part of our makeup. The whole notion that he was propounding was ignorant of the fact that you can never hit an objective. You might pass a milestone which may include winning the Superbowl, or the selling of 50,000 or five million units, or many people coming together around a central idea, but it's not an end.

It also seems that those kinds of philosophies can be used as excuses for unscrupulous behavior.

Precisely. It certainly spawned the whole Nixon dynamic; Nixon was a product of the Lombardi ethic.

Well, it has no place in the arts. If it finds its way into the arts, you get... network television shows. You have to go back to the more exalted notion, which is, "It's not whether you win or lose, but how you play the game"; the more exalted notion that "The ends do not justify the means." They are old, but they have a tremendous amount of ballast to them because they're accurate.

The important thing in doing *Elephant Parts* to me was to do it as well as I could do it. Now that it's done, the important thing to me is to sell it as well as I can sell it.

How are you going about doing that?

I put together Pacific Arts Video Records, the distribution arm of my company, to go from A to Z in the entire process. It's a small business, but it's very active and aggressive. There are 22 nationwide distributors. I replicate at a couple of companies that make stereo Dolby cassettes for me.

Why haven't you signed up with a major distributor?

We can do it ourselves. We do make liasons and alliances, and we do have some relationships that are mutually dependent on some of the other big companies. You can't do this business by yourself.

The most difficult thing for people to understand is that it's not an extension of the old business practice. It's good, standard business practice, but it's not the *old* business practices, which were cancerous and opprobrious.

Do you mean the record business?

Absolutely. It was essentially a consignment business, with a well-founded, widespread and well-known reputation for dishonesty. It was not a savory business in the least. It's inter-

esting, too, that the men and women who were involved in the business were not necessarily that way; the **business** had become that way. It had become standard practice—steal a little here and there, take free goods and send them back as returns to get money that you never should have gotten in the first place.

If you're not corrupt, it spits you out.

What comes next on the creative side after Elephant Parts?

I'm in the process of making

Video Ranch, my next video record. I could tell some details of its contents, but it's been my experience that everything changes drastically between the time you conceive something and the time you actually get it done.

Specifics of Video Ranch aside, let's talk about your plans for the next couple of years.

This business is in a state of flux. It's sort of the startup phenomenon: the business is collecting its energy at this point, and not expending it in any way. That's one of the reasons that it's so

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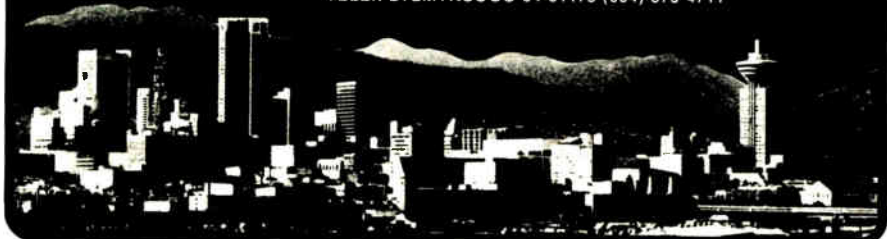
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(continued from page 47)

much like rock and roll was when it first started, or any of the sociological phenomena we've been through.

When I say "the video business," you have to understand that I include in it computer peripherals and game arcades and home entertainment. The video market comprises all those things.

How connected are you with Silicon Valley?

I'm as connected to it as you can be without having an engineering degree. If industry was the beginning of the application of science, then technology is the *art* of science. As the technological artist come along, the language they speak is computerese—BASIC, COBOL, PASCAL—and unless you speak that language, you're on the periphery of that community.

I speak a little BASIC [chuckle], but that's as far as I can go. I can write some very, very simple game programs; it's almost like being able to play a scale.

I exist on the outskirts of Silicon Valley—and I *live* on the outskirts of Silicon Valley. But when I say "video," I'm referring to the whole video revolution—the interaction with the video screen.

Do you mean that that is going to be the new center of information dissemination?

Yes. Not only in the home, but everywhere you go.

I find that a little frightening.

The papacy found the fact that Gutenberg printed the Bible so alarming that they destroyed him...

Fortunately, there's nobody in that type of position today, although we're seeing the clergy now coming together against the video games. This is idiotic, but they are in fact doing this; they're the same people who stirred in Alabama against rock and roll, saying that it was terrible.

I think the point is that kids aren't reading.

They're watching television. Television is the information carrier. The thing that is coming down is that the learned habit of reading—sitting in front of a printed word—is going to be replaced by another learned habit: sitting in front of a video screen.

[The screen] will carry much more information than the printed word. That's hard for people like you and me to understand, because we grew up with the printed word. I enjoy grammar, word usage and vocabulary, and I enjoy talking to people with an extensive vocabulary, and the subtle (continued on page 52)

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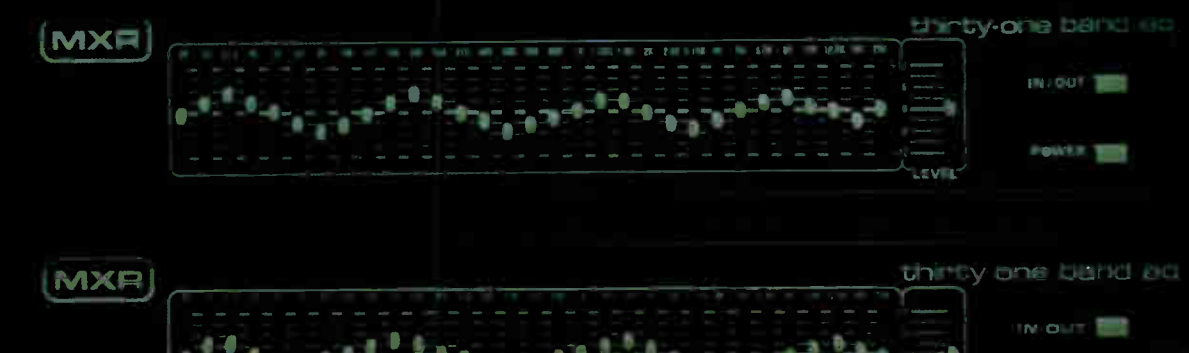
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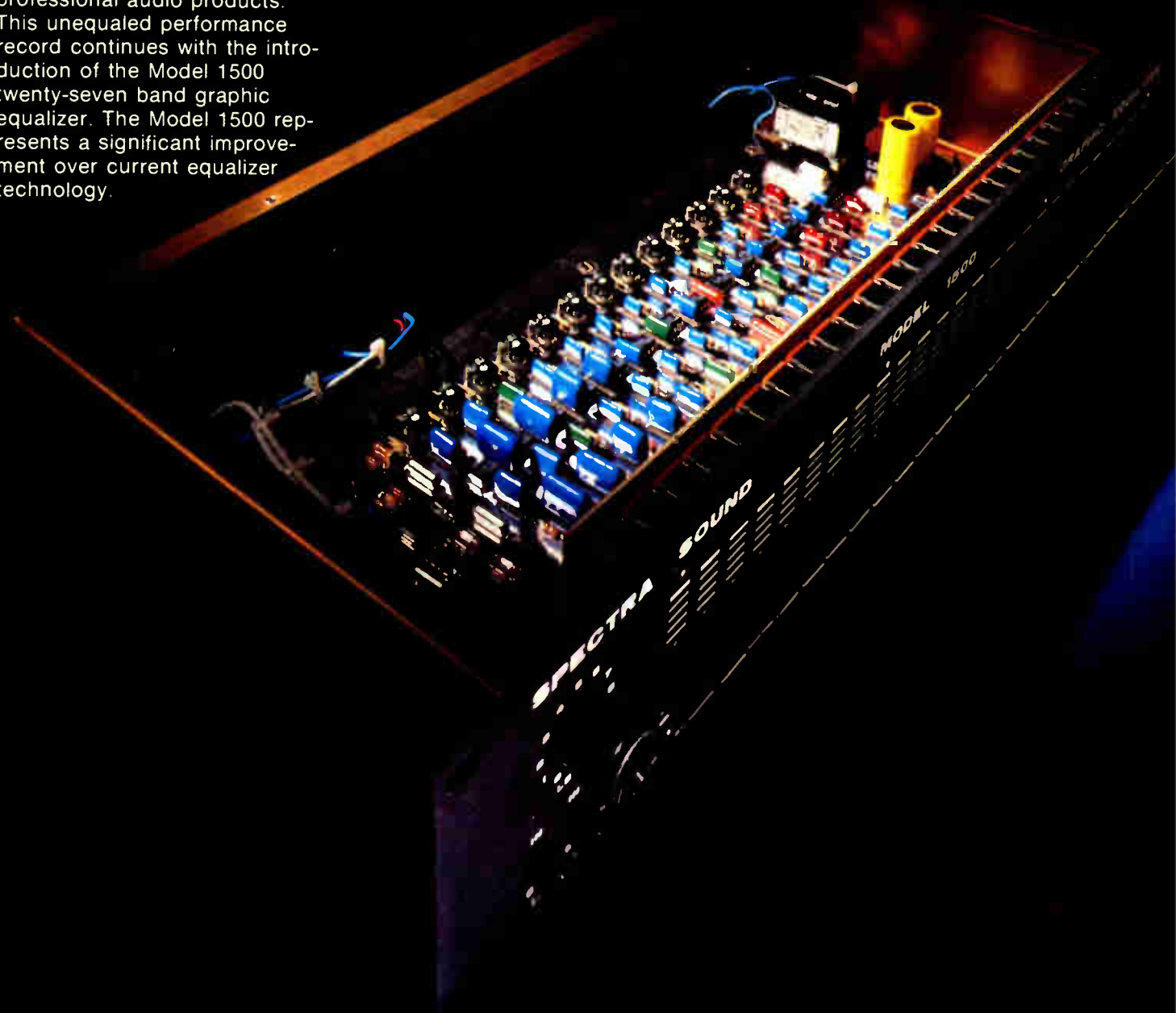
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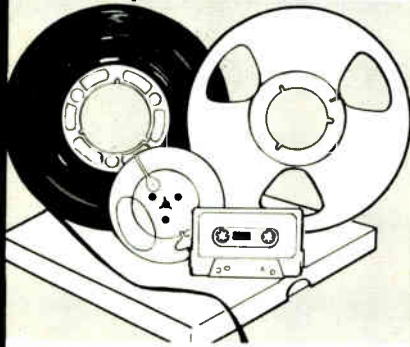
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Michael Nesmith in *Elephant Parts*.

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TODD RUNDGREN

Some think that the next boom in music will come when creative people apply video to their sounds.

There aren't many creative musical artists [laughs]. It's not going to be common musicians—"baby, I love you, baby, you love me." How interesting can that be in terms of video? It's going to have to be people with a whole other philosophy and range of things to say.

The economics of it will have to change, too. Duran Duran made a video because they had hit records in England first, and a record company paid for it. You're not going to be able to just go in and do it unless it's going to get sold someplace.

Is there positive movement to create a working market?

People are trying, but there are hardware problems. Cassettes—the hard part of the software—are expensive. Disks are supposedly cheaper, but they're not recordable—and not everybody has a player. In fact, very few people will get the player until it has a recording capability.

Record companies all have

video divisions now, or some involvement with video, but none of them are really doing it with any degree of adventure. In the main, the artists don't think much about it, either. Fleetwood Mac, The Eagles, The Doobie Brothers don't do anything in video to speak of; they tape concerts, but that's as far as they go. They're at top of the heap, but they're not video conscious.

Most of the artists we know today are not going to be seriously involved in video. They may have a fleeting dalliance with video, but most of the ones that we are now aware of are not going to be seriously involved. They have a hard enough time doing the music.

The record companies are always praying for something that will help; that's the whole basis of their involvement with video. Their scheme of marketing has gotten more and more restrictive. More labels have been absorbed by conglomerates, and they get their fiscal mandates from people who don't listen to the music at all. Nobody wants to take the responsibility for discovering a phenomenon, whoever it may be, and bringing it to a point

(continued on page 54)

(continued from page 48)



shadings of meaning. But younger people, the eight- and nine-year-olds who are just beginning to flex their thinking mechanisms, are viewing television in a way that you and I just don't have any concept of. They're able to see subtleties and shadings, and they will impress on this medium their own need to retrieve from it the spiritual nourishment that you and I impressed on the printed medium.

How do you propose to program to those people with your archaic mental mechanism?

I probably won't... It may be archaic, but it's not obsolete... I'm happy to take a position as a patriarch, if God wills it.

The point is that the technological change and the sociological move from the reading habit to the viewing habit is a profound move.

In a strange way, this answers your question about the marketing. In order to perceive how to market this new product, you have to perceive it as a book. It's more akin to the book business of old—it's that dense a carrier of information. It's not a record medium; it's not akin to the motion picture business. It's not even a consortium of the two. *Elephant Parts* is just a meager beginning. ■



PHOTO RALPH GABRINER

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(continued from page 52)

where it's successful.

Music *has* changed character, and a lot of that has been engineered by the record companies. Once Fleetwood Mac sold 7 million albums, it wasn't acceptable for an artist not to have a platinum album. If they didn't have one, they had to imitate somebody who did—whoever it was this month or year. I was on a label that might even have been considered independent [Bearsville], and I had to deal with that.

Do you see anything positive on the horizon?

Subscription cable has the greatest potential for expanding the borders of known programming. It's like the Christian networks—they have a specialized audience that pours money into that kind of programming. There aren't any opera or classical-music channels, but there could be if enough people wanted the programming enough to pay to see it.

The way it is with any specialized programming is to either do it really badly and throw it in with all the other things, or to somehow find a way to reach the audience that's willing to pay for it.

Do you have any advice for musicians who are thinking of getting into video?

If you're recording, you can probably get the record company to foot the bill for at least one promo, but the whole point is to have an idea of what you want to do and not just go in there and shit it out. If you put a lot of energy and thought into your music, video requires no less, and sometimes more. It's neither simple nor easy.

It might be a good idea to hang around with some video people and get an idea of what's involved and the techniques available. There are things you can do in video that aren't possible in other media. It may be a question of getting involved with the video equivalent of a producer, somebody whose work you respect. Let them deal with the nuts and bolts.

I think it should be a negotiating point in contracts, too—what's going to happen with your visuals? You should try and retain ownership of it yourself, which I have done with Utopia's stuff. We own all the videos we've done, and we've leased them to the record company for promotional use. Usually the label pays for it and owns it. I think that's a very important factor. ■

(continued from page 21)

rather than for mono, to make editing and synchronizing easier. A head stack developed by the European Broadcasting Union for a form of the Type C videotape recorder offers four audio channels, but does so at the sacrifice of some video functions.

Even with separate tracks, a problem arises about how to deal with the dynamic range of the signals. Television sets, with small speakers and amplifiers in noisy environments, obviously require a limited dynamic range. On the other hand, FM receivers, with large amplifiers, feeding high power capacity speakers, are better suited for wider dynamic range.

Completely separate mixes, of course, can deal with the issue; otherwise, judicious use of limiters or compressors seems necessary. In a system such as MTV's however, where only stereo signals are transmitted, there isn't much choice.

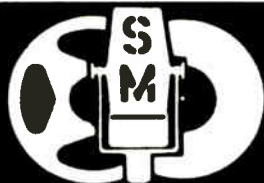
Warner Amex uses a similar transmission scheme for stereo transmission of movies available in stereo for its Movie Channel. There are also different stereo transmission systems used by such satellite programmers as CBS Cable and Bravo! The different systems often use only one subcarrier, with signals multiplex encoded as they would be for an FM stereo transmitter.

Though it might seem as though cable television operators have a heavy burden of capital equipment to bear if they want to carry everyone's stereo signals (MTV's receiving and decoding equipment costs about \$1,400), home satellite earth station owners are getting into the act, too.

If there are more than 100,000 satellite earth stations in the United States, the vast majority belong to individuals. Individuals, of course, don't relish the thought of paying \$1,400 for a stereo processor, when their entire earth station might have cost less than that (though the legality of individual reception of these signals without permission is in question).

However, at the 1982 Winter Consumer Electronics Show in Las Vegas, home earth station manufacturers were exhibiting receivers costing only a few hundred dollars, styled like hi-fi components, and capable (or so they claimed) or receiving anyone's satellite transmitted stereo and video frequencies. Considering the tremendous cost reductions that have been occurring in satellite receiving equipment, it's not too surprising.

And it's been less than 25 years since Sputnik! ■



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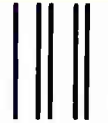
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Off the Record



Nick The Knife Nick Lowe

Columbia FC 37932

Produced, recorded and "honed" by Nick Lowe; engineered by Aldo Bocca; recorded in Eden Studios, Acton, England.

Nick Lowe came to international prominence through his association with New Wave rock—his three solo albums, *Pure Pop For Now People*, *Labour of Lust*, and now *Nick the Knife*, all have their share of hard-driving, modernistic music, and he has produced LPs for Elvis Costello & the Attractions, Graham Parker & the Rumour, and others. Yet the label New Wave hardly does

justice to a singer/bassist/songwriter/producer who has been recording since he joined the British band Brinsley Schwarz in late Sixties.

Lowe's music knows few stylistic boundaries. As in his efforts with the recently (and sadly) departed Rockpile, *Nick the Knife* finds Lowe roaming throughout rock history in search of rhythms and tunes to which he can add his mordant wit. For instance, anyone who as ever heard "Green River" by Creedence Clearwater Revival will instantly recognize the opening guitar riff to "Stick It Where the Sun Don't Shine." Yet Lowe's sneering exuberance manages to make the song sound very fresh and immediate.

Lowe's new songs include the usual forays into rockabilly and somewhat lightweight homage to the Jackson Five sound ("Let Me Kiss Ya"), yet his best efforts are in the area of poppy, but not too sweet, love songs. Of these, perhaps the most engaging is "My Heart Hurts," an intriguingly syncopated tune that evokes the memory of Buddy Holly.

As a producer, Lowe has frequently gone in for a wall-of-sound approach—check out "Little Hitler" on *Pure Pop For Now People* for a letter-perfect Phil Spector tribute. He continues that here, using a booming drum sound and waves of acoustic guitar to fill up the spaces. But there is very little wasted effort or unneeded effects, in part because Lowe and his supporting musicians—drummer Terry Williams



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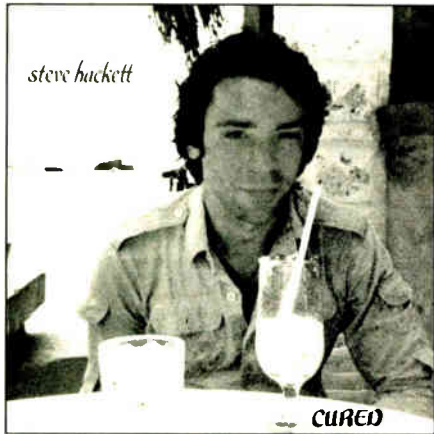


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Off the Record

and guitarist Billy Bremner from Rockpile, guitarist Martin Belmont from the Rumour, and keyboardist Steve Nieve from the Attractions, among others—play with the controlled precision one would expect from people who have worked together often in the past.

—Bruce Dancis



Cured

Steve Hackett

Epic, ARE 37632

Produced by Steve Hackett, John Acock, Nick Magnus; recorded at Redan Studios; engineer: John Acock; assistant engineer: Johnie Schinas; mastered at CBS Recording Studios, New York, on the CBS DisComputer™ System, by Ray Janos; mastered at Utopia by Kevin Metcalf.

Former Genesis guitarist Steve Hackett dabbles in the pop arena on *Cured*, without totally forsaking his progressive rock background. Hackett couches some very catchy vocal melodies among instrumental forays, in what is his most commercially accessible album yet.

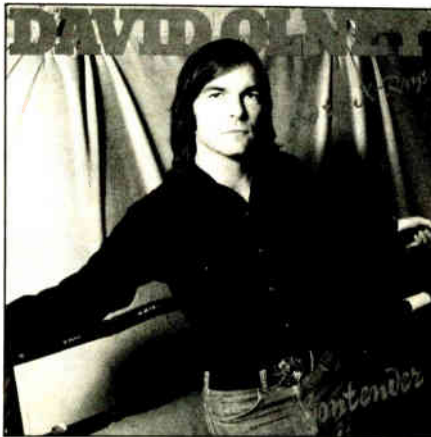
Cured is a two-man show. Hackett mans guitars, bass, and vocals, while Nick Magnus pilots the keyboards and drum computers (and adds cymbals). Linn Drum Computer and SDS5 Drum Synth provide impressive drum sounds—booming toms and a fat snare. Magnus' programs aren't the most inventive, but they're rock solid. The lack of spontaneity in the drums make the project sound a bit like a demo tape at times, but a drummer-friend of mine guessed it was Aynsley Dunbar or Steve Smith playing, so the computers can be convincing.

"The Air-Conditioned Nightmare," with its grandiose synthesizer wave, sounds like something off *Trick Of The Tale*. While

Hackett is successful in creating dense and colorful instrumental passages like "Nightmare," the vocal arrangements here are equally heady. "Hope I Don't Wake" sounds like a modern-day Crosby, Stills, & Nash, while Hackett uses more of a breathless approach on "Turn Back Time." At Hackett's last San Francisco concert, the overuse of tape slap made his voice sound like it was coming from the bottom of a well. On *Cured*, the tape delay, compressors, and reverb tanks are used to better effect, and the overall sound of the disk is clean and crisp.

Hackett's fans from Genesis days may hope for a return to the unpredictable instrumental nature of his *Voyage of the Acolyte* album. Nonetheless, *Cured* is an album of windfalls and pleasantries. It helps to put the original Genesis work into focus, and should do much to establish Steve Hackett as the major talent he is.

—Robin Tolleson



Contender

David Olney and the X-Rays Rounder 3064

Produced by Steve Gibson; engineered by Rich Schirmer; and Jimmy Stroud; recorded at Sound Emporium and Quadrafonic, Nashville.

This album has several problems, not the least of which is the cover art. I would suggest that Rounder dump the cover photo altogether and replace it with the following statement, in bold block letters:

WARNING: THIS ALBUM SUFFERS FROM SEVERE COMMERCIAL HANDICAPS. RAW PRODUCTION STYLE UNACCEPTABLE FOR AM/SOFT ROCK RADIO. LEAD SINGER APPARENTLY GARGLES WITH PUMICE BEFORE SESSIONS. IQ ABOVE 93 NEEDED TO APPRECIATE SUBTLETIES OF SONGWRITING, SO MOR AIRPLAY NOT RECOMMENDED. DOOMED TO BE A LAUDABLE BUT OBSCURE CULT ALBUM. FILE WITH BARBARA KEITH AND T-BONE BURNETT.

That's why you haven't heard this on the radio, even though it's one helluva powerhouse

rock LP. But then you really can't blame the deejays and program directors: this is not an appealing album at first listening. Olney's pugnacious intensity is the polar opposite of the Kenny Loggins/Michael McDonald ingenuousness, and you can't blame people for wanting to keep their distance. But that's a shame, because they're missing a rock songwriter who has honed his art to an edge of genius.

Don't look for silly love songs in here. For Olney, rock music is a ritual of personal exorcism, a venue for letting out the pressure that builds after you try and try and try, then lose and lose and lose. But even in the heat of passionate desperation, Olney's lines flow out effortlessly, pulsing with natural rhythm. For example, recite aloud these lines from "Will to Survive:"

Hard knocks, broken hearts,
low down complications
I ain't always done
the right thing
I had to cheat
and tell some lies
Just a few...

Olney also has an uncommon knack for building mood and suspense through subtle suggestions of scene. In "Love or Money," he paints a courtroom scene seething with paranoia and betrayal:

Listen
I must be certain
When it comes up for trial
Don't look at me and smile
Like you don't know me
You'd better know me!

And, when necessary, he drives the point home with one savage twist of irony:

She called me her friend,
she called me her lover.
Then she called me
just to tell me goodbye.

None of this would work without some solid, energetic backing from the four X-Rays, and Olney gets it every sweaty inch of the way. The sparse, sinuous sound is reminiscent of primal Doors in some places, with keyboardist Ken Moore and drummer Rick Rowell deserving special note for the way they lock into Olney's finely crafted syncopations.

Track this album down if you're an aficionado of rock songwriting in the Springsteen/Segar vein. You'll find three good tunes here, two very good ones, and three more that will match line for line the best of the year. Then sit back and wait for it to become a collectors item.

—Sam Borgerson

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direct from manufacturer below wholesale. Any length cassettes. 4 different qualities to choose from. **BULK & REEL MASTER TAPE** from 1/4" to 2". Cassette duplication also available. VHS T-120's, \$11.25. Brochure. **ANDOL AUDIO PRODUCTS, INC.**, 4212 14th Ave., Dept. MX, Brooklyn, NY 11219 **TOLL FREE: 1-(800) 221-6578 ext. 4** or NY res. (212) 435-7322 ext. 4

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Maintenance

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JUNE

REMOTE RECORDING AND CONCERT SOUND SPECIAL ISSUE

- LISTINGS:
Remote Recording Facilities,
Sound Reinforcement Companies.
- Engineers' Forum:
Concert Sound Mixing.
- Bones Howe Interview.
- Kenny Roger's Studio.
- Keyboards of the Stars.

AD CLOSING: April 19th
MATERIALS DUE: April 26th

JULY

STUDIO DESIGN SPECIAL

- LISTINGS:
Studio Designers and Suppliers.
- SPECIAL REPORT:
Power Amplifiers.
- Studio Designers' Forum.
- Maurice White Interview.
- Spyro Gyra.
- Drum Synthesizers, Pt. II.

AD CLOSING: May 17th
MATERIALS DUE: May 24th

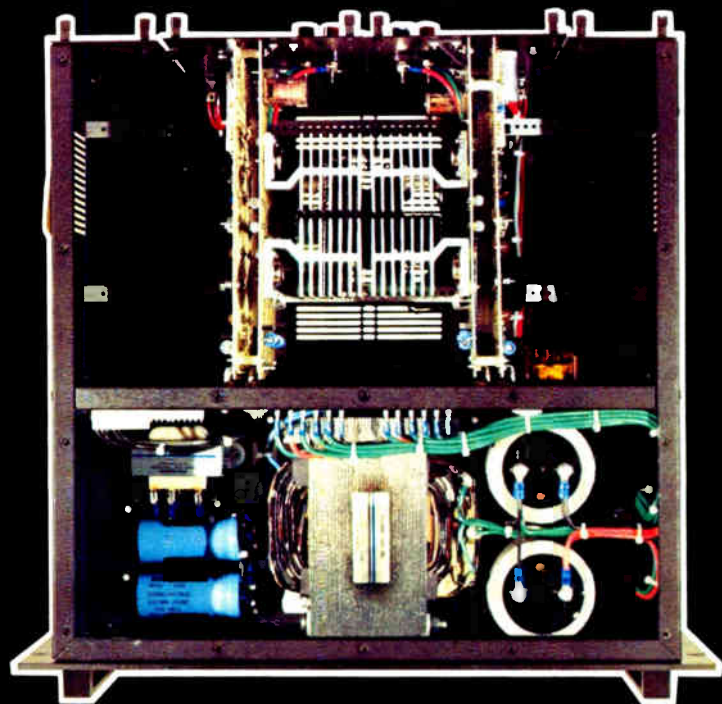
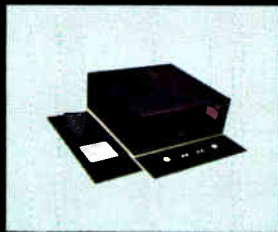
AUGUST

MIX 5TH ANNIVERSARY AND RECORDING HISTORY SPECIAL

- 100 Years of Audio:
A look back by Jack Mullins, Larry
Blakely, Tom Lubin and special
guest writers.
- Mix's Audio Hall of Fame.
- International Recording Spotlight.
- Gold Star Studios.

AD CLOSING: June 16th
MATERIALS DUE: June 22nd

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The Model 6250 Dual Channel Power Amplifier

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The Model 6150 Dual Channel Power Amplifier

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