

OCTOBER 1981

THE RECORDING INDUSTRY MAGAZINE

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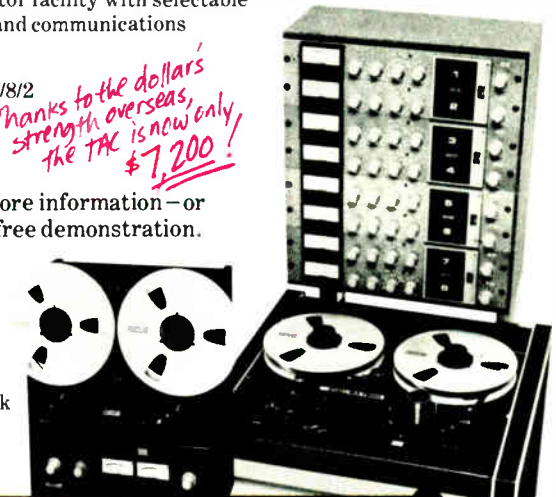
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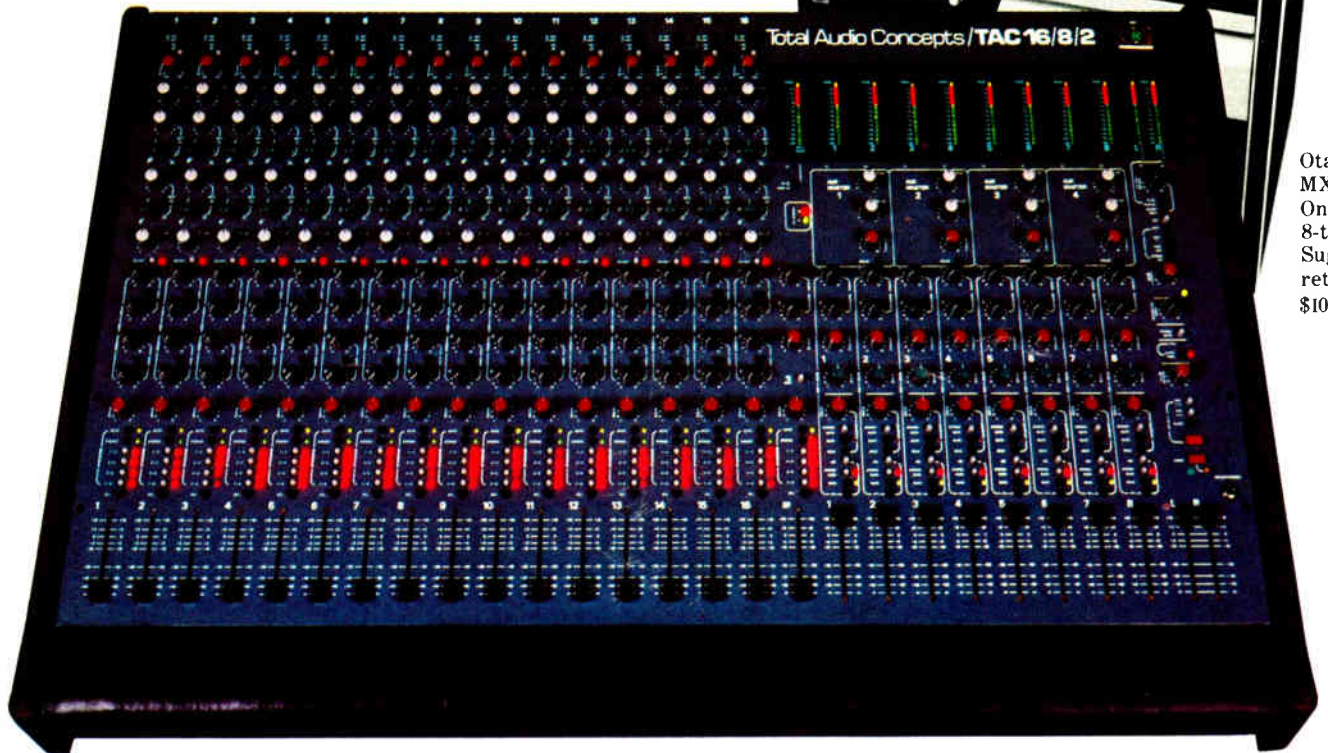
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World Radio History

Cover: Chicago Recording Chicago, Illinois

Photo: Jerry Milam

Chicago Recording in Chicago, Illinois has been open since 1975. Their workload is split 50/50 between commercials and album production. Clients include McDonald's, United Airlines, Coca Cola, Wrigley's Gum, Ohio Players, Jerry Butler, Ramsey Lewis, Billy Squires, Marshall Tucker Band and Todd Rundgren.



Mix

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OCTOBER 1981

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Get into the MIX

November:

AES 1982 NEW PRODUCTS
—nearly 150 new audio
products previewed

December:

TAPE-TO-DISK
listings of:
Mastering, Record Pressing,
Tape Duplication
Deadline for listings: Oct. 19
Ac. Closing: Nov. 1

January:

**NORTHWEST STUDIOS plus
CONSOLE SURVEY**
Deadline for listing: Nov. 20
Ac. Closing: Dec. 1

CURRENT

North Central Studio Suppliers

MARKET FAVORS VALUE, EYE TOWARD VIDEO

According to the people who supply equipment to the recording studios in the upper midwest region of the U.S., their clients tend to be more involved in jingle work than music projects. The feeling seems to be that while commercial recording is growing in volume and sophistication, music studios outside of Chicago have felt a pinch as artists have equipped themselves with budget 4 and 8 track systems to make their demos at home. Says Jonathon Lipp, of Full Compass Audio in Madison, Wisconsin, "There are so many of these basement and garage studios now that many musicians only go into the big studios for a very serious project. The smaller scale recording that was the bread and butter of the medium size studio doesn't exist anymore, because people are doing it themselves."

As the jingle work has become a larger share of business, value, quality and resaleability have played a larger part in the buyers' shopping habits. "This is a turnabout from previous years," says John Loeper of Flanners Pro Audio in Milwaukee, "when people would buy anything you put in front of them. Now people are becoming far more conscious of what they're purchasing. They are checking with different dealers to get better deals and more opinions before they buy."

Jerry Milam of Milam Audio in Pekin, Illinois, also stresses that value is a primary concern and feels that the buying market is going for the cost effective equipment. "The people who were spending \$80-90,000 for a console a year or two ago, are now looking at the \$30-60,000 console because the quality is there and money is tight. I have been preaching for years that studio owners should get rid of the ego and get down to the hard facts of the financial ability of the studio, which is far more important."

Video is looming in the expansion plans of many studios, according to John Borman of AVC in Minneapolis, although he notes that, "For the most part we are seeing video people *buying* better audio gear, while we are seeing audio people *preparing* to get into video."

In areas where the economy has taken some of its greatest tolls, things seem to be on the rebound. "I am definitely seeing the light at the end of the tunnel," says Henry Root of Ann Arbor, Michigan's Hy James Audio. "We are very busy now with several studios investigating video coupling and a lot of interest in sixteen and eight track equipment."

Many suppliers have also diversified to find clients for recording equipment. Bill Schuermann of Antech Labs, in St. Louis, has found that, "While there has been little expansion at the major studio level, we have seen extreme growth in industrial sales to the corporate type companies who are building their own jingle rooms. These are usually no larger than eight track operations but the business has been very, very good."

AES 70th Convention

The 70th Version of the Audio Engineering Society Convention will convene October 30, at New York City's Waldorf Astoria Hotel. The four day event will feature 75 technical paper presentations, six floors of technical product exhibits from 185 manufacturers, a special Tape Machine Maintenance Clinic and ten Workshops in such areas as Audio/Video Interfacing, Synthesizers and Electronic Music, Sound Modification Devices and Basics of Mixing Consoles and Applications.

A large U.K. contingent, 23 strong, will exhibit professional audio equipment at the AES

Convention. Among the British products on show at the Waldorf in New York will be amps, technical publications, components, consoles, speakers, mikes, mixers, recorders and record cleaning aids.

FAS Relocates

FAS Audio Services, resulting from the recent merger of Filmways Audio Services and ACI/Filmways, has moved to 5219 Craner Ave. in North Hollywood, California. According to FAS president Larry Metz, the 12,000 square foot operation is equipped for sales with sophisticated demo facilities; full service department, headed by Glen Eckes; and a rental department with over \$2 million worth of inventory. Rental manager Rick Conyers has already gotten the rental division off to a big start with contracts for the Billboard Video Show, the L.A. Rams' broadcast sound and a gala 50th anniversary party for Julio Gallo in Modesto, California, featuring the San Francisco Symphony, Frank Sinatra and a \$20,000 rental bill for FAS sound equipment.

notes

The second annual Wally Heider Garage Sale will be held October 23, 24, and 25, at the old ACI premises at 7138 Santa Monica Blvd. in Hollywood. Many LA studios will be contributing to the audio swap meet. For more information, contact **Ike Benoun** at 213/877-9711...**Otari Corporation**, the Northern California based professional tape recorder manufacturer, has announced the appointment of **Mr. John Carey** as Product Manager...**Soundcraft Electronics U.S.A.** has announced the appointment of **Northwest Marketing, Inc.** as their manufacturer's representative for professional mixing consoles in Washington, Oregon, Alaska, Western Montana and Idaho...**TDK Electronics**, manufacturer and marketer of quality audio and video recording tape products, held groundbreaking ceremonies on August 17th for its new American headquarters facility in Port Washington, New York...**Ray Combs**, Vice President of **United Recording Electronics Industries**, has announced the appointment of **Garry Margolis** as Director of Sales...**Furman Sound, Inc.** has moved into larger quarters at 30 Rich St. in Greenbrae,

California. **Diane Poole** has been named Furman's new National Sales Manager...The Board of Governors of the Chicago chapter of **NARAS** has elected **Robin McBride**, President; **Paul David Wilson**, 1st Vice President; **David Webb**, 2nd Vice President; **Tony Rufo**, Secretary; and **Hank Neuberger**, Treasurer; with **Chuck Suber**, **Chuck Colbert** and **Murray Allen** as Trustees for the 1981-82 term...**Nortronics** has retained Audities 2001 of Denver, Colorado as its manufacturer's rep for Montana, Wyoming, Colorado, Utah, Southeast Idaho, New Mexico and El Paso, Texas...**Dr. John D. Holm** has been appointed technical director of **3M's** Magnetic Audio/Video Products Division...**Imaginearing Audio**, of Milwaukie, Oregon, has undergone staff & executive changes. The new line-up looks like this: **Albert Troutman**—Chairman and Chief Executive Officer, **Robb Bacardi**— Sales, **Bob White**—Media Placement, and **Carol Derrington**—Public Relations. No longer with Imaginearing Audio are **Cliff Miller** and **Scott Moir** who are leaving to pursue other business opportunities.

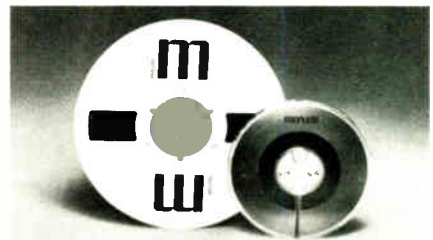


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SESSIONS

NORTH CENTRAL

At **Pearl Sound**, in Detroit, Michigan, **Rockets** drummer **John Badanjek** and manager **Gary Lazar** are supervising mixes for Detroit group **Radio City**. **Cub Koda** (ex **Brownsville Station**) just finished production on the second LP by **Blue Money** (featuring ex **Woolies** member **Jeff Baldori**), with engineer **Ben Grosse**. **Ron Asheton** (ex **Stooges** guitarist) producing **The State**, which includes ex **MC5** bassist **Michael Davis**. Asheton also completed work with **The Ragnar Kvaran Group** for **ATC** records with engineer **Ben Grosse**. **Frank Fischer** and **Geoff Michael** at the controls with **Belfield & The Cats** for **Tremor Records** with **Frank Fischer** producing.

At the **Chicago Recording Company** studios, in Chicago, Soul singer **Barbara Acklin** recorded her new **Chi-Sound** single produced by **Gener Chandler & Willie Henderson**, and engineered by **Phil Bonanno** and **The Resurrection Band**, a leading Christian hard rock group, recorded their forthcoming LP for the **Light** label. The band produced; **Phil Bonanno** engineered.

The "Storms" from Toledo, Ohio are putting the finishing touches on their album—"Black & Blue." **Ron Lehmann** producing and **Bill Cuson** engineering at **Tape-Tracks Recording Studio**, LaSalle, Michigan.

Recording activity at **Studio A**, Dearborn Heights, MI. includes, producer **Eryck McClinton** laying down tracks for self-produced project. Songwriter **Mike Hoffhens** cutting tracks with **Greg Southwell** handling vocals; **Eric Morgeson** producing. **Morgeson** at the board for both projects.

NORTHEAST

At **Sigma Sound** in Philadelphia PA, **Gamble & Huff** are putting the finishing touches on albums they're producing for **Teddy Pendergrass** and **Patti LaBelle** with **Sigma's** president, **Joe Tarsia**, engineering.

At **Sigma Sound** in New York, mixer **Francois Kevorkian** working with engineers **Jay Mark** and **Carla Bandini** on "Inch By Inch" by **The Strikers** for **Prelude Records**.

Recently at **Blue Rock Studio**, New York: **Rupert Holmes** producing his own upcoming album, **Bill Stein** engineering. **Swollen Monkeys** recording an album produced by **Hal Wilner** for

Deep Creek Productions, engineered by **Vince McGarrie**.

Recent projects completed at **Unique Recording Studio**, New York City, include **Richie Havens**, in with **Timmy Cappello**, producer, recording **Timmy's** composition "A Part of You", the theme song for a new film currently being shot in New York.

Composer **David Amram** is one of the winners of \$1,000 in free 24-track recording time at **Variety Recording Studio**, in New York City. Other winners include "The Pseudos," **Sound Concepts** of Woodbridge, Connecticut, and **Issachar Miron**, composer of "Tzena Tzena Tzena."

At **Secret Sound Studio**, in New York City, **David Buskin** is recording his new single produced by **Jeff Kent**, formally of **Pierce Arrow**, engineered by **Jack Malken** and assisted by **Lisa Romano**.

SOUTHEAST

Truc Of America, a rock comedy show band, is recording their first album at **Triiad Recording Studios** in Ft. Lauderdale, Fla. After several weeks, the self produced project is nearing the mixing stages with all the engineering being done by **Michael Laskow**, **Vincent Oliveri** and **Robert Corti**.

Trusty Tuneshop in Nebo, Kentucky has several projects going on their 8-track Otari. **Rodney Richardson** finished the first complete song for his up-coming album. **Rodney** produced his session and house engineer, **Michael Cain** engineered the session.

Single Bullet Theory has been recording at **Alpha Audio Recording Studios**, in Richmond, Virginia with producers **Carlos Chafin** and **Barry Gottlieb** for the production company of **Mad Dog Music** for the **Messes**.

Activity at **Reflection Sound Studios**, Charlotte, N.C., includes **Ted Daryll** producing **Rick Bowles** for **Polygram**, **Ron Carran** and **Steve Haigler** engineering. **Eric Aucoin** producing **PTL Family Album** for **PTL Records**, **Bob Whyley** engineering.

Fire Flight, a group from Trinidad, at **Criteria Recording Studios** in Miami recording an LP, with **Carl Beaver** producing and **Bruce Hensal** engineering.

SOUTHWEST

From Alexandria, Louisiana **Southern Recording & Video Productions, Inc.** has completed

overdubs and mixdown for **Bill Wray** on material recorded for **Capitol Records** for release on the **Liberty** label on videodisk, videocassette and cable networks.

Chaton Studios in Scottsdale, Arizona just taped the **Louis Belson** drum clinic on location, **Stephen Moore** at the board.

From Manchaca, Austin, Texas, **Reelsound Recording Company's** remote bus has been on the road lately with projects in Austin and Duluth, Minn. for **Ted Nugent**. **Malcolm H. Harper, Jr.** was engineering with **Mason Harlow** and **Mark Gitterle** assisting.

CBS Records booked the **Omega Audio Mobile**, out of Garland, Texas, for a 24-track date with **Earl Slick** and **Silver Condor** at the **Agora Ballroom** in Dallas. The recording was mixed later for record release to **AOR** stations. Engineering was by **Paul Christensen** and **Russell Hearn**. Producer was **Earl Slick**.

NORTHWEST

Current projects at **CSS Recording Studios** in Las Vegas, Nevada, include **Diana Ross** producing her own album, her first for **RCA**. Staff engineer **Scott Spain** at the board. Also at **CSS** **The Fifth Dimension** cutting a new album with **Tony Camillo** for **Venture Productions**, **Barney Perkins** engineering.

Long John Baldry is in **Mushroom Studios** in Vancouver, Canada working on his next album scheduled to be released by **Capitol Records**. He has acquired the production services of Vancouver's own **Bill Henderson** and **Brian MacLeod** whose many credits include **Toronto**, **Chilliwack**, **Headpins**, **The Good Brothers** and **Kickaxe**. Local engineer **Rolf Hennemann**, has joined them again for this project.

Recent recording activity at **Sea-West Studios** on the north shore of Oahu, in Hawaii, includes: mainland rock group "TKO" completing their second L.P. with **Rick Keefe** producing & mixing and "Danny Mirror" from **Holland** doing an L.P. of **Elvis Medleys** with the original **Jordanaires** for **CBS/Holland**.

Recent activity at **Angel Voice** in San Jose, CA, includes **Pablo Telles**, author of **Suavecito**, completing pre-production work for a new album, with **Vince Sanchez** at the controls and, **Pat Kelly** is doing overdubs and tracking for his new album on **Rock Candy Records**, **Vince Sanchez** engineering.

Currently at **Fane Productions Studio**, Santa Cruz, CA., **The Garcia Brothers** wrapping up their latest album for **Bullseye Records**, **Tom Anderson** producing and engineering; **The**

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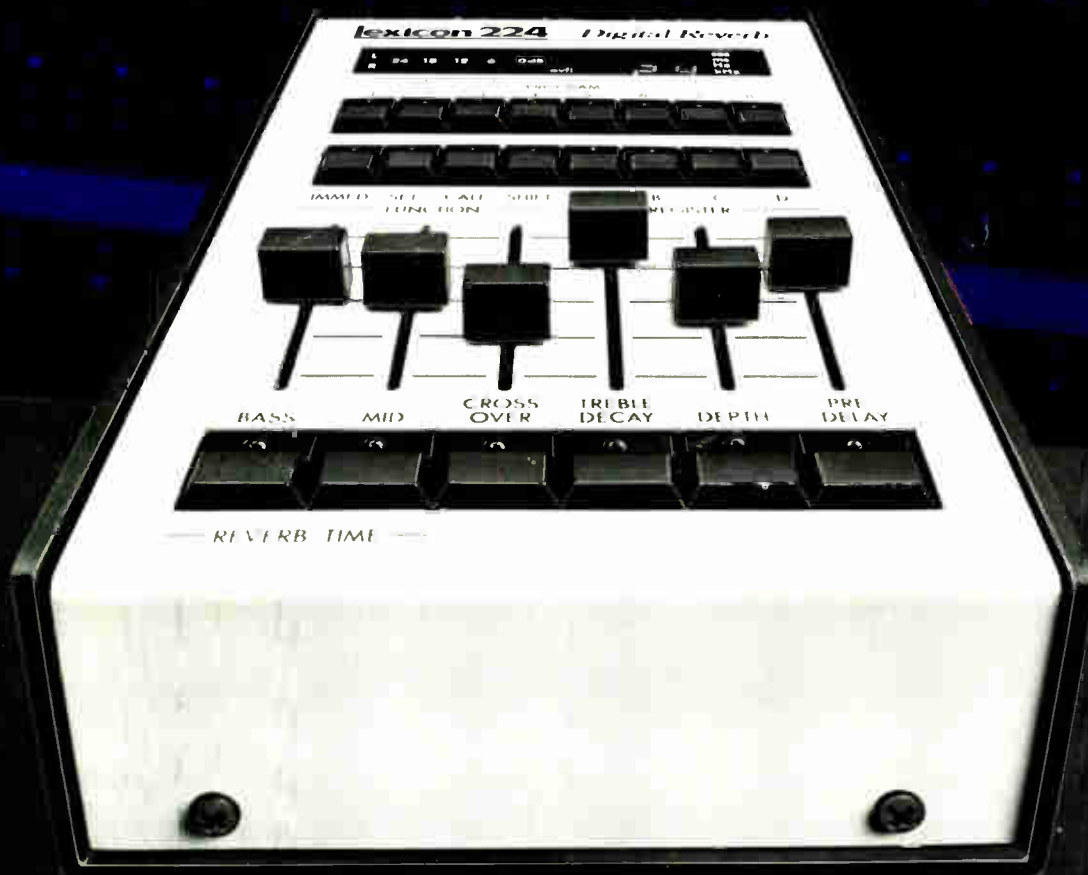
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Secretes putting the finishing touches on their new single for Secret Sound Productions, **Pete Carlson** engineering

At **Mobius Music Recording** in San Francisco, CA, **The Dead Kennedys** have completed their compilation album "Let Them Eat Jelly Beans" The Kennedys are presently working on their new EP produced by the band and engineered by **Olive DiCicco** assisted by **Annette Olesen**.

Recent activity at **Different Fur Recording** in San Francisco includes: **The David Grisman Quartet** tracking and mixing their forthcoming album for Warner Bros., engineered by **John Haeny** and assisted by **Howard Johnston**.

SOUTHERN CALIFORNIA

At **Soundcastie** in Los Angeles, **Kasim Sulton** of **Utopia** working on overdubs for his new solo

album on EMI America. **Bruce Fairbarin** producing, **Joe Chiccarelli** engineering, **Mitch Gibson** assisting.

At **Mystic Sound** in Hollywood, "Sheiks of Shake" in for a shake-down session with their new bass-player **Paul**, **Ysef Rahmen** producing **Bill Streitfield**.

At **Monterey Sound Studios** in Glendale, Ca., **Steven Soles** producing himself for **Good News Records**, **Larry Hirsch** engineering with **David Goldstein** assisting.

At **Fifty Four East** in Pasadena, CA, **Electric Light Orchestra** bassist **Kelly Groucutt** has completed the tracks for his first solo album project with **Llew Horowitz** engineering the A.P.I. custom designed 48 track console. Fellow E.L.O. member **Richard Tandy** sat in on keyboards, while the band was on hiatus before their world

tour in the fall

At **Skylight Exchange** in Granada Hills, CA, singer/songwriter **Grey Singing Horse** is finishing tracks and is soon to begin mixing in preparation for his up-coming record release **Grey Horse** has backed such greats as **Jackson Browne** and **Taj Mahal**. Players on this project include members of the **Kenny Loggins**, **Kittyhawk**, and **Melissa Manchester Bands**.

Richie Furay has been at **Mama Jo's** in North Hollywood, Ca, recording his next LP release for **Word Inc.** with **David Diggs** co-producing with **Furay** and using **Jack Joseph Puig** at the controls with **Gene Meros** assisting. Producer **Brown Bannister** and **Michael Blanton** were finishing some final mixes on **Amy Grant's** live album with **Jack Joseph Puig** engineering.

Studio News

Transparent Recording in San Francisco announces the acquisition of a **Studer model 169** mixing console. The 10-in/2-out board is primarily for use in live on-location recording.

Faithful Sound Studios of Urbana, Illinois announces the installation of an eight-track **Ampex 440B** master recorder. According to Chief Engineer **Mark Rubel**, initial eight-track projects included sessions with **The Edge**, **Erin Isaac**, and album pre-production work with **Adrian Belew**.

Fantasy Records, Berkeley, CA, has acquired two **Mitsubishi PCM digital audio recorders** and plans to offer state-of-the-art digital recording and mastering services both to its in-house clients and to others in the Bay Area on a rental basis. Fantasy studio manager **Roy Segal** said the two units are the **X-80A** console recorder, a two-track, fixed head unit which Fantasy will maintain in its mastering facility, and the portable **X-80** recorder for additional in-house mastering and for rentals. A **DDL-1** delay system completes the Mitsubishi mastering package.

Pat McDermott has taken over as operations Manager at **City Recorders** in Hollywood, CA.

Sound Stage Studios in Nashville has recently updated their "A" studio with the installation of a new **Trident TSM** console. The console is custom designed with a special 32 meter overbridge and a separate monitor mixing section located on the left side to accommodate the layout of the studio and control room. The Trident console was supplied by **Wilson Audio** of Franklin, TN.

Nashville's **Music City Music Hall** recently became the first studio in the United States to take delivery on the two newest recorders from **Studer**: the **A80VU MKIII** 24-track with transformerless amplifiers; and the **A80VU 1/2-inch** 2-track mastering recorder, also with the new transformerless amps.

At the site of the old **Dusk Recording Studios** in Santa Clara, **Hot Tracks Recording** has opened with new owners, new equipment and a new approach to recording excellence. Hot Tracks owners are **Don Heinsen** and **Phil Jamison**.

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Thanks to the many years of friendship and support from the hundreds of our Mid-West professional clients, Milam Audio Co. will be located in our newly constructed headquarters in October, 1981. Our new address is 1470 Valle Vista Street, Pekin, Illinois 61554. 309/346-3161.

Again, thanks to all of you.
Sincerely,

Jerry Milam

MILAM AUDIO

VIDEO NEWS

by Mia Amato

CABLE: ROCK JUSTICE REDUX

The guiding behind the Grateful Dead's highly successful cable tv debut on Showtime is none other than East Coast promoter John Scher, who provided the seed money for the project that has reportedly grossed over \$2 million in video revenue from pay-tv, videocassette and disk deals. Scher's next project will be to resurrect "Rock Justice," a musical comedy penned by Marty Balin and produced onstage in San Francisco in 1979. Rock video fans may recall that the SF show *was* videotaped originally for EMI, which shelved the project after the subsequent dismantling of its EMI Videograms division in the U.S.

The new version will be shot in the New York area, with Balin in the lead role and a rock-star-sprinkled cameo cast. Len Dell'Amico, who directed the Grateful Dead program, will also direct this shoot scheduled for taping this Winter. The Dead program, by the way, will be released as an RCA videodisk this Christmas.

NEW COMPANIES: LA, CHICAGO

Several new companies announced video/music projects and services: International Automated Media is launching video post production capability under the supervision of Jim Rose, a video veteran whose credits include tv work with Sonny and Cher, Tony Orlando and Dawn, and Burt Bacharach. Ruggles Reber & Associates have hung out a hybrid-technology shingle in Marina Del Rey following the completion of two programs for VHD videodisk. In Chicago, On Track Productions is attempting a documentary on local bands and the Chicago club scene.

BROADCAST: DIGITAL JAZZ FOR PBS

Master Digital of Los Angeles is handling the final mix for "JazzAmerica," a history-of-jazz concert series airing on PBS this fall. The tv series is the first to feature digital soundtracks and will be simulcast in stereo over the National Public Radio Network. The show is produced by Paul Rosen for KCET-TV. Chief engineer for the project is Arne Frager, Head of Master Digital and Spectrum Studios.

The First program is a 90-minute concert

videotaped in Avery Fisher Hall, featuring the music of Dizzie Gillespie, Max Roach, Gerry Mulligan and other jazz greats. Location audio was provided by Record Plant—in analog—and mastered on digital at Spectrum using the Sony PCM 1610 digital audio processor. The final video mix was done at Pacific Video on one-inch type C videotape, which can carry stereo tracks.

"The television stations will be able to broadcast in stereo directly from the one-inch tape," says Frager, "or they can broadcast directly from the digital tape."

Frager says future concerts in the series will be recorded on digital at various sites around the country; mobile audio and video services will be subcontracted locally. "JazzAmerica" is also slated for videodisk release. "There will also be a series of LPs using the same stereo mix," adds Frager. "That's one of the reasons the project was done in digital—to get that super-high-quality audio. Going to PCM gave us the advantage of being able to mix to a digital master and to tape simultaneously."

CASSETTE/DISK: CHRISTMAS CHEER

The Videography Company is exploring the home video market under the "Synthetic Symphonies" label. The LA-based firm has a rep for award-winning television commercials; the first release is expected to be "a Christmas album" on cassette.

PROMO: CABLE USE UPDATE

Last year the pay television service Home Box Office used record company promo clips to fill 10% of its "intermission" time between features. This year nearly 40% of its programming before and after film showings will be filled by promo. Promo also got a boost when several other satellite networks went 24-hour this year, and programmers turned to free clips to round out telecasts in the wee hours. "We just keep repeating the current clips, especially late at night," confided one scheduler, "but because they're music, they seem to hold up to repetition better than other kinds of programming."

But before you go running off to grab your video camera, bear in mind that the satellite services only air clips from major labels. "Please tell your readers we don't take any promo from independent video producers," warns Lisa Tumbleton of HBO. "I don't care how good it is, it's got to

have a record company behind it." The reason, says Tumbleton, is that cabling feel a band's label should be willing and able to share the responsibility should any legal or royalty problems arise.

Record companies still regard cable's use of clips with some suspicion, and some firms, like the Polygram group, would like to see cable services paying for the use of promo material. That's one reason Polygram will not allow any of its artists' promos to air on Warner's 24-hour music channel. MTV began telecasting nationwide via satellite on August 1, and has yet to win over more than a handful of record companies to its concept of "radio with pictures." The service responded to what it hopes will be a temporary shortage of clips by playing more "video oldies"—tapes of songs no longer on the charts—and accelerating paperwork on its planned concert "specials."

MTV has a top-40 format, not surprising since its program director is Bob Pittman, lately of ABC radio in New York. At this writing the program is not transmitted live but is videotaped. Besides clips, viewers watch five disk jockeys (they call them VJs) provide the wraparound and segue into commercials—eight minutes an hour. The ad space is, again not surprisingly, a showcase for Warner's record and movie divisions; other advertisers include Pepsi, 7-up, and Bubblicious Gum.

Another problem MTV has is that it can't be seen in any major U.S. city. No cable system in New York, Los Angeles, or the other Top Ten markets has elected to carry the 24-hour channel. But MTV is being beamed to 251 cable systems in smaller cities and towns and it currently claims two-and-a-half million subscribers; industry observers say it's the most successful launch of a cable channel this year.

SHOW DATES: VIDEO ART

Fall is the video festival season—a great opportunity to see creative experiments in form and content. The long-running prestigious Athens Video Festival will be held in Athens, New York October 22-24. This year's San Francisco International Video Festival will be the largest ever, October 24 through November 2. The Chicago Film and Video Festival is also an international event and runs November 6 through 25. Each of these festivals also tours its winning tapes at museums and galleries around the country, and you won't find a better introduction to non-traditional television and video art. ■

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You'd like the outstanding sonics of digital recording for your next project. Problem is, buying a system is expensive, and it could be outdated before you even finish. Using another studio is out because that studio/artist/producer relationship is not established in one session. What do you do?

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STUDIOSCOPE

MORE ON digital

RENTAL

by Dennis Buss and Chris Haseleu and Los Angeles.

In last month's column we were discussing the merits and options for renting digital recording equipment. We considered the Soundstream and JVC systems and mentioned some of the operations that have evolved to deal with the business of digital recorder rental.

Soundstream is the only digital manufacturer directly involved in the rental business. They offer the DTR 1/8, DTR 1/4, and DTR 1/2 systems. There are 8-track, 4-track, and 2-track respectively. Their rates are as follows:

For Recording:

DTR 1/2 or DTR 1/4—\$120 per hour for the first 3 hours; \$80 per hour thereafter.

DTR 1/8—\$150 per hour for the first 3 hours; \$100 per hour thereafter.

Mastering: \$80 per hour.

(An engineer is provided with the system.)

Shipping and travel costs are additional to areas outside of the service centers of Los Angeles, New York, Boston, Salt Lake, and Nashville.

Tape is \$122 per reel with 50 minutes recording time in stereo and 25 minutes using 4 or 8-tracks.

The Soundstream computer disk editing system is available in Salt Lake

\$150 per hour for the first 3 hours.
\$120 per hour thereafter.

Soundstream offers new clients reduced rates. They also have a rate schedule based upon a royalty system. For more information, contact Soundstream, 2505 East Parley's Way, Salt Lake City, Utah 80109. The phone number is (801) 486-4701.

Of the firms that offer other digital rental systems, we have surveyed a few to give you an idea of some of the going rates.

The JVC 2-track system is being offered for rent by several companies including the JVC Cutting Center in Los Angeles. Typical rental rates are those offered by Master-Tech, a subsidiary of Masterfonics in Nashville. Master-Tech offers the BP 90 processor and Umatic recorders along with the AE 90 electronic editing system. The rates are as follows:

Recording	\$400 per day
Editing	\$70 per hour
Tape is supplied at \$35 with 60 minutes of recording time.	
The Mastering System including delay line is \$750 per day.	
Mastering is free if done at Masterfonics.	
Hourly rates for all services are also available.	

For more information, contact Mack Evans at 28 Music Square East, Nashville, Tennessee 37203. The phone number is (615) 327-4533.

Sony's PCM 3324 24-track system is to be made available late this year. Currently, though, they are quite prominent in the rental of their very compact 2-track digital systems for live recording and studio situations. Digital Services of Houston is one of several companies offering the Sony system. Digital Services is located at 2001 Kirby Drive, Suite 1001, Houston, Texas 77019. The phone number is (713) 520-0201. They offer the Sony 1610 Digital processor and associated Umatic recorders. They also have the DAE 1100 electronic editor. Digital Services is prepared for remote digital recording, using the Sony equipment and a Neve console. The rate is \$750 per day, for the complete recording and editing system. In addition, owner John Moran stressed that a sliding scale block rate is available, and can be tailored to the individual project. He also said that studios in the same area can share the equipment and cost.

3M manufactures a 32 track and a four track unit and most of the firms offering these systems for rental have rates for the machines separately and together. The Los Angeles Record

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in the design and construction of recording studios...**



we don't mean N.Y. to L.A.

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We haven't designed a studio as fanciful as the one depicted above, but if you're "game", give us a call.

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The Mitsubishi X-80 two-channel digital recorder can be made available on a rental basis outside of Fantasy Studios anywhere in the San Francisco Bay Area.

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fantasy studios

Plant will rent out the entire system for \$1000/day, \$4000/week or \$12,000/month. Individual rates are \$300/day for the four track and \$700/day for the 32-track, and longer term rates are also available. Westlake in Los Angeles and Sound Ideas in New York also rent the systems. Bob Shafner of Sound Ideas tells us that they will rent the four track unit with the preview head for mastering applications at \$550/day.

Effective in August, Mitsubishi Electric Sales America Inc. began the short term rental of their X-80 digital recording systems for live two channel recording, and the digital mixdown of recorded material. These rentals include use of the Mitsubishi Electric DDL-1 Digital Delay unit for mastering.

Rates for the rental of the X-80 recording package are \$1000.00 per week with a two week minimum rental. Shipping charges to and from the studio will also be at the renters expense. All supplies, with the exception of digital mastering tape supplied by Ampex Corp. and 3M Co., are included in this rental rate.

The services of a PCM engineer are available on rentals of three weeks and longer, for no charge.

Where Mitsubishi Electric X-80 Series Recorders are available for rental in a particular area, such as The Bay Area (Fantasy Record Inc.) rental referrals will be made to those clients first. In the case that Mitsubishi customers' recorders are already booked for a particular period of time, Mitsubishi will rent a system directly.

Lou Dollenger or Sonny Kawakami of Mitsubishi Electric Sales America, of Lincolnwood, Illinois (800/323-4216) should be contacted for details.

• • •

The long awaited introduction of a consumer digital playback system will apparently take place within a few months. The Sony/Phillips Compact Disk or CD system is well on its way to becoming a de facto standard. This system is already the EIAJ standard. In addition, Matsushita Electric, the parent company of JVC and Technics, has also agreed to manufacture CD players. Those record companies with a catalog of digital material ready to go will undoubtedly reap whatever benefits are to be had in the consumer software market.

With the demand for digital recording increasing, the studio owner/manager is caught in the unpleasant position of dealing with the current high prices to purchase digital equipment. The short term answer to this problem just might be to rent or lease the equipment. ■



Murray Allen
President,
Universal Recording Studios

“The studios that are going into digital are the studios that plan to stay in business.”

Murray Allen, who has been president of Universal Studios in Chicago since 1973, started performing professionally with the Glen Miller Band when he was 18. He says that if he has had one goal in life, it is to record music the way it actually sounds. And he claims that the 3M Digital Recording System just may be the answer to that dream.

Q: You're known in many circles as a management genius. In a depressed industry, how did you justify the cost of a digital system?

A: It's when times are tough that you've got to do something different – better, to stimulate business. Digital gives clients much more in terms of sound. And I find that a lot of bankers would sooner give you financing on digital, because they know analog is being replaced by something new.

Q: I understand your entry into digital has been quite profitable.

A: It made money right away. Immediately. It's currently running about 60 to 65 hours a week. And that makes money. We typically charge fifty dollars more per hour. And, we've yet to find a client that doesn't get hooked on it.

Q: So the added cost doesn't discourage clients?

A: Digital sells itself, and the added cost isn't that much. It's not that much more than doing double 24s. If you're talking about an advertising job, it might end up being three hundred dollars more. On a record date, people get more squeamish. But when producers and musicians hear the results, they realize digital is worth it. Because every little nuance comes through, artists actually play better.

Q: How do you find digital editing?

A: Electronic editing takes a little longer because our blade skills are so well developed. But, the extra precision and ability to preview and audition an edit more than make up for the time. Actually, our editing requirements have been small because of 3M's exceptional punch-in capability. We've done multi-track punch-ins of large vocal and instrumental groups right in the middle of a note . . . and you can't detect them.

Q: You were speaking earlier about commercials. Do you actually think, given the relatively poor quality of broadcast sound, that digital is worth it?

A: Yes. Commercials we've recorded digitally prove that TV can carry better sound, more impact. And impact is what the client wants. He can't add more lines of resolution to video but he can add punch to the audio.

Q: Any other applications you see as prime prospects?

A: Film scoring. We've done some already. Sound is so important to productions. When somebody does a film in digital, and releases it with digital playback, it'll be a mind-blower. And it won't be long.

Q: Any other comments about the future of digital?

A: It's catching on like crazy. More and more albums are digital because it sounds better, the musicians like it better. You're remiss in your responsibility if you don't give them digital.



3M Hears You . . .

3M

PROGRESSIONS

digital

REVERBERATION

by Larry Blakely

Perhaps the most common type of reverberation is that which we hear in a large room or hall. The size of the room, and the amount and type of reflective surfaces will determine the decay time of the reverberation. Typically, large rooms have longer decay times than smaller rooms.

CHAMBER—In the early days of recording, a common way of obtaining reverberation was to build an acoustic chamber. These required a good deal of space, were expensive and often times did not sound so great.

PLATE—Because of the difficulties of size and expense in constructing chambers, another method of reverberation was desired. So came the plate, a large sheet of metal with an exciter on one end (to vibrate the plate) and a pick up on the other. The plates seemed to have a brighter sound with more density. This has since become a popular method for high quality reverberation.

SPRING—This is another method of obtaining reverb at typically a lower cost than the plate. In the earlier days, the quality of spring reverbs would not compare to that of a good plate or room. However, today there are some good sounding high quality spring reverb available.

Auditioning A Reverb

A good sounding reverb will have a nice "anvil" type of sound to it and will build and decay in a very smooth

fashion. There should be no chatter by stronger distinct echos and no wobbles or flutter in the reverberant sound. It should sound smooth and natural.

Electronic forms of reverberation often have unwanted side effects such as noise, restricted frequency response, boing, flutter, dominant individual echos or uneven decay. Very often in studio situations the sound of the reverb is combined with the normal "dry" signal in ways to minimize some of these inadequacies.

I recommend auditioning a reverb in two ways:

Listen to the sound of the reverb only. This will prevent any masking of the pure reverb signal. First, listen to the reverb by using widely spaced snare drum shots, just like you would clap your hands in a room. This can also be done with electronic pulses.

Second, listen to the reverb with program material. Mix the reverb just as you would when you would be mixing. It is good to use material such as strings, vocals, brass and percussion for this listening test. By applying both of these tests when auditioning a reverb, you will have a better idea of the unit's capabilities.

Digital Reverb

Digital reverb is accomplished by the electronic recycling of individual echoes while the signal is in digital form. This has brought about a whole new technology in the attempt to provide electronic reverberation that is as natural sounding as a good room,

chamber or plate.

Digital reverbs are typically a powerhouse of versatility in a small package. Many of these units are rack mountable and several of the available models have remote controls. Most of the digital reverbs offer a variety of programs, such as simulations of different sized concert halls, acoustic chambers, plates and other special effects.

Of the available devices, some will only do reverberation while others will also perform functions such as delay, flanging, etc. Some units are 'software based,' meaning that the digital programming is done v.i.a. plug in circuitry that will allow the basic unit to be easily re-programmed and updated as better reverberation programs are developed.

Without question there is a wide variety available in digital reverb. I suggest that you review your needs before you go shopping for one and, most importantly, take the time to do some critical listening. All the flexibility and specifications are fine, but the final result is what you hear.

In order to supply you with the most current information available on digital reverberation units, we have asked the manufacturers of many of the major units to explain their systems to you directly. Read carefully.

• • •

Lexicon 224 Digital Reverberation System

The Lexicon Model 224 Digital Reverberation System is an advanced, software driven, audio processing

system. It contains high speed computing hardware and sophisticated music/acoustic processing programs of proprietary design. The 224 is capable of producing a wide array of reverberation enhancements and acoustical environments with superb audio quality and naturalness for use in studio applications in the music, film and broadcast industries, as well as in live concerts.

The 224 will accept one of two audio signal inputs and provide up to four outputs. This allows the user to have mono, stereo or quad operation depending upon the program selected and the input/output connections to the system. It's unique among digital reverberators in its ability to provide true stereo processing.

The Model 224 has a maximum of nine programs available at this time, as well as 2-sub programs and a new console feature, variable diffusion.

Its remote console allows wide adjustment of all significant parameters of each music program. For example reverb times can be varied individually in the bass, mid-range and treble regions (up to 70 seconds) with cross-over selection as well as control of listener position (Depth) and pre-delay. Human engineered selection of basic programs and up to 36 user pre-set mixes are also provided via the console. The console also provides displays that ensure reliability of operation and ease of maintenance. Diagnostic programs thoroughly checkout the hardware on command and on each power-up.

While two programs are standard, virtually any 224 in the field can be updated to have additional programs and the latest operating system software. These programs are supplied by Lexicon in the form of ROMS (read only memory) which can be easily and economically retrofitted in the field. The 224 is an open ended, on-going engineering process, thereby ensuring maximum *future* usefulness and protecting the end user's investment. For example, Lexicon has recently introduced its Version 4 operating system—its third major system upgrade. Thus, owners of the first units manufactured can be updated to the latest audio and system improvements.

The 224 Basic System Version 4 consists of:

- Main frame processor
- Remote Control Console w/shielded cable
- 2 Standard Programs
- Sub Programs, Mode Enhancement and Decay Optimization
- Variable Diffusion

The Music Programs in its present repertoire are:

1. Small Concert Hall-B (standard)

2. Vocal Plate
3. Large Concert Hall-B
4. Acoustic Chamber
5. Percussion Plate-A (standard)
6. Small Concert Hall-A
7. Room-A (new program)
8. Constant Density Plate (new program)
9. Chorus-A (new program)

The standard 224 can accept up to 7 music programs. Additional programs require a non-volatile memory storage module (NVS). The optional, plug-in NVS Module will provide capacity to add up to 15 additional programs as well as provide non-volatile memory for 36 user reverb program pre-sets.

At this writing Lexicon plans to introduce an advanced version of the 224, designated the 224X, at the New York AES Show.

The 224 mainframe requires 7" of rack space and weighs 47 lbs. The price varies from \$7500 to \$9100, depending primarily on the number of programs included with the system.

For more information, contact:
James L. Comacho
Lexicon, Inc.
60 Turner Street
Waltham, MA 02154

EMT 251

The EMT 251 retains the distinctive "space machine" look of its predecessor, the 250. However, the two units are quite different. Using the latest technologies, the 251 surpasses the 250 in frequency bandwidth and operational versatility. The EMT 251 has double the memory capacity and incorporates internal error correction and self-diagnostic features. Increased versatility mainly results from increased processor speed (40 ns/instruction, down from 50 ns) and more refined programing techniques. Digital-to-analog conversion is 16-bit linear with 15 kHz bandwidth for all programs. Thus the 251 provides unmatched excellence in dynamic and phase characteristics and generates denser, more refined reverberant images. The totally new control panel employs an advanced dot matrix, liquid crystal display which shows reverberation curves, delay settings and amplitude settings at a glance.

The EMT 251 provides high quality reverberation with extraordinary versatility in the control of its characteristics. Recent findings emphasize the importance of discrete reflections as well as diffuse reverberation in determining the perceived qualities of reverberant 'space'. The EMT 251 simultaneously provides the reverberation program and three delay lines, all individually controlled to permit detail-



EMT 251

ed 'placement' of first, second and third reflections within a time range of 0-120 ms, and assignable across the stereo output. In addition, the fourth delay line produces a reverberation cluster just prior to the onset of actual reverberation, thereby making a smooth transition into the reverberant field.

In addition to the basic reverberation mode, the EMT 251 has three special reverberation modes: a delay mode, echo mode and chorus mode. The reverberation modes provide special characteristics such as Doppler shift reverberation, non-linear reverberation decay and extra long reverb times. The Chorus mode processes a single input to create four independent outputs, each one slightly different and varying both in pitch and amplitude. Mixed with the original signal, they yield a startling "choral" effect. Delay and echo modes allow time delays ranging from a maximum interval of 440 ms down to extremely short (less than 4 ms) intervals, which are useful in 'broadening' or 'fattening' dry tracks.

The time and amplitude controls for the four delay lines are used in the delay, echo and chorus programs in several ways. Delay mode provides up to four independently controlled delays as long as 440 ms each. Echo mode has four loops, one primary and three ensuing loops, with loop length and feedback amplitude independently programmable in time and amplitude. Extremely short loop lengths may be used to 'broaden' dry tracks without reverb. Chorus mode permits separation of any two chorus outputs by as much as 80 ms with independent control of all four output amplitudes. Each output is programmed to vary pitch and amplitude slightly according to an internal random program with range and speed of variation controllable from the panel. If short time delays are set for the chorus outputs, stereo flanging effects can be generated in addition to chorusing.

The EMT 251 is also compatible

with console automation systems, enabling direct control of all parameters. Variations in reverb characteristics are recorded on a data track or disk drive along with the console fader information and later decoded to precisely reproduce those settings during mix-down. The EMT 251 interface is compatible with dc type systems such as Harrison Autaset and others. Every EMT 251 function is controllable in this way.

The EMT 251 weighs about 95 lbs., measuring 21" x 32.6" and costs \$20,100.

For more information, contact:
Russell O. Hamm
Gotham Audio Corp.
741 Washington St.
New York, NY 10014

AMS Digital Reverberation Systems

Advanced Music Systems have just released two new digital audio reverberation systems. Both these units are 16 bit systems with identical audio specifications, and are based on the highly successful DMX range of Digital Delay Lines and Pitch Changers. The DMX 15R is a 19" rack mount add-on system for use with the DMX 15-80, DMX 15-80S or the DMX 15-80SB Digital Delay Mainframes. The RMX 16

is a stand alone version of the DMX 15R.

Both the DMX 15R and the RMX 16 incorporate sophisticated micro programmed parallel processing of 16 bit data with 28 bit internal data paths. As with the DMX range of delay processors, these two new digital reverberation systems offer a full 18 kHz bandwidth and signal-to-noise ratio better than 90dB with distortion typically 0.03%.

Operation of both systems is straight forward. On selection of any one of up to nine programs the unit will provide a reverberant field, the parameters of which are shown on LED displays. Any or all of these fundamental parameters may be altered—the variables being pre-delay, delay time, high frequency decay profile and low frequency decay profile. Any variation of these fundamental parameters of the program may now be stored and recalled in up to ninety-nine non-volatile memory locations. Hence not only are the fundamental programs not lost on power-down, but up to ninety-nine personal reverberant patterns may be stored without loss. As with the 15-80 series, key pad entry ensures ease of entry of parameters as well as producing accurately repeatable effects.

An intelligent remote interface will also be available for both the DMX 15R

and the RMX 16. The remote is a hand held terminal interfaceable to mainframe via the jack-field by a standard jack cable. All functions adjustable on the mainframe may now be altered by means of twenty four keys on the remote unit, all variable parameters displayed by LED on the mainframe are also displayed by liquid crystal on the remote. A remote once programmed with ninety-nine memories may be removed and interfaced to any other AMS reverberation unit. Each remote terminal also has provision for interface of a bar code pen. This will allow the end user to update his own reverberation programs immediately as new software is available. The end user will receive his software in the form of bar codes on sheets of A4 paper. In this way a library of programs may be built up.

These two new reverberation systems allow clean, natural pre-programmed reverberation to be selected with the greatest simplicity, or complex permutations of parameters may be accurately constructed, stored and recalled at will to obtain specific or unnatural reverberation effects.

For more information, contact:
Rodney Pearson
Quintek Inc.,
4721 Laurel Canyon Blvd., #209,
North Hollywood, CA 91607.

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Eventide's incredible new SP2016 Effects Processor is here! And you can see it at the New York A.E.S. convention—booth 54. This new unit costs no more than an ordinary digital reverb (and thousands less than some), but its capabilities just begin where other digital reverbs leave off.

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delay—an incredible new effect. And phasing, flanging and chorusing too—the best you've ever heard.

Best of all, there's much more to come, because the Eventide SP2016 Effects Processor is totally software programmable via convenient plug-in ROM's. We'll be adding exciting new effects all the time! You'll even be able to create your own exclusive effects with our optional software development system.

Eventide's SP2016 has been in development for over three years. When you see and hear it at the AES show (and soon at your Eventide dealer), you'll know why—Building the best digital reverb was easy, but bringing you the best of everything took a little longer.

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Our top-of-the-line Series, the RX-7 is available from 16 in/4 out (pictured below) to 32 in by 8 out.

It's modular, and has features too extensive to cover here. When an RX-7 is more than you need, we make three smaller RX Series consoles that will more than get the job done: The RX-5A (8 by 2); The RX-6A (12 by 2); and the RX-5/16A (16 by 2).

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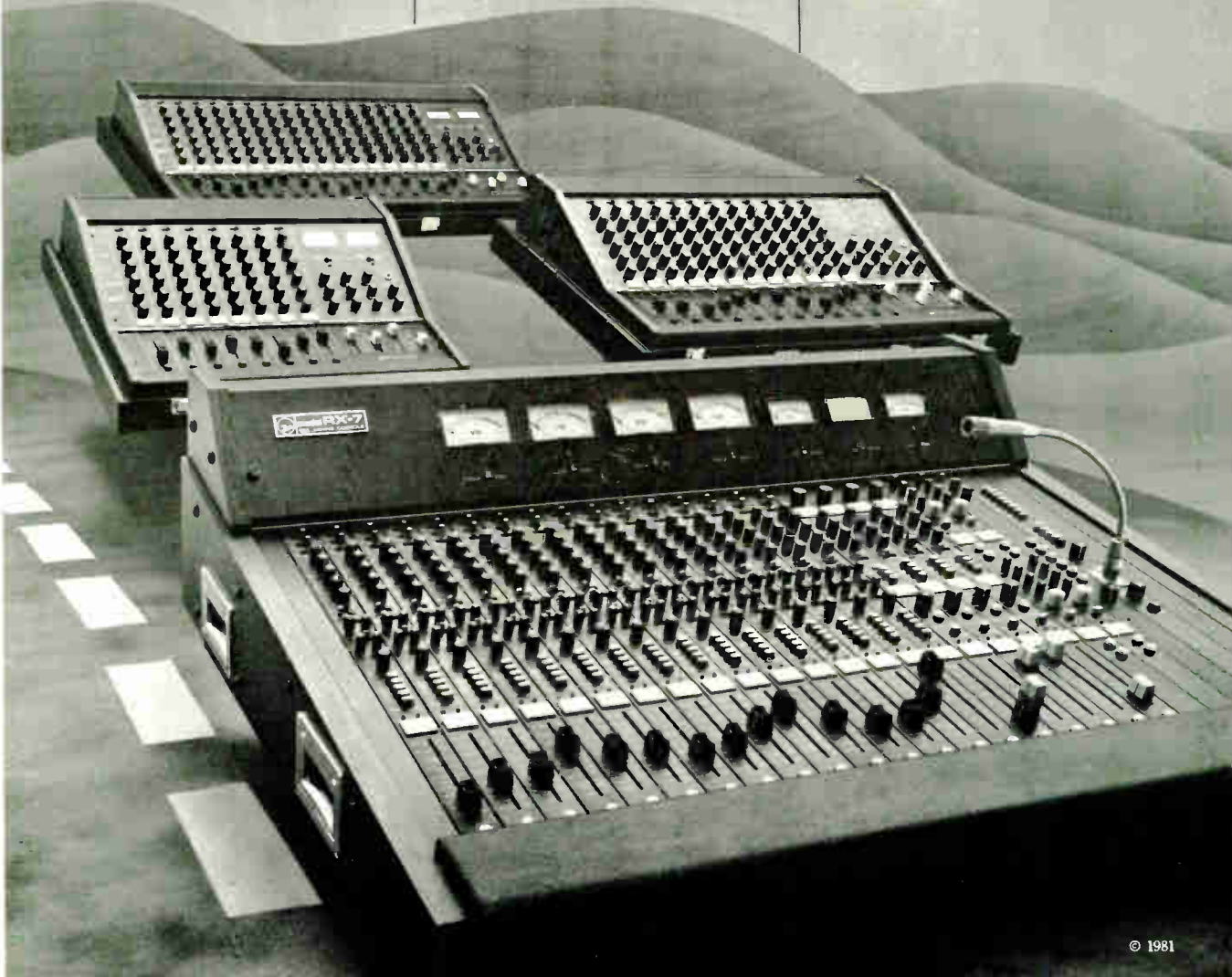
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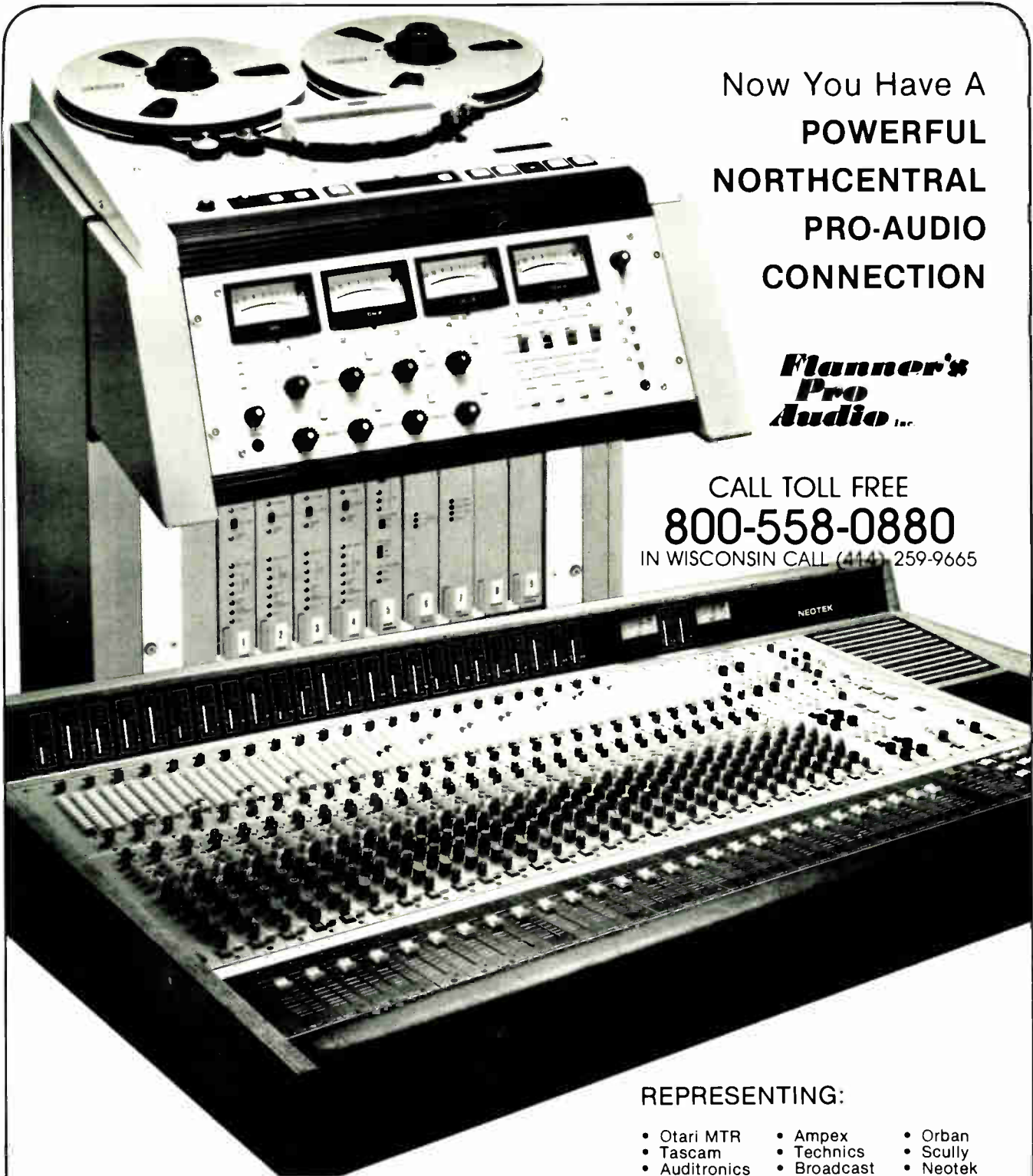
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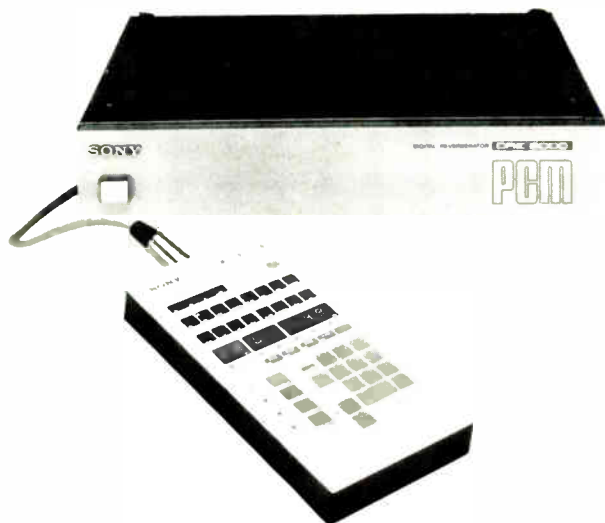
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Sony DRE-2000 Digital Reverberator

The Sony DRE-2000 Digital Reverberator

The DRE-2000 is a digital reverberator (16-bit serial format quantization) with four reverberation modes, two echo modes, and two delay modes. With built-in A/D and D/A converters, the unit interfaces directly with either digital or analog systems. The DRE-2000 is unaffected by external vibrations or mechanical shocks and consists of a main unit microcomputer which is rack-mounted and a hand-held remote keyboard for programming. Exclusive non-volatile memory protects against loss of program due to power loss or cable disconnection.

The DRE-2000 has a 10-program memory for storing and recalling various modes and qualities of reverberation, echo, and delay. Once selection of parameters have been made, A-B tests of different programs is possible, as well as immediate variations of programs in progress.

The parameters of reverberation the engineer can select are: early reflection delay time and its level, pre-delay time, sub-reverberation delay time and its level, and reverberation time. Reverberation time is independently controlled for the low, mid and high frequency ranges.

For time delay, the DRE-2000 offers two modes. In Mode 1, signals on both channels can be delayed from 1 - 999 milliseconds. In Mode 2, two different delay times are provided, 1 - 999 milliseconds for channel 1 and 1 - 499 milliseconds for channel 2. Frequency response can be varied by the use of low-cut (flat, 30, 50, 100, and 200Hz) and high-cut (flat, 2.5, 5, 10, and 13kHz) filters. Variables for the delay modes are delay time and frequency

response of outgoing signal, while those for the two echo modes are feedback factor, delay interval, and frequency response of outgoing signal.

The DRE-2000 features time displays of all selected parameters. Fine adjustments are made with the UP and DOWN keys, whereby the micro-computer automatically counts up or down from the value entered until the desired numeral is reached. The DRE-2000 can also be programmed to provide a buzzer sound each time keys are pressed to ensure failsafe program settings.

While echo and delay effects are simple to produce, reverberation requires extremely complex programs to simulate acoustic reflections which increase exponentially as time elapses.



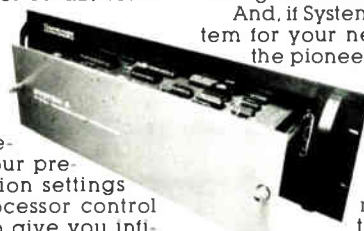
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System 5 has four individual reverb programs, four pre-sets, 16 equalization settings and the microprocessor control which combine to give you infinitely more settings than you'll

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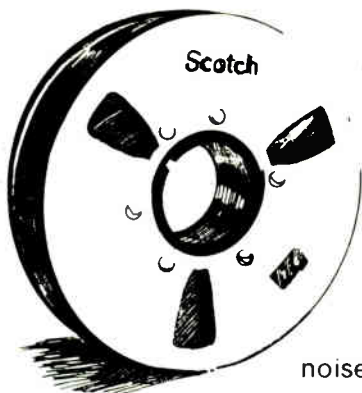


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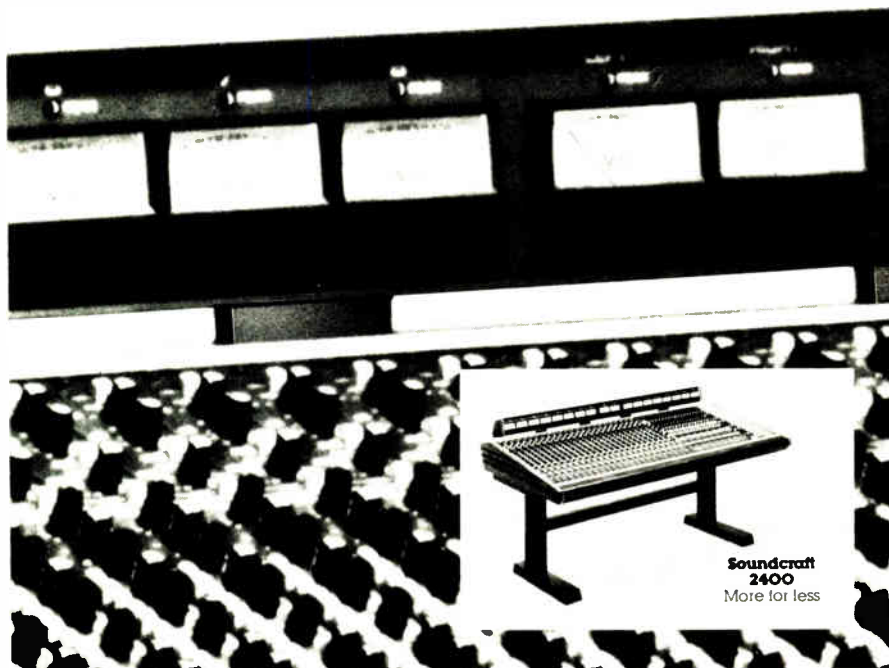
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The main rack unit weighs 34 lbs, 2 oz.; the control unit 1 lb., 2 oz. Price: \$15,000.

For more information, contact:
Rick Plusher
Sony Digital Audio
700 W. Artesia Blvd.
Compton, CA 90220

URSA MAJOR'S Model 8X32

URSA MAJOR's Model 8X32 digital reverberator is one of the newest entries into the field of high-end reverberation. The 8X32 is a sleek, compact unit that provides control over all important reverberation parameters, while synthesizing clean, natural reverberation.

Comprehensive LED and numerical displays give immediate confirmation of all parameter settings, and give them simultaneously. A unique LED display shows the levels of both the input signal and the reverberation being produced by the 8X32.

The 8X32 has memory comprising 64 non-volatile registers (they retain their contents even when power to the 8X32 is turned off), which permits storage and recall of 64 complete reverberation set-ups.

The 8X32 will be available at time of purchase with controls and displays on the front panel, in a remote unit, or both.

The 8X32 can be operated by simply recalling appropriate reverberation set-ups from the bank of 64 registers, with no need to program parameters in detail. Once recalled, the reverberation characteristics stored in a register can be modified and, if desired, the modified set-up can be re-stored in the register, allowing either temporary or permanent register editing. During the creative phase, the controls are used to adjust the various parameters until the desired reverberation effect is obtained. During this process, the LED displays show the exact values currently being processed by the 8X32, giving both an aural and visual confirmation of the adjustments. When a desired effect is established, it can be stored in any register designated by the user.



URSA MAJOR'S Model 8X32

The 8X32 provides broad control over reverberation synthesis. Four basic Programs simulate the reverberation of two different plate reverberators (a small, fast-diffusing Plate I, and a larger Plate II), a concert Hall, and an unnaturally large, echoing Space. Within each Program, additional delay times and levels of the Early Reflections and Initial Reverberation can be separately adjusted.

Early Reflections are those first reflections heard in an acoustic space between the direct sound and the dense, omni-directional pattern of reverberation.

Initial Reverberation is the last phase of the reverberation process before individual reflections are indistinguishable. The algorithm of the 8x32 provides a cluster of delays for Initial Reverberation, which makes for a smooth transition into the reverberant field. "Pre-delay" is set by the Initial Reverberation controls of the 8X32.

Within each Program, there are 15 possible Decay Times to choose from, extending all the way up to 20 seconds in Space.

Low Frequency and High Frequency Decay can be individually trimmed in each Program.

Two other features enhance the ability of musicians to "play" with the reverberation process during performances, and are especially useful with longer decay times in which reverberant decay can be used as an accompaniment. Input mute silences the input signal path so that no new sound enters the reverberator, leaving the prior reverberation to decay naturally. Reverb Clear empties the reverberator of its prior contents, regardless of the programmed Decay Time, then opens it up to build new reverberation.

URSA MAJOR has developed an efficient reverberation algorithm that permits an economical hardware realization, which, in turn, yields a high degree of flexibility and quality. The reverberation processor, itself a high-speed signal processing computer, is controlled by a microprocessor that supervises the user interface of controls and displays. As automated mixdown interface requirements are defined, the

8X32 will be able to accommodate them. Furthermore, program parameters in ROM will be amenable to occasional refinement and updating as factory and field experience evolves.

The 8X32 front panel measures 3½" x 19" and the unit is priced at \$5995.

For more information, contact:
Gerald Abels
URSA MAJOR, Inc.
Box 18
Belmont, MA 02178

The Quad-Eight System-5

While natural high-frequency reverberation is by no means "flat", HF reverb generated by the System-5, with a 14 kHz bandwidth, is not prone to severe transient loss or the unnatural roll-off curves inherent in restricted bandwidth systems. When a "natural" reverb is required, the System-5 provides the full bandwidth, allowing the user to determine the amount and characteristics of HF roll-off. This is achieved using the independent HF reverb time control and various EQ settings.

The simplicity of the System-5 control panel allows the user straightforward communication with the system. Machine controls are designed for the human, and there has been no compromise in the ultimate control flexibility. All control settings may be stored in up to four presets for instant recall later in the mix, or for making instant comparisons of trial settings. Optionally, all System-5 settings may be controlled by tape or disk automation.

The ability to remote the control unit using standard 3-conductor audio wire (including shield) allows the slim System main-frame to be mounted in a central or out-of-the-way location. If the System-5 needs to be used in another room, only the controls need to be moved.

Because of Quad-Eight's long-term roots in the film industry, it was deemed necessary to design a unit capable of scene changes. Scene changes (in terms of audio) may range from minor

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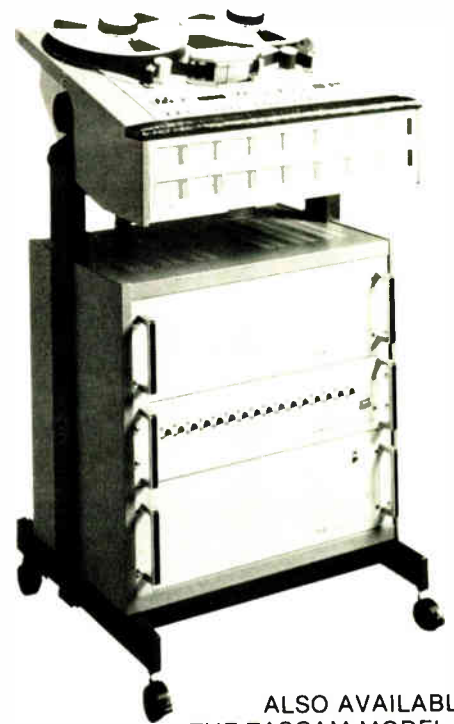


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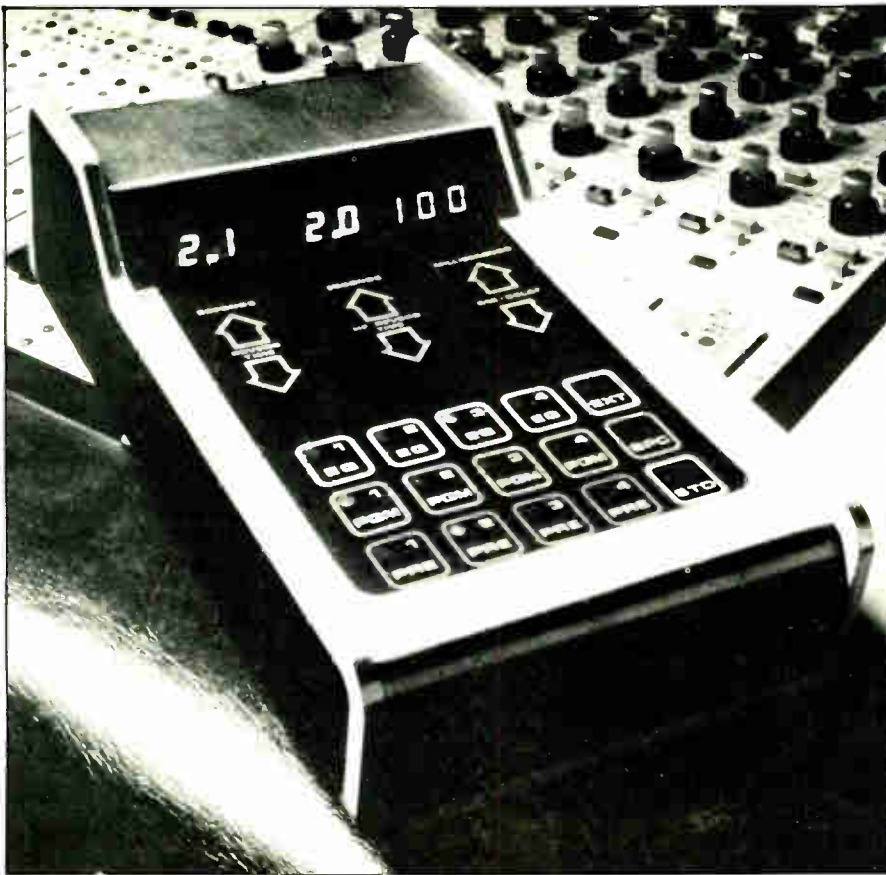
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Quad Eight System 5 Digital Reverberation Processor.

delay-time adjustments to the selection of a whole new reverb program. The System-5 is capable of program changes with no audible signal drop-out. There is no "recalculation" required between programs, therefore eliminating the .5 to 1 second delay that has plagued other digital reverbs.

The System-5 uses the most advanced VLSI (Very Large Scale Integration: IC technology, and nothing has been sacrificed in the ability to update programs. The echo, "space", and three reverb programs reside in standard EPROM chips that are user-changeable.

The System-5 costs \$8950 and the rack unit weighs 40 lbs.

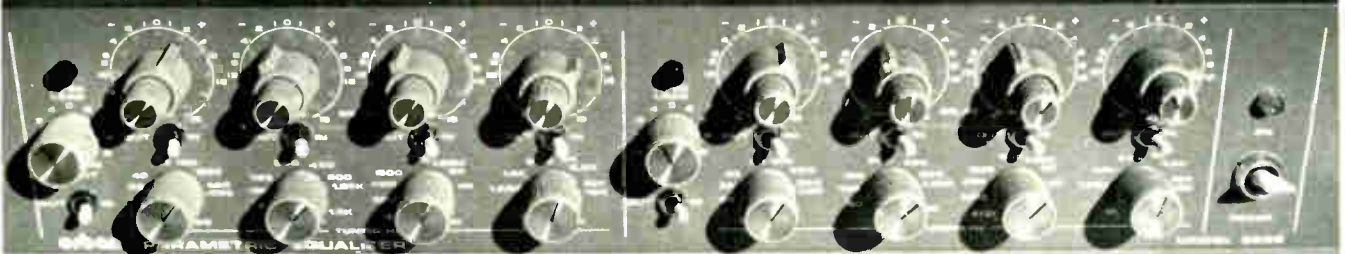
For more information, contact:
 Frank Stearns
 Quad/Eight Electronics
 N. Hollywood, CA 91605

The Eventide SP2016

Eventide Clockworks, Inc. has recently announced the introduction of its SP2016 Programmable Effects Processor, a 3½" high by 19" wide unit that has a wide variety of effects that include a digital reverb, phaser/flanger, a stereo delay line, and a flexible digital filter.

The Eventide SP2016 is not limited

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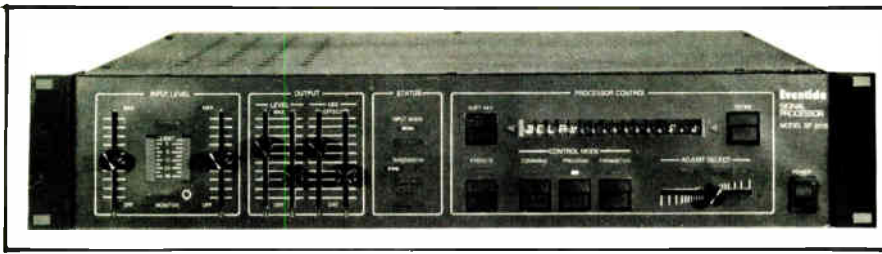
The Orban 622, unlike most parametric equalizers, is a Constant Q design, providing almost infinite cut instead of the reciprocal's 12 to 20dB. This means the 622 can be used as a notch filter, providing greater flexibility to the professional while reducing equipment requirements. Long experience has shown the narrow cut and broader boost curves of Constant Q to be more musically useful, while the bandwidth control still allows de-equalization of recorded material to exactly cancel a previous boost.

Remember—reciprocal may be more common, and perhaps cheaper, but Constant Q is more useful for the demanding professional. Rugged construction, stability, reliability and responsive product support all make the Orban 622 the professional's choice in Constant Q parametrics.

For a copy of our 622 brochure and "How to Choose Equalizers" article, see your Orban pro-audio dealer. Contact us for names of dealers near you.

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Eventide SP 2016

simply to reverb program software; it can create totally new effects. Selective Band Delay, for example, allows the engineer to separate the signal into a number of frequency bands and then to delay each band independently up to 3.2 seconds in one hundred micro-second steps.

As Eventide continues to release additional software effects plug-ins, the SP2016 becomes even more versatile and talented. In fact, Eventide will be offering a software subscription service, with new effects appearing on a regular basis—An "Effect of the Month Club"!

Although most studio users will probably rely on factory-produced plug-in software, interested researchers and educators can program the unit in the field. Eventide will introduce a system for program development and the factory will support and encourage an ongoing user information and software dialogue.

Because the SP2016 offers so many functions and so much flexibility, special care had to be taken with the design of the control system to avoid an unmanageable array of front panel knobs and switches. The result is splendid simplicity. The SP2016's computer guides the user through all control functions, one clear step at a time. An alphanumeric "marquee" readout keeps the user fully informed at all times as well as offering set-up HELP when requested. Program parameters (such as delay time) can either be preset for later use of "live-edited".

User presets are non-volatile and cannot be accidentally lost, even if power is disconnected. If previously stored parameters are changed, the unit will continue to remember the original values for easy return to preset. Depending on the specific programs installed, up to 32 different effects can be called up from memory (without chang-

ing plug-in modules) with up to 18 presets on each program. Also included on the SP2016 is the most advanced self-test capability ever designed for a professional audio product. The unit can even display the part number of a defective I.C.

The SP2016 is a two in and two out unit with a dynamic range of 86 dB. Bandwidth is 16 kHz or 8 kHz depending on the program in operation. Price is in the \$9000 range.

For more information, contact:
Suzanne Langle
Eventide Clockworks, Inc.
265 West 54th St.
New York, NY 10019

DeltaLab Acousticcomputer

The DeltaLab Acousticcomputer® is a two-channel digital effects processor designed to provide true stereo effects (including digital delay, double and triple tracking, flanging, echo, cardboard tube echo, slapback, resonance, rotating speaker, chorusing, vibrato, etc.), as well as reverberation, ambient synthesis and extraction.

The way this all comes together is through two independent delay lines (channel A and B which may remain independent or may interact with each other depending on which mode of operation is selected.

Channel A has delay from .25 ms to 160 ms, while channel B goes from 1 m to 92 ms in stereo (parallel) mode. By switching to serial (mono) mode, channel B delay is added to the end of channel A to extend maximum delay time to 252 ms.

Both channels may be recirculated either in or out of phase with the frequency response of the recirculation being user controllable to simulate hard or soft surfaces.

In addition both input and output channels may be phase blended in a frequency-weighted fashion to provide ambient extraction. To understand how this work, imagine two microphones spaced equally distant from a vocalist. Connecting both microphones to a balanced line input would in theory, result in no output from the balanced line as the two identical signals would cancel from the addition of the in-phase and inverted (out of phase signal). In practice the cancellation is not ever perfect since reflections arrive at the microphone from walls, floor and ceiling, all at slightly different times due the differing distances the sound must travel. This is, in essence, what the Acousticcomputer simulates electronically by virtue of the image controls.

Furthermore, selected delay taps within the device have a binary address code or number between 0 and 15. The user may select any number and regenerate four delay taps to create reverb while simultaneously selecting the time before the onset of the recirculation (pre-reverb delay). This can be further enhanced by internally sweeping the delay times via the unit's built-in voltage controlled oscillator. The effect of this is to prevent delays being constantly recirculated at the same time. By sweeping the delay time, "boinginess" caused by recirculating delay can be greatly diminished.

While reverberation is not the Acousticcomputer's intended primary function, the unit will provide good reverberation approximately equipvalent to that provided by a medium-priced spring reverb. By simultaneously creating reverb internally and extracting ambience contained within the signal fed to the unit, some very striking room simulations may be obtained. Coupled with the unit's primary applications as a digital effects processor and stereo delay line, the Acousticcomputer's reverb facilities should be viewed as "the frosting on the cake." The Acousticcomputer has a suggested retail price of \$1850, measures 1 3/4" x 19" x 10" and weighs 12 lbs.

For more information, contact:
Wayne Morris
DeltaLab Research, Inc.
27 Industrial Ave.
Chelmsford, MA 01824

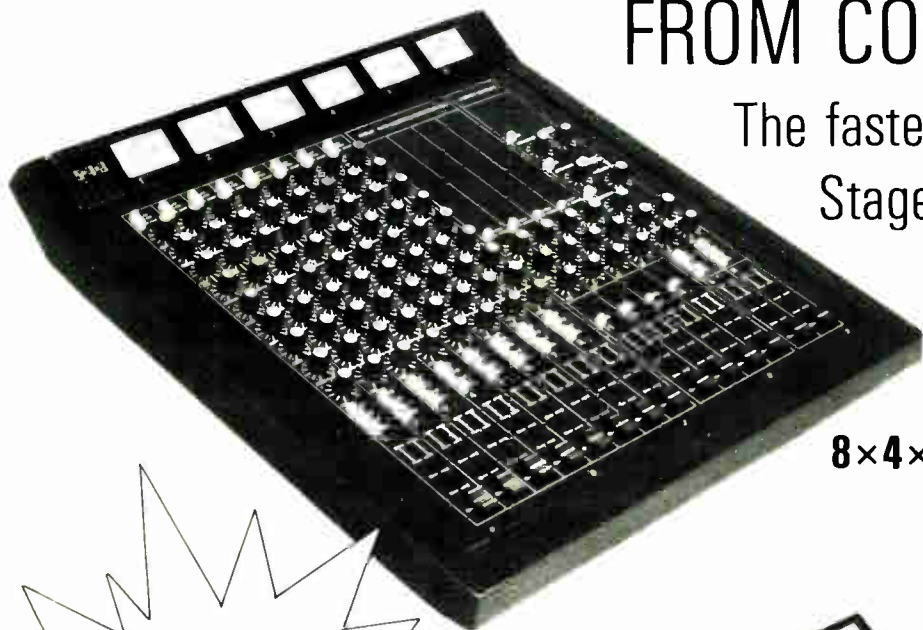
DeltaLab DL-2 Acousticcomputer



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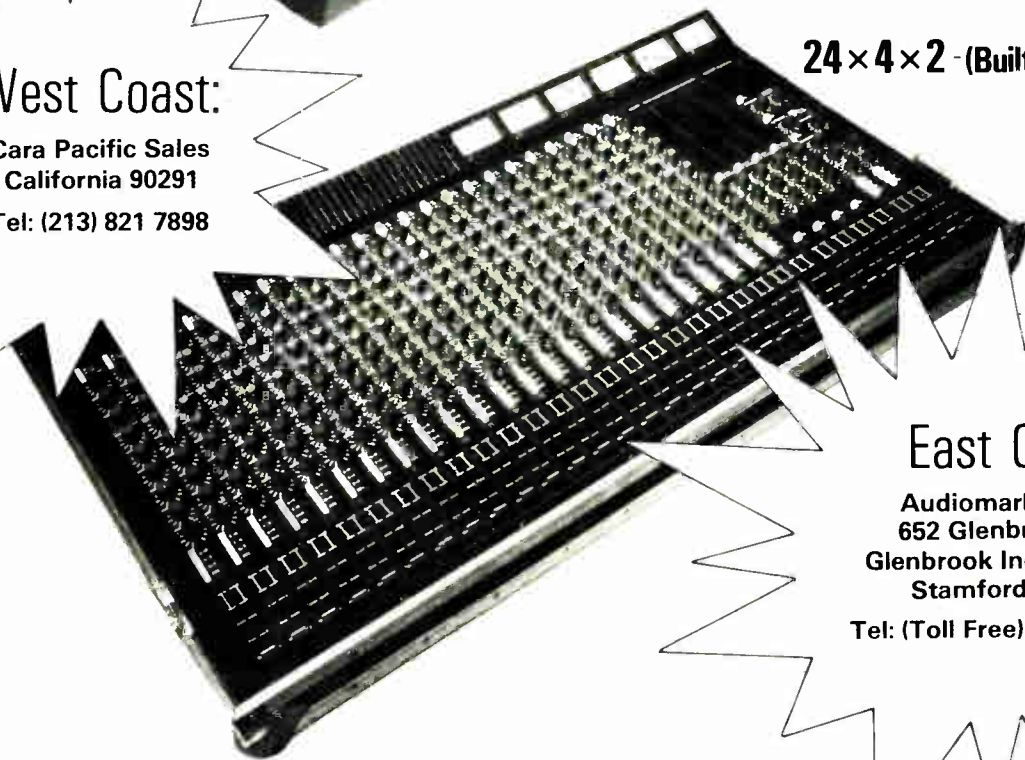
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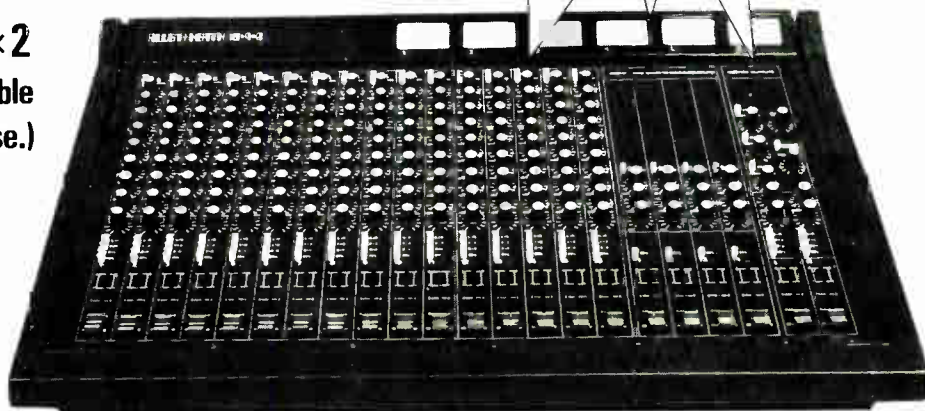
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by Cary Baker

Chicago has variously been heralded as Convention Center of the Nation and Hog Butcher to the World, as well as architectural capital of America and the hub of organized crime.

One of the city's less-heralded distinctions is that Chicago once was the epicenter of the recording industry. Few are aware that any record company existed between the coastal bastions of New York and Los Angeles. No museum preserves its artifacts. Many of its proponents have left town or died, making documentation a difficult task. But Chicago once hosted corporate headquarters or recording facilities for such labels as Columbia, RCA, Decca, Vocalion, Brunswick, Vee-Jay, Chess,

CHICAGO'S GREATEST HITS

USA, Mercury and Curtom.

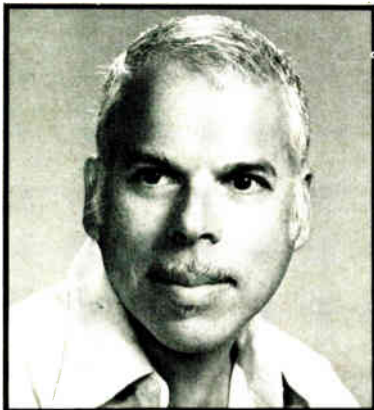
Columbia Records prefixed the catalogue numbers of its 78 RPM disks recorded here with a "C." Mercury, many decades later, portrayed the Chicago skyline on its label. But somewhere along the way the city that forms

the nation's largest retail market kissed its vinyl magnates goodbye, despite the teeming talent pool that remains to this day.

Such moves, of course, did little to affect the record-buying public. The "Hot 100" can still be found at anyone's neighborhood record store. But precious few of those records were made in the Windy City.

Recording activity still exists, as attested to by an ever-growing number of

Murray Allen and Universal Studios



by Cary Baker

Going on 35 years, Universal Recording Co. has been the leading recording studio in Chicago and a leader in the national black contemporary record market. But, according to Universal president Murray Allen, current chart records by the likes of the Manhattans, Dells, Chi-lites and Bobby "Blue" Bland represent only the tip of the iceberg. The facility is equipped to handle 24- and 48-track

recording, digital and analog work, filming, film mixing and transfer, jingle and narration recording, disk mastering and tape duplication.

Murray appeared on the scene at Universal in 1961, as a tape editor for then president Bernie Clapper. A reed musician with a fascination for the technical and a masters degree in music, Allen purchased the studio in 1975 after Clapper's death. Since that time Allen has molded the studio with his techno-musical expertise. Not afraid to be first, he is one of digital recording's strongest proponents and has gone to great lengths to make sure that Universal leads the way in the demanding interface of audio and video. His progressive outlook has led him to the current presidency of the Society of Professional Audio Recording Studios, where he has stimulated the growth in membership by encouraging communication and shared technology.

Though prominent in the national studio arena, Allen believes strongly in the Chicago music scene and says that Universal "does its best to promote the local music and act as a traffic agent."

"Chicago has always been a good r&b town. The rhythm sections are good and so are the background vocalists. The arrangers and producers are strong. That comes out of the Chess and Vee-Jay days. As for the pop market, we did the keyboard overdubs for Styx' *Paradise Theatre* and
(Cont'd on page 30)



VEE-JAY RECORDS

studios. A number of fine speciality labels—most notably Alligator, Flying Fish and Delmark—found Chicago a desirable home base both for its abounding talent and receptive marketplace. The Chi-Sound and Curtom (now called Gold Coast) labels have accrued a respectable number of hit records in the soul market, but both have enlisted with coastal labels for distribution.

Whatever sparks of encouragement remain, it's a far cry from years gone by.

The Beatles' very first American recording contract was with Vee-Jay Records, then headquartered at 1449 S. Michigan Ave. The Rolling Stones frequently visited the home of their favorite American label—Chess—paying tribute to its address in their song, "2120 S. Michigan Ave." Hit artists like the Four Seasons, Chuck Berry, the Shadows of Knight and Jerry Butler topped the national hit parades from labels and studios in Chicago. And, as many of the smaller independent labels fell off, Mercury continued to keep

(Cont'd on page 30)

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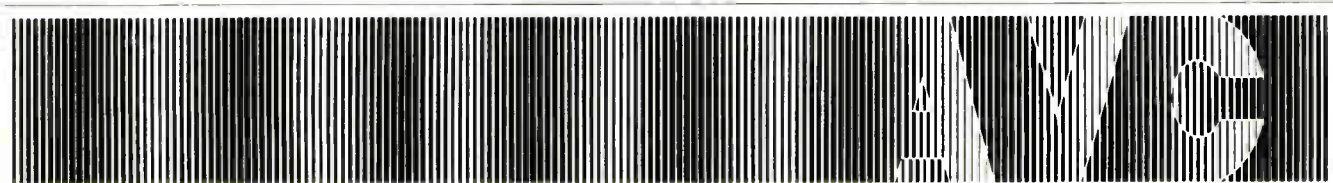
*Barry Fasman,
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(Cont'd from page 28)

Champaign's LP here. If that breaks, you'll see much more of that at Universal," Allen says.

Universal boasts a proud history in its own right. Originally located on the city's far North Side, Universal relocated atop the Kemper Insurance building (during which time the studio debuted the echo chamber on a Harmonicats recording), later at 101 E. Ontario (where stereo was introduced) and finally its present building at 46 E. Walton just off Chicago's Magnificent Mile, in 1957.

Room for expansion is Universal's present drawing card, its 'Studio A' is large enough to accommodate the world-renowned Chicago Symphony Orchestra (who recently set up there to record a spot for Seaworld).

Universal, of course, has competition along the Magnificent Mile in Chicago Recording Company, Paragon and Streeterville studios, plus suburban facilities like Pierce Arrow, Pumpkin, Shade Tree and Hedden West. But with an estimated 240 chart records since the early '60s, Universal is still Chicago's leader. ■

(Cont'd from page 28)

Chicago on the map with Rod Stewart, 10 CC and Chuck Mangione under ex-



ARGO Records

clusive contract. When Mercury packed its bags for New York last summer, an era ended.

How did the Second City become a distant "Third City" for the recording industry? Murray Allen, president of the 36-year-old Universal Recording Co., puts it in a nutshell: "Traffic attracts

traffic. People simply want to go where the action is. If Chicago had gambling and major nightclubs, you'd see a tremendous amount of action."

Recording activity in Chicago appears to have started in the 1920s and 30s at which time the fast-paced major labels shuffled their studios from one city to another. Invariably, all roads led to Chicago.

Brunswick Records had studios in the Lyon-Healy Building, at Wabash and Jackson. Columbia built studios in the Tribune Tower, across the street from the Drake Hotel at Michigan and Oak, and in the Furniture Mart. RCA had their studios at 1245 N. Lake Shore Drive.



Brunswick Records

What stood in the way of the major labels keeping their Chicago operations?

"Unions," believes Bob Koester, president of the Chicago-based Delmark label and student of jazz and blues history. According to Koester, "James Petrillo, head of the local [musicians] union in 1936, felt that records were ruinous to the live music industry. The upsurge of juke boxes and radio stations playing records were killing live music. That basically killed the pop record industry in Chicago. In fact, RCA opened a studio in suburban Aurora."

Hillbilly and blues musicians were exempted from the union block which probably helped to bring Chicago its reputation as blues capital of the world. Harmonica players only became acknowledged when the Harmonicats scored with hits they'd made in Chicago. The unions eventually loosened their hold, but by then Los Angeles had stolen the limelight. Until the mid-30s, "Chicago had just been another stop on the circuit that included Texas, New Orleans, Atlanta and St. Louis," according to Koester.

One notable figure in Chicago recording was RCA's Lester Melrose. A downstater of Irish descent, Melrose

operated a grocery store on 63rd St. in the early 20s. In 1922, he and his brother opened a music store on Cottage Grove and chanced upon the publishing rights for several Jelly Roll Morton and King Oliver jazz compositions. By the 40s, Melrose had become RCA's producer in Chicago, and the label's Lake Shore Dr. studio was swinging to the blues of Sonny Boy Williamson, Tampa Red and Blind John Davis.

Post-war times saw the supplantation to the majors by independent labels. In the 50s, there was Chess Records (originally Aristocrat), owned by former nightclub entrepreneurs Leonard and Phil Chess, featuring their star talent Muddy Waters. In time, Chess had signed Howlin' Wolf, Little Walter, Chuck Berry and Bo Diddley. "Around 1951, Leonard Allen's United and States labels were stronger than Chess," says Koester. "Although Muddy Waters got a lot of the glory, people never made movies like *Rock Around the Clock* with artists like him. Muddy didn't make the Chess's rich. Chuck Berry and Bo Diddley did, and later Ramsey Lewis and Ahmad Jamal."

Muddy, along with his label mates, did make the Chess brothers legendary. With a golden decade of hits, Chess was easily one of the nation's hottest independent labels by the late 50s. With Chess at 2120 S. Michigan Ave., Vivian and Jim Bracken were going from height to height with their Vee-Jay label at 1449 S. Michigan Ave. Vee-Jay started with bluesman Jimmy Reed and doo-wop vocal groups the Spaniels and Eldorados, and hit a groove ten years later with Gene Chandler ("Duke of Earl"), the Four Seasons ("Sherry"), Betty Everett ("You're No Good") and even the first recordings of the moptopped Fab Four, whose "Please Please Me" reached No. 3 in *Billboard* in February, 1964.

Of course, the Beatles soon fled to Capitol/EMI and took their Vee-Jay masters with them. And on January 15, 1964, Vee-Jay was served with an injunction against manufacturing or distributing recordings by the Beatles, who claimed non-payment of royalties. Finally, Vee-Jay accepted a license from Capitol to sell its product with a substantial royalty payment enforced. This was the beginning of the end for Vee-Jay. The label relocated briefly in Los Angeles, then moved back to Chicago, pared to the basics. In May, 1966, Vee-Jay closed its offices and released its employees. A *Billboard* news item was headlined: "Curtain Down on Vee-Jay As Liquidation is Ordered."

Chess had meanwhile moved to its own building at 320 E. 21st St., a move that put every facet of the recording

business at their fingertips, from in-house pressing to distribution, as they continued to turn out hits by the Dells, Ramsey Lewis and Etta James well into the 60s. Then, on October 16, 1969, founder Leonard Chess—the man whom bluesman Little Milton described as “having all the deals in his head”—passed away. Brother Phil Chess left to run radio stations WVON-AM and WSDM-FM (now WLUP). The company was sold to the GRT Corp., moved to New York, was sold by GRT to All Platinum Records in Englewood, N.J., where its valuable master tapes now lay dormant.

The 60s saw other local labels



Mercury Records

make successful showings in the national market. USA records, which had changed hands perennially since its early 60s origins, went Top 10 in 1967 with the Buckingham's “Kind of a Drag.” Unfortunately for USA, the Buckingham's soon left for Columbia's greener pastures. Dunwich Records, then owned by Bill Traut and restaurateur George Badonsky, scored No. 1 its first time out with the Shadows of Knight's “Gloria.” The success never repeated for Traut until a single on his Wooden Nickel label by then-unknown Styx, “Lady,” hit in the mid-70s. Traut has since left for Beverly Hills, where he's negotiating recording contracts, and has launched a jazz label, Head First.

The New Colony Six released several local hits on their Sentar label, distributed nationally by Neil Bogart's Philadelphia-based Cameo/Parkway Records.

Carl Davis, former CBS staff producer, became artist and repertoire director for Brunswick. While Brunswick's main office was in New York, Davis re-opened the old Vee-Jay headquarters at 1449 S. Michigan Ave. During the middle 60s, Davis broke artists like the Chi-Lites while infusing new blood into the careers of Jackie Wilson and former Ramsey Lewis accompan-

ists Eldee Young and Red Holt. Later, he launched a sister label, Dakar, with a series of smash hits by soul man Tyrone Davis.

However, trouble started when Brunswick president Nat Tarnepol was convicted of giving payola to DJ's. Carl Davis was acquitted of all wrongdoing.

In 1976, Davis left Brunswick and formed Chi-Sound Record. Many of Brunswick's superstars—the Chi-Lites, Gene Chandler and Otis Leaville—followed. And today, Davis is one of the city's most successful hit producers. He admits his frustration, however, with a deal in which Chi-Sound is distributed by 20th Century Records, which in turn is distributed by RCA. It's no wonder that one of Chicago's oldest surviving vocal groups, the Dells, Jumped to 20th Century Records.

“We're two generations down,” he says. “After I signed with 20th, they decided to go with RCA.” In the interim, Davis has launched an independently-distributed label called Kelli-Arts.

Former leader of Vee-Jay's Impressions, Curtis Mayfield, opened shop with the Cutrom label in the late 60s, scoring hits with the movie soundtrack album from *Superfly* and the single “Freddie's Dead.” Just recently, Mayfield joined the list of Chicago emigrants, having left for Atlanta. Mayfield's business manager, Marv Stuart, continues to produce recordings by Linda Clifford and Ava Cherry on the new Gold Coast label, headquartered in Cutrom's Lincoln Avenue studio.

When many of the early labels folded, Mercury wasn't an open door. Jerry Butler, Gene Chandler and the Four Seasons joined the Mercury family when Vee-Jay closed shop. Mercury's origins, like that of Vee-Jay and Chess, were steeped in rhythm & blues with early artists like Dinah Washington, Sarah Vaughan and Junior Parker. The early 60s brought a move from 839 S. Wabash to 35 E. Wacker, and Mercury's purchase by the North American Philips Corporation.

By 1973, Mercury had relocated once again, to One IBM Plaza, and developed a roster spearheaded by the Ohio Players, Rod Stewart, Thin Lizzy, 10 CC and others, although all of the aforementioned artists eventually jumped ship to other labels. Meanwhile, North American Philips acquired Polydor, RSO and Casablanca Records, forming the PolyGram Group of record companies. And Mercury, the last surviving Chicago major, uprooted in July 1980, bound for New York.

“When most other companies abandoned the Midwest, it turned out

to be a bonanza for Mercury,” PolyGram chairman and former Mercury president Irwin Steinberg says, reflecting on the label's Chicago heyday. “Many of the acts we developed—Kool & The Gang, the Gap Band, Con Funk Shun and the Bar-Kays—came out of the Midwest.”

According to Steinberg, who joined Mercury as controller in the late 40s, “PolyGram was a European-oriented company. It made sense to consolidate and be able to focus contact between Europe and the record companies in one central location. New York was chosen.”

Steinberg moved to New York to help orchestrate the consolidation, but to this day maintains an apartment in Chicago.

Mercury's sole corporate representation in Chicago is a branch sales office in suburban Schiller Park. But Steinberg, a Chicago native, continues to believe in the Midwest talent pool. “When people think of entertainment, New York and Los Angeles come to mind. Still, somebody who knew how to work it could establish a very viable record company in Chicago,” he says.



Mercury Records

Robin McBride, former Artist and Repertoire Director for Mercury, and now president of his own Chicago-based VU Records, believes, that “Mercury had no choice but to move. It made sense to be here 15 years ago because they started here and had emotional ties. Unfortunately, now that they've moved, Mercury doesn't look to Chicago very much anymore.”

For McBride's new label, it's make or break in Chicago. “I don't know if either coast would serve my purpose,” he says. “I'm excited about the talent in Chicago.”

For the “North Side Trinity” of Delmark, Flying Fish and Alligator, it's business as usual. Alligator president Bruce Iglauer received an offer from

(Cont'd on page 34)



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PRODUCERS DESK



JOHN RYAN

by James Riordan

John Ryan has had considerable success with acts which, while established, have not had a hit for some time. He has breathed new life into records by such top artists as the Climax Blues Band, Pure Prairie League, Rare Earth, The Allman Brothers; and has scored substantial hits for Styx, Doucette, and Black Oak Arkansas, to name a few.

"A big part of my job is reacquainting the artists with the sound and power they had as a group, both in terms of songs and whatever it is that was special about them such as the guitar sound of the Allman Brothers or Gregg's voice for example. The first thing I do is try to identify what it is about the band that people really want to hear and then I try to incorporate that into really great songs. In a sense I try to rehabilitate what was already there initially."

Ryan's most recently completed project was with The Allman Brothers, resulting in their current hit single.

"We did the Allman Brothers in Nashville. It was very good to work

there and I've done two records in a row there. It's a good environment for a band because you can go fishing and there are some hotels that really accommodate musicians. Of course there are a lot of good players there, and with the country musicians it is a different lifestyle. Working with the Allmans was great. The hours were crazy. Sometimes we'd start at 11 p.m. and leave at seven in the morning. I saw the sun come up more than I have on any other album, but it is a real strong record so it was worth the effort. Normally I work during the daytime but they're so used to playing live they like to get up in the afternoon. They're really good to work with.

"A lot of acts lose touch with their creative identity when they make a lot of money, but this was never the case with the Allman Brothers. Even though they sold millions of records, a lot of that money never got into their hands through a bizarre set of circumstances. Now they're coming back with a whole new set of business people around them and they're not going to make the same mistakes. They still live in the South and

they haven't removed themselves from the influences they had in the beginning."

Ryan is also working with some new artists and has just done an album for Badlands Records (distributed by Columbia) on Gregg Guidry.

"Gregg wrote one of the songs on Climax's album and I have liked his writing for a long time. I have a few other people in the Midwest that I'm going to work with also but the time factor has been real difficult. I'm doing Larry Lee from the Ozark Mountain Daredevils. He sang "Jackie Blue" and he has a very unique voice. After that I'll be doing the next Climax album and I'm going to do an album with the Ozark Mountain Daredevils as a group later this year."

Ryan's work with the Climax Blues Band has resulted in two Top Forty singles including the recent smash "I Love You".

"That was written by Derek Holt of the band. Climax is a very unusual band because basically they started as a blues band and they have a couple of really, really good songwriters in the group. Each guy has a completely different approach to songwriting. We just had a Top Ten record with them and I believe they are going to do some very great things."

Ryan got his start as a producer when he was a disk jockey as WGLD in Chicago. "I kind of backed into it with Styx and wound up doing the first few albums. I started going to their rehearsals and helping them arrange their songs and the next thing I knew I was producing them. "Lady" was the first record I ever really produced.

"The Midwest is really a great place for talent. Record companies have had a tendency to focus on the coasts and I think it's great that bands like REO and Styx are topping the charts now."

Although it's been years since his deejay days, Ryan says his roots are still in radio and that it is still a valuable part of his methods today. "I was working at a college radio station while I was in school and it gave me a lot of knowledge about the medium and its power which I still try to incorporate into the records that I make. I always loved to listen to a lot of music. I use to blow thirty or forty dollars a week on records and that's when albums were only \$2.98 and at night I'd go to the black

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clubs all around Chicago. I still think in terms of radio in that I try to envision what an artist's records need to sound like to be on the radio. I then take ten steps backwards and go from point A to point B trying to fill in the blanks and conceptualize what a hit record by this particular artist will be. Radio is very much the catalyst that takes it from the business world of the record companies to the public, and if you don't get the enthusiasm from radio you can forget the rest."

Like many producers John Ryan believes in a lot of advance preparation before entering the studio. "It depends on the artist's schedule, of course, but I have a pretty good idea of what I want before I go into the studio. In pre-production I conceptualize what is happening and usually nail most of the songs down. There are exceptions. "Lady", for example, was actually written while we were mixing the Styx album, but that usually doesn't happen. I like to go in fairly well prepared with at least some idea of a certain number of singles, a certain number of AOR cuts, and to have a combination of different types of music on the record so that we can get different kinds of radio stations playing the record. My philosophy is to find what the group's sound is and incorporate that into great songs that are accessible to radio and put the sort of spontaneity the band can generate live

onto the tape. I think if you can do those three things you'll do real well."

Ryan is also a big believer in the value of good songs. "Even a name group can't afford to put out an album with mediocre material. If the band has seven great songs I'll go out and find three others to give us ten strong songs for the album."

As far as advice to would-be producers, "There's nothing more valuable for experience than finding something you believe in and doing it. If it hadn't been for Styx and my getting involved I don't think I'd be sitting here today. It's also very important to learn about the business and not just the studio. Learn about radio and especially about songwriting. If a producer/engineer has a fault, it is usually that they don't have a strong enough background in songs. I think it's essential to know about songwriting if you're going to work with artists in the studio. You have to be able to tell the difference between a great song and a mediocre song. You have to be into melody and lyrics and be able to listen to records on the radio and know why they appeal to people. The sound of a record is very, very, important—but you've got to have great songs. The greatest drum sound in the world won't make it without the right music. The idea is to have great recordings of great songs." ■

(Cont'd from page 31)

United Artists Records to move to Los Angeles in 1972 to produce blues records, but declined in order to remain in Chicago. Eight years later, Alligator has developed into one of the more prolific and aggressive blues and reggae labels in the country from his base in an Edgewater frame house.

New blood has come into the city in the form of the new Third Coast and Taxi labels in Evanston and Skokie, respectively. And, at 2120 S. Michigan Ave.—Chess' former home—producer Gerald Sims has updated the facilities, featuring a new 24-track studio, and forming the Gerim label.

Universal's Murray Allen is not leaving Chicago either. At the time we called, he boasted the Styx's *Paradise Theater*, Champaign's *How 'Bout Us*, The Manhattans' *Shining Star*, and Gene Chandler's "Get Down" were all recorded at his Walton Street Studio. Universal and its Magnificent Mile counterparts—Chicago Recording Co. and Streeterville Studios—are also instrumental in the burgeoning advertising jingle trade, which, he says, "all popped up in this neighborhood because the agencies are here. And the agencies are here because they want that Midwest mentality. As Budweiser says, they don't drink beer in New

York—how can they sell it?"

"In the future, the music and jingle recording trades will separate," Allen adds. "You'll see recording studios popping up all over town."



CHESS Records

Carl Davis of the Chi-Sound and Kelli-Arts labels concurs with Allen's optimism. "Chicago has a lot of music coming out on labels in other cities and we're not getting a lot of credit," he says. "We cut Natalie Cole's biggest record in this city, as well as Peabo Bryson and Styx. Maybe one day, people will become aware that Chicago's still a vital record town." ■



by Deborah Harter
of Convergence Corporation

(ed. note: For the next couple of installments of Video Interface, we will be investigating video editing alternatives as presented by several leading manufacturers in the field.)

Editing systems are now available in sizes and configurations to suit every application. The trick is to find the one that meets your needs. You don't need a tank to hunt rabbits.

A basic system is a cuts-only or news-style edit controller. It works with one Source and one Record VTR. Control track is standard but SMPTE time code is an option for those who require critical frame accuracy. Such a system is essentially portable. It can easily be installed in a van or set up in a hotel room for end-of-day editing while on remotes. In addition to news or documentary style programming, cuts-only systems are often used by feature film and video producers to do initial rough cuts. Since the system is relatively simple, almost anyone can learn to do basic editing in about an hour.

Though these are basic systems, many have borrowed features from their more sophisticated brothers. Many have full status displays that tell tape location, VTR mode and allow for the keyboard entry of tape time numbers. Small microprocessor-controlled edit controllers can also do some calculating that can save the human editor time and frustration.

The next big step is into A/B roll editing. Now you're talking about at least two Source VTRs (A and B) in addition to the Record VTR. Each Source VTR must have a time base corrector to aid in synchronization and color phasing. This system also requires some kind of special effects generator.

A/B roll editing means that you are rolling both the A and B Source VTRs at the same time in synchronization in order to mix their signals. The most common A/B roll is a dissolve. Most special effects (wipes, keys, etc.) are the result of A/B roll editing. On a sophisticated edit controller like the Convergence ECS-103B, all effects can be called up from the editor keyboard and previewed in a matter of seconds. Generally this is done with the help of a series of questions or prompt sequence from the controller.

A special kind of an A/B roll is a

sync roll. This is often used for concert material that has been shot by several cameras, each with its own individual VTR. In post-production, these tapes can be run in sync and cutting is done on-the-fly as though the edit controller were a production switcher and the concert live. Unlike live production, however, if your finger slips or if you

Editing Symposium

decide you don't want to cut on that last beat, you can go back and re-do the edit as many times as you like.

The most elaborate and intelligent controllers around are the List Management editors. These controllers give the editor maximum flexibility in making changes in a program. They are a necessity when doing a program that will have a series of rough cuts and revisions before a final cut is made. Several film makers are starting to use such systems to do feature film editing.

The heart of a list management edit controller is its memory...that is, its ability to store internally a list of all the edit points selected, reel numbers, and a brief description of the edit. Using this list, the same edit controller or a similar one across town can automatically assemble a program from the original material. If you want to change a scene you can just change the numbers in the list and have the program completely auto assemble to show you the new version.

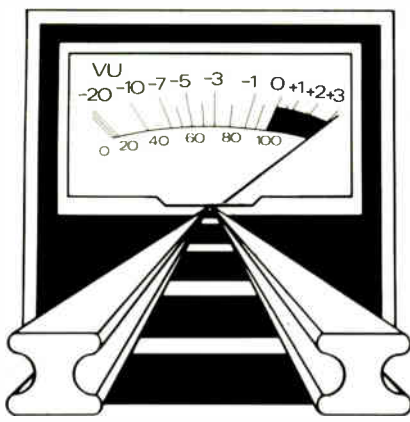
A list management editor may or may not be set up to do A/B rolls, but it

will be able to write effects into its list for auto assembly later. Most full-blown list management systems will be configured to do the final on-line auto assembly with effects. Such a system might have three Source VTRs, each with time base correctors, a disk drive or paper punch for permanent storage of an edit list, and possibly a printer for adding comments to the edit list. It would also usually include a switcher for special effects.

Typically, a film maker or video producer would shoot his original material in the best format he can afford: 35mm/16mm, one inch, two inch, or three-quarter inch tape. From this original material, small format ($\frac{3}{4}$ " or $\frac{1}{2}$ ") work tapes are made and time code added to one of the audio tracks. Some producers also have the time code numbers burned into the picture for visual reference. These work tapes would be used to make the first rough cut. Now everyone gets to review it and make his comments. Inevitably, this leads to a second rough cut and probably a third. Since these are work tapes no one worries too much about picture quality or damaging the tape. The main purpose of this off-line editing is to generate a perfect list.

After all the changes have been made the list may be a patchwork of inserts, re-dos, and overlaps. This is known as a dirty list. If you use a dirty list to do your auto assembly, it will go through all the same mistakes and re-dos that you went through off-line. Not only is this a waste of time, but such a list may contain contradictions that will confuse a computer. The safest thing to do is to clean your list. The best procedure for doing this is a program called "409," named after the spray cleaner. This routine cleans the list of overlapping or redundant edits automatically.

From simple to sophisticated, there is an edit controller out there that is just right for your project. The hardest part is to figure out what you really need. The best plan is to shop around and visit various post-production houses and let them tell you the advantages of their systems. Some may have special audio set-ups or character generators or digital effects. Also try to get your hands on a simple system to try hands-on editing for yourself. The more you understand about the process, the better you can prepare for any editing session. ■



Other Side of the Tracks

WHATEVER

THE BEST OF BONZAI
An Encore Performance

by Mr. Bonzai

Managing a recording studio means getting payment for the sessions you book...but if you get too uptight about monetary concerns, you may scare off business. The manager must walk a dangerous line, one that calls for perception, tact, diplomacy, and psychology.

We had just returned from lunch and Layla, our receptionist, was taking down the "Location Recording" sign when the phone rang. We hadn't actually been location recording, but it looks a lot better than "Out to Lunch." Promote a busy image and you will keep your studio busy—that's my motto. Cart, our engineer, and Smilin' Deaf Eddie, our tech man, had just gone into the control room to trace a leaky capacitor or some such electronic gremlin. I took the phone call in the lobby and found myself talking to somebody I was supposed to recognize.

"Hello, can I help you? This is Mr. Bonzai, the manager."

"This is Sandy Bar, the drummer," the voice informed me.

"Oh...yes?" I tried to sound friendly and professional.

"I'm the drummer for Horris Edward."

There was a slight pause during which I was supposed to be impressed, I guessed, but I couldn't place Horris Edward. I decided to fake it.

"Oh, *Horris Edward* ...yes, can I help you?"

"Well, Horris is looking for a studio to do some demos in, and asked me to call you guys at Ryan Recording."

Business is business, whether it's Horris Edward or Morris the Cat. I told them we had some time open that afternoon if they wanted to come by and check out the studio. Afterwards, I walked into the control room to tell Cart.

"Cart...just got a phone call. Do you know who Horris Edward is?"

"HORRIS EDWARD! Are you kidding? You know the song 'Whatever'?"

I pondered. "Oh...sure." I quoted

the familiar lyrics.

"Whatever you say...I love you.

Whatever you do...I love you.

Whatever's right...I'm not uptight...

Whoa-oh-oh-oh...whatever."

Cart spoke in amazement. "Horris Edward's 'Whatever' is one of the biggest songs of all time. It's been covered by over 2,000 artists—everybody from Gary Coleman to Ethel Merman. There are jazz versions, country versions, classical versions. There's even a punk version!"

Keeping up with all the stars in the music industry is a full-time job, and I had a stack of unread *Billboards* and *Cashboxes* to testify to my ignorance. So I didn't remember who Horris Edward was...big deal. After all, he hadn't had a hit in eight years. But I had to admit his profound influence on the Seventies, the "Whatever Generation."

I was sitting in the lobby when the cars arrived. Horris was driving a stretched Lincoln with a custom convertible top. Lincoln makes only one Mark XII each year, and Horris had the year's. His drummer, Sandy Bar, was driving a Maserati that was so low, it could drive under a limbo dancer. The third person in the party was Limey Whitehead, Horris' manager and former chiropodist. The three of them strode confidently into the studio and we all introduced ourselves. I had to think, "If they are so big, what are they doing here?"

"I have just written the next 'Whatever,'" Horris informed us. "I prefer to work on it at a smaller studio for reasons of privacy."

That's a good enough reason. Maybe it would lead to something bigger. As Cart gave Horris and Sandy a tour, Limey and I discussed business.

"We would like a 50% deposit on the session..."

Limey was shocked. "Oh...just ring up Stan Allen at DCA records. He'll take care of everything."

I took a chance, and decided to wing it until I had spoken with DCA. It was risky, but if I had pushed it, they might have gone elsewhere.

The next day, the musicians arrived and unpacked their instruments. Sandy's drums were a joy to behold and a bitch to record. He was supplementing his income with Horris by sharing the rights to his new drum with the Diamond Drum Company. Sandy's invention, the Phaser Stundrum, consists of a set of drums with light-sensitive disks underneath the heads. They are played with laser pistols which fire a beam at the designated point on the drumhead. He looked like Buck Rogers all ablaze, playing the drums like a gunfighter. We all got free "Stundrum" T-shirts from Sandy.

By the third day, I was still unable to get in touch with Stan Allen at DCA. I had spoken with his secretary in Los Angeles, his assistant in New York, and the accounting department in Mooselips, North Dakota, but no luck. They were going to "get back to me."

If DCA was not going to pay, I had to know. When I brought it up, I could tell that Horris was hurt. He looked up at the ceiling and spoke sensitively.

"Listen. Don't worry. If DCA is taking too long, I'll pay for the time *myself*. Call Rolf, my accountant."

While I was in the control room, I heard a little of Horris' new hit, "Really." It went like this;

"Really...yes, I need you, really.

Just a little really...

Can you deal with it...

Really...whoa-oh-oh-oh, really."

Well, if "Whatever" could sell 30 million, I guess "Really" could. Limey informed me that Horris was working on a deal for the soundtrack of Claude LeDouche's new film, "Poof!" (English translation: "Get Out Your Air Freshener.")

While they were working at our studio, I did my best to make life and recording go smoothly. Keeping the session rolling is very important. Horris asked if we could get him some congas, so I started hunting some down.

Everyone's congas were gone, but when I spoke with our buddy,

Hamhock Washington, he suggested we give Snicky Smith a call. I didn't know Snicky personally, but with Hamhock's recommendation he said we could borrow his drums.

Snicky lived in one of those anonymous apartment complexes in Southern California. They all look the same and have names like "Walnut Knoll" or "Oak Valley." They never have walnuts, knolls, oaks, or valleys. Snicky greeted me at the door and there was something vaguely familiar about him.

"Hi, I'm Snicky. The congas are in the bedroom. I'm off the road for a few weeks and don't need 'em."

On the wall in Snicky's bedroom I found the clue to his identity. There he was as a boy with the familiar mouse ears and T-shirt, shaking hands with Goofy. This was *Snicky*, the former Mouseketeer. Since the Disney days, he had drummed with such groups as "Patrick Henry and the Patriots" and "The Amalgamation." What a strange life. Start out as a Mouseketeer and live out your life with invisible mouse ears. I'm sure Walt would have something to say about this if they thawed him out.

Back at the studio, while Sandy was laying down the conga overdubs, I finally got through to Horris' accountant, Rolf Wurstfinger. Mr. Wurstfinger was a real hard driver and I reluctantly agreed to a ten day receivable on the studio time. I was worried, but after all, we had Horris "Whatever" Edward in the studio and that was good P.R.

Horris finished his song and shot out the door to get to the airport in time to reach Paris by that afternoon. Sandy, Limey, and the others packed up and left. We waited.

We waited quite awhile. At first we were worried when we found that Rolf had gone on vacation and Sandy's phone had been disconnected. Later, we learned that "his dog had chewed the cord." Finally, we got a postcard from Horris. The film deal had fallen through and DCA had decided not to pick up his option. He asked that we trust him and hang in there.

We had no choice but to hang. As the weeks slipped by, we gradually gave up on Horris Edward, but about three months later he came driving up to the studio. He personally handed me a check covering all of the recording time and materials, plus a 25% bonus for being so patient. This time the gamble had paid off. It turned out that the U.S. Postal Department was paying him \$100,000 for the commercial rights to "Whatever." They were going to use it as a jingle to upgrade their image. Whatever. ■

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*For helping us build it,
for helping us run it
and for the music:*

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*For the equipment,
the technology and
the faith in us:*

Dave, Jeff & Bob, SOUND GENESIS. Lutz & Dennis, MCI, INC. Virginia. (Ike) & Ron, A.I.C. Bob Todrank, VALLEY PEOPLE, INC. Jim Cunningham, STUDIO TECHNOLOGIES. Micheal Tapes, SOUND WORKSHOP. Doug Shauer, MATRIX MARKETING, Kourtney Dunkel, AMP, INC. Marvin Caesar, APHEX, INC. Steve Krampf, OTARI CORPORATION. Noel Lee, MONSTER CABLE. Dave Donaldson & "Family", CHER-OKEE RECORDING. Tom Donald, TAMARIN PRODUCTIONS. Ken Jones, CALIFORNIA CANADIAN BANK. Bill Onink, ONINK LEASING. Bill, Russ & Tammy, ENTERPRISE LEASING. Penny Riker Jacob & David Schwartz, MIX PUBLICATIONS. Pete, Jerome & Eroline Adams, Arlene & Margaret Rice. Ginny, Betsy & Ray Yeager. David Rankin. Richard & Laurie Owens. Art Sohcot. Don & Carolyn Davis, Bea Jacob, Richard Heyser, Nancy Davis, Puddie Rodgers, PHD. Don Eger and a cast of thousands.

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Studio Designers and Suppliers

—an addendum to the listings
published in Vol. 5, No. 8

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attn: John Borman
1517 E. Lake St.
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612/729-8305

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7116 W. Higgins Ave.
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312/763-6010
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Nashville, TN 37211
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attn: Margaret Finn
1595 Broadway
New York, NY 10019
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Equipment Supply and
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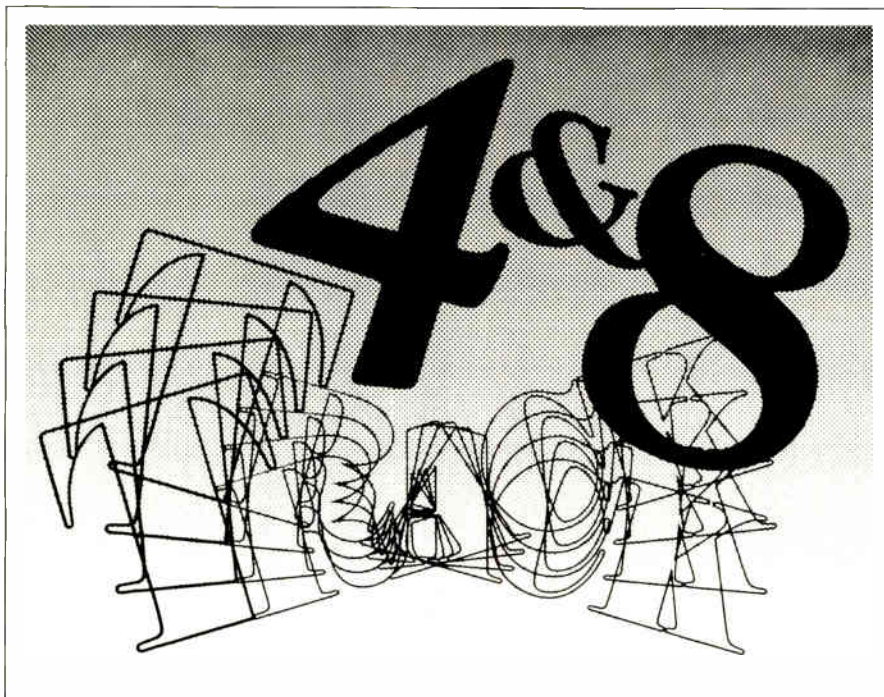
Studio Supply Chicago, Inc.
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100 E. Ohio
Chicago, IL 60611
312/751-1075
Equipment Supply and Service,
Studio Design,
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Address Correction:
TPS Corporation
attn: Riki Burkes, Pres.
45 East High St.
Somerville, New Jersey 08876
201/287-3626

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••ACME RECORDING STUDIOS

also REMOTE RECORDING
3821 N. Southport, Chicago, Illinois 60613
(312) 477-7333

Owner: Michael Rasfeld
Studio Manager: Jerry Buttitta

Extras: Acme's all musician staff specializes in music recording of all kinds. We've recorded over two dozen nationally released records and equal number of independent regional albums and handled the production of thirty locally released singles. We are the only studio we know of regularly recording rock, jazz, and blues direct to two track from soloist to seventeen piece big band. This year Acme's eight track remote recorded twenty national acts for Music Makers series of cable tv live concerts. Our signal path has been transformerless for eight years. We maintain a stock of imported beers and serve state of the art coffee.

••AJAX RECORDING TEAM

902 West Wayne Street, Fort Wayne, Indiana 46804
(219) 423-3479

Owner: Craig Harding

Studio Manager: Colleen Watson

Engineers: Craig Harding, Colleen Watson, Independents

Dimensions of Studios: Studio A 9' x 19' Isolation Booth 9' x 11'

Dimensions of Control Rooms: Control Room 9' x 19'
Tape Recorders: Ampex 440C 8 track, (2) Otari 5050B 2 track, Nakamichi 580 cassette deck 2 track

Mixing Consoles: Tascam Model III 8 in x 8 x 4 out, Tascam Model II 6 in x 4 out

Monitor Amplifiers: Yamaha P2201 (Control Room), Sescam (Headphones)

Monitor Speakers: JBL 4311's, Auratone

Echo, Reverb, and Delay Systems: AKG BX10 reverb, DeltaLab DL2 Tape Delay

Other Outboard Equipment: Eventide Instant Flanger dbx 155, (2) UREI LA4 compressors, MXR dual 15 band EQ, (2) MXR 31 band EQ Sescam parametric EQ, Countryman & Associates direct boxes (2 Acoustic 150 guitar amps, Dwarf amp, the usual assortment of foot actuated effects

Microphones: AKG 414EB, 200's, D1000's, Shure SM7, SM57's, SM58's, Electro Voice RE 20

Instruments Available: Steinway upright piano, Fender Telecaster, Fender Precision Bass, Guild Starfire, Tambourne, Claves, Cowbell, Maracas

Rates: \$25/hr recording, \$20/hr mixing, free set up, block rates available

••ANDOVER AUDIO

also REMOTE RECORDING
2387 S. Coon Creek Drive, Anoka, Minnesota 55303
(612) 757-6589

Owner: Don G. Erickson

Studio Manager: Don G. Erickson

••(ATA) ARMAGEDDON TALENT ASSOCIATES

1604 W. Juneway Terrace, Chicago, Illinois 60626
(312) 465-3373

Owner: Fred Teken/Glad Smith

Studio Manager: Fred Teken

••ATOM SMASHERS UNLIMITED STUDIO

also REMOTE RECORDING
Fernadale, MI; All Mail: Silver Stone-Arrow Productions
P.O. Box 21054, Detroit, Michigan 48221
(313) 541-0373 M-W & Sa-Su: after 7 p.m. all day Thur & Sun/ 584-8111, Mon-Wed, Fri-Sat 11 a.m.-6 p.m.

Owner: John Annesser

Studio Manager: Barb L. Rohr

Engineers: John Annesser, Barb L. Rohr full time, some part time

Dimensions of Studios: 32' x 23' x 15' & 20' x 15' x 10'

Dimensions of Control Rooms: 14' x 10' x 10'

Tape Recorders: TEAC/Tascam 80:8 8 track, TEAC 3340S 4 track, Ampex 600 2 track, Sony TC 630 2 track, Dokorder 7050 2 track

Mixing Consoles: Biamp 16/21 16 in x 4 or 2 out, TEAC/Tascam Model 5 8 in x 8 4 or 2 out, TEAC/Tascam Model 2 6 in x 6 or 4 out

Monitor Amplifiers: Biamp 1225 750w stereo, Lafayette LA2525 quad 25W/ch., Bogen Challenger 100w, Acoustic 200 slaves, Dynaco 60w stereo

Monitor Speakers: Jensen w/pizos, Presage w/pizos, Utah w/pizos

Echo, Reverb, and Delay Systems: H & H Electronics, Maestro Echoplex, Univox Reverb, other systems available upon request

Other Outboard Equipment: 4 Soundcraftsmen stereo 10-band equalizers, Phase Linear Autocorrelator Model 1000, 2 stereo TEAC AN60 Dolby units, Electro Harmonix Clone Theory Chorus effect, patch bays, complete headphone monitoring system, custom 6 & 12 input snakes, Whirlwind 16 ch 100' snake, other special effects available upon request

Microphones: Audio Technica, Shure, Electro Voice. Sony others available upon request

Instruments Available: Mason Hamlin studio upright acoustic piano, Hohner electric Pianette, Yamaha YC 10 electric organ w/ Leslie, Fartisa combo-compact w/flanger, Univox Multi-Man string synthesizer w/spec. effects, Univox Minikorg K 1 & K 2 synthesizers, 1964 Fender Jazz bass guitar, Holner Beatle bass guitar, Microtrets 6-string bass guitar, flutes, sax, clarinet, complete Lubwin dbl. bass drum set, congas, tambournes, other instruments available upon request

Rates: 2 & 4 track—\$15/hr, 8 track inc elec instr—\$25/hr, \$150/8 hrs, 8 track flat rate—\$20/hr, \$125/8 hrs

Extras: We have an extensive selection of amplifiers for any elec instr. 2" tape provided below retail cost, we offer complete personnel—musicians, producers, composer and lyric writers, food and lodging facilities nearby, custom guitar repairs upon request

Direction: We are adding 16 track and complete mobile facilities. Credits: special thanks to our associates the Idealist Institute w/ Lou de Vivre-Vita Keith, Detroit, MI and Jeanna Norton, New York, NY self-produced musicians Control w/ Wally Segreda, and Little Rock Pub Prod Corp w/ Eugene Scott, also partnership companies Molecular Music Publishing & Silver Stone-Arrow Prod. the Earthmen.

••AUDIO GRAPHICS SERVICES

also REMOTE RECORDING
1516 Ferris Ave., Royal Oak, Michigan 48067
(313) 544-1793

Owner: Audio Graphics

Studio Manager: Susan Woltrum

••AUDIO HOUSE

also REMOTE RECORDING
Box 219, Lawrence, Kansas 66044
(913) 843-4916

Owner: Larry Miller

Studio Manager: Bruce Liddel

••AUDIO TAPE PRODUCTIONS

also REMOTE RECORDING
P.O. Box 428, 413 Cherry Street, Potterville, Michigan 48876
(517) 645-7561

Owner: Dean & Patricia Bredwell

Studio Manager: Patricia Bredwell

••BARWIG RECORDING CO.

also REMOTE RECORDING
*For film sound only
5254 W. Agatite Ave., Chicago, Illinois 60630
(312) 283-2820

Owner: Roy E. Barwig

Studio Manager: Roy E. Barwig

••BGD RECORDING

1601 Oakton, Park Ridge, Illinois 60068
(312) 698-3644

Owner: Bill G. Demis

Studio Manager: Bill G. Demis

Engineers: Bill G. Demis, Assistants Jim Grnsword, "Sugar Shack" Williams

Dimensions of Studios: 21' x 14' x 9' x 17' Irreg.

Dimensions of Control Rooms: 14' x 10'

Tape Recorders: TEAC 80:8 + dbx 8 track, TEAC 35 2 2 track; Sony 650:4 2 track, AKAI CS707-D cassette, Pioneer CS650 cassette

Mixing Consoles: TEAC (2) 5-B 16 in x 8 out, TEAC Model 1 8 in x 2 out

Monitor Amplifiers: QSC, Sony

Monitor Speakers: JBL 4311, Auratone, Sony

Echo, Reverb, and Delay Systems: Furman reverb, advanced Audio digital delay

Other Outboard Equipment: dbx Noise reduction, dbx limiting

Microphones: Sennheiser, Electro-Voice, Shure

Instruments Available: Baldwin baby grand, ARP Strng Ensemble, Fender Rhodes, Slingerland drums, Fender amps

Rates: \$25/hr recording & mix down

••BOULEVARD RECORDING STUDIOS, INC.

641 Madison St., Oak Park, Illinois 60302
(312) 386-5388

Owner: Hal Kaitchuck & Eleanor Kaitchuck

Studio Manager: Hal Kaitchuck

••BROADWAY SOUND STUDIOS INC.

620 N. Broadway, Milwaukee, Wisconsin 53202
(414) 276-1220

Owner: Eric R. Hoppe

Studio Manager: Eric R. Hoppe

••CENTURY & SOUND SLIDE

also REMOTE RECORDING
1018 Busse Highway, Park Ridge, Illinois 60068
(312) 696-0675

Owner: Allen I. Tallman

Studio Manager: Allen I. Tallman

••COMMERCIAL FEATURES, INC.

also REMOTE RECORDING
3650 Washington Blvd., Indianapolis, Indiana 46205
(317) 926-5570

Owner: Paul Bender

Studio Manager: Paul Bender

••DEER CREEK AUDIO ILLUSIONS

also REMOTE RECORDING
865 Clark Ave., Webster Groves, Missouri 63119
(314) 962-7635

Owner: Susan Harwood

Studio Manager: Christopher Harwood

••DUWAYNE KLOOS RECORDING/WESTMARK

CUSTOM RECORD & TAPES
also REMOTE RECORDING
8345 Duluth St., Golden Valley, Minnesota 55427
(612) 544-3050

Owner: DuWayne Kloos

Studio Manager: Production Manager Joann Kloos

••FAITHFUL SOUND STUDIOS

712 W. Clark St., Urbana, Illinois 61801
(217) 328-5065

Owner: Antipode Arts, Inc

Studio Manager: Mark Rubel

•**FOSTER COMMUNICATIONS**
also REMOTE RECORDING
 401 E. Court Street, Cincinnati, Ohio 45202
 (513) 241-9937
 Owner: Dennis Foster, Mat Foster, Joe Quinn
 Studio Manager: Dennis Foster

••**GROUP EFFORT SOUND STUDIO**
 8317 Beta, Cincinnati, Ohio 45231
 (513) 931-TAPE
 Owner: Wayne A. Hartman and Dan T. Murphy
 Studio Manager: Dan Murphy
 Engineers: Wayne Hartman, Dan Murphy, Jerry Lane, Gary Bates
 Dimensions of Studios: 33' x 24'; Piano Room 16' x 14'; Iso Room 8' x 7'
 Dimensions of Control Rooms: 21' x 12'
 Tape Recorders: Otari MX5050 8D 8 track; (2) TEAC A-3440 4 track, Ampex AG 440B 2 track, Pioneer CTF-1250 cassette; (2) Sony TCK-60 cassette, Otari MX 5050 2SHD 2 track
 Mixing Consoles: (2) Tascam Model 5 modified & cascaded 16 in x 4 out
 Monitor Amplifiers: Phase Linear 400, JDM Headphone system
 Monitor Speakers: JBL L 166, Auratone 5C
 Echo, Reverb, and Delay Systems: Audicon Plate, Orban 111B, Fisher, (2) Deltalab DL-4, DL-2, Lexicon PCM-41, Deltalab Memory Module
 Other Outboard Equipment: (2) Technics Parametrics, Audio Control C 22, UREI 550A, 565T; (2) Orban 245E, (3) MXR 1/2 octave EQ, (4) Accessat Noise Gates, Spectra-Sonics 610, Fairchild 136 Esser, Systech & MXR Flangers, dbx 161, 162, 163 EXH Exciter, dbx & B&L Noise Reduction all
 Microphones: AKG; Beyer, Electro Voice, Neumann, PZM, Sennheiser, Shure, Sony
 Instruments Available: Ludwig drums, Zildjian cymbals, Hammond B 3 w/122 192H Ellington grand, Rhodes, ARP Odyssey, Korq, Crumar Orchestrator, Fender amps
 Rates: \$25/hr 8 track

••**GST MUSIC PRODUCTIONS**
 17 Ponca Trail, St. Louis, Missouri 63122
 (314) 821-8432
 Owner: Greg Trampe
 Studio Manager: Alan Shalon

••**HANF RECORDING STUDIO**
also REMOTE RECORDING
 1825 Sylvania Avenue, Toledo, Ohio 43613
 (419) 474-5793
 Owner: Ruth C. Hanf
 Studio Manager: Jim Thomson

••**HARMONY RECORDING STUDIO**
also REMOTE RECORDING
 4095 Meadowbrook Lane, St. Louis Park, Minnesota 55426
 (612) 933-6494
 Owner: Bill M. Jason
 Studio Manager: Bill M. Jason

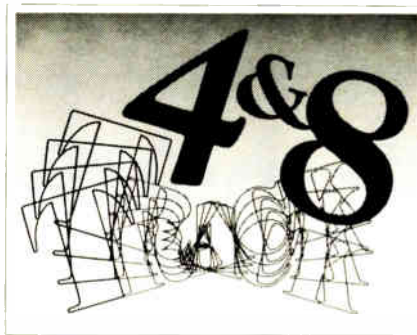
••**HARTWOOD RECORDING**
also REMOTE RECORDING
 4607 Jeffers Road, Eau Claire, Wisconsin 54701
 (715) 834-5122
 Owner: John and Ruth Hartzell
 Studio Manager: John F. Hartzell

••**JABAUGHN STUDIOS**
also REMOTE RECORDING
 3147 Snowhill Road, Washington Court House, Ohio 43160
 (614) 335-6519
 Owner: Bob West
 Studio Manager: Bob West

••**JOR-DAN RECORDING INC.**
 1607 E. Roosevelt Road, Wheaton, Illinois 60187
 (312) 653-1919
 Studio Manager: Dan Zumbelman

••**KNIPE KAMP PRODUCTIONS**
 31 N. Prindle, Arlington Heights, Illinois 60004
 (312) 398-1637
 Owner: Alberto Kniepkamp
 Studio Manager: Alberto Kniepkamp

••**LAB RECORDING STUDIO**
also REMOTE RECORDING
 2908 Parkway Drive, Highland, Indiana 46322
 (219) 838-0747
 Owner: Neophon Productions
 Studio Manager: Larry A. Brechner



••**LOST NATION SOUND RECORDING STUDIO**
also REMOTE RECORDING
 State Route 329, Box 125, Guysville, (Athens) Ohio 45735
 (614) 662-5701
 Owner: Dave Aiken
 Studio Manager: Nancy Aiken

••**LRS RECORDING STUDIO**
also REMOTE RECORDING
 107 Elmwood Place, Athens, Ohio 45701
 (614) 592-1939
 Owner: Louis Ralph Stevens
 Studio Manager: Louis Ralph Stevens

••**MAGNETIC STUDIOS, INC.**
 4784 N. High St., Columbus, Ohio 43214
 (614) 262-8607
 Owner: John Fippin
 Studio Manager: John Fippin

••**MASTERPIECE SOUND STUDIOS**
also REMOTE RECORDING
 1611 Webb Street, Detroit, Michigan 48206
 (313) 867-7874
 Owner: Sylvia Moy Productions Inc
 Studio Manager: Sylvia Moy

••**MIXED MODES PRODUCTIONS**
 254 Durand St., East Lansing, Michigan 48823
 (517) 351-3340
 Owner: Dennis G. Jablonski
 Studio Manager: Wendy J. Durrh

••**THE MUSIC FACTORY**
also REMOTE RECORDING
 11249 North Riverland Road, Mequon, Wisconsin 53092
 (414) 242-9010
 Owner: Paul Edwards
 Studio Manager: Greg Panetra

••**MUSICIANS WORKSHOP**
also REMOTE RECORDING
 P. O. Box 10558, Chicago, Illinois 60610
 (312) 774-1850
 Owner: Ralph M. Ostrom
 Studio Manager: Ralph M. Ostrom

••**M Y RECORDING STUDIO**
also REMOTE RECORDING
 7349 Croigmere Dr., Cleveland, Ohio 44130
 (216) 884-0650
 Owner: Dennis Yurch, Tom Meltzer
 Studio Manager: Dennis Yurch

••**NEWMAN A-V COMMUNICATIONS**
also REMOTE RECORDING
 1635 South Division Ave., Grand Rapids, Michigan 49507
 (616) 452-1503
 Owner: Newman Communications Inc
 Studio Manager: Stan Barnes

••**NORTHSIDE RECORDING**
 3946 Spring Grove Ave., Cincinnati, Ohio 45231
 (513) 541-6811
 Owner: Northside Recording Ltd
 Studio Manager: Bob Rowlette

••**NORWEST RECORDINGS**
also REMOTE RECORDING
 123 South Hough Street, Barrington, Illinois 60010
 (312) 381-3271
 Owner: Mark & Natalie Karney
 Studio Manager: Mark Karney

Engineers: Mark Karney, Eric Marto, Vic Owen, Jared Karney, Jenny Skeels
 Dimensions of Studios: Studio 'A' 30' x 26' with drum booth & vocal booth, Studio 'B' Booth
 Dimensions of Control Rooms: Control Room 'A' 26' x 14', Control Room 'B' 10' x 12'
 Tape Recorders: Ampex AG 440 4 track, Ampex AG 440 2 track, Ampex AG 351 2 track, Ampex AG 440/351 2 track
 Mixing Consoles: Tascam SB 14 in x 4 out, Tapco 6201B 6 in x 4 out
 Monitor Amplifiers: IBI
 Monitor Speakers: JBL L100 & Auratone
 Echo, Reverb, and Delay Systems: Plate Reverb, MXR digital delay
 Other Outboard Equipment: dbx on all tracks, compressors, graphic equalizer, noise gates, quarter track R-R recorders, cassette recorders
 Microphones: Shure SM 81, Sony ECM 22P, RCA 77DX, Shure SM-56 and a variety of others
 Instruments Available: Conover grand piano
 Rates: \$40/hr Block rates available
 Extras: High Speed cassette duplication, Audio-Visual Pulsing, 16mm mag film transfers, In house A/V production facilities, Screening room for movies & multimedia
 Direction: In addition to being a full-service audio-visual facility, Norwest specializes in the production of acoustic music. We offer a creative and comfortable facility for the acoustic musician who wishes to produce a high quality product. We are an alternative for the musician who desires something other than a highly produced manipulated sound. From microphone to pressing we strive to produce a clean lifelike reproduction of the performance. Our records are produced on the Depot label

••**POSSUM RECORDING STUDIO**
 4924 Plymouth Rd., Mound, Minnesota 55364
 (612) 472-1239
 Owner: Jim Thompson
 Studio Manager: Jim Thompson

••**PRANGE SOUND STUDIO**
also REMOTE RECORDING
 25436 Mary St., Mt. Clemens, Michigan 48045
 (313) 949-5816
 Owner: Steve Prange
 Studio Manager: Janet Prange
 Engineers: Steve Prange
 Dimensions of Studios: 21' x 17'5"
 Dimensions of Control Rooms: 11' x 10'
 Tape Recorders: TEAC A 4440 4 track, TEAC A 3440 4 track, Vector Research VCX 300 cassette deck
 Mixing Consoles: Tapco C 12 Catalina Series 12 in x 3 out
 Monitor Amplifiers: Kenwood KA 401 Sanyo headphone amplifier
 Monitor Speakers: Polk Audio Model 7A
 Echo, Reverb, and Delay Systems: Tapco 440 reverb unit; SWTPC two channel analog delay unit
 Other Outboard Equipment: dbx noise reduction (six channels) dbx stereo compression unit; flanger; SWTC function generator; Switchcraft 64 point patchbay
 Microphones: AKG D200F D160F1 Shure SM 57 Shure SM 54 Pressure Zone Microphones
 Instruments Available: Ludwig drum set with Zildjian cymbals and toms; various percussion and piano
 Rates: \$12/hr plus tape; block rates available \$20/hr remote recording

••**BUD PRESSNER RECORDING SERVICE**
also REMOTE RECORDING
 4839 So. Broadway, Gary, Indiana 46409
 (219) 884-5214
 Owner: Bud Pressner
 Studio Manager: Bud Pressner

••**RAINBOW RECORDING STUDIOS**
also REMOTE RECORDING
 2322 S. 64th Ave., Omaha, Nebraska 68106
 (402) 554-0123
 Owner: Nir Erickson
 Studio Manager: Steve Sleeper

••**RIVER ROAD RECORDING STUDIO**
also REMOTE RECORDING
 409 Ohio, Pittsburg, Kansas 66762
 (316) 232-9554
 Owner: Wilson Bros Inc
 Studio Manager: Bird Wilson

••**ROLLING RECORDING STUDIO**
also REMOTE RECORDING
 53 Lakeshore Dr., Carpentersville, Illinois 60110
 (312) 428-8454
 Owner: Alan D. Sauer
 Studio Manager: Alan D. Sauer

••RON ROSE PRODUCTIONS, LTD
29277 Southfield Rd., Southfield, Michigan 48076
(313) 424-8400
Owner: Ron Rose
Studio Manager: Don Wooster

••RPM RECORDING & SOUND
also REMOTE RECORDING
6730 S. Pulaski, Chicago, Illinois 60629
(312) 735-9476

Owner: Rich Morford, Mike Podgorny
Studio Manager: Rich Morford, Mike Podgorny
Engineers: Rich Morford, Mike Podgorny, Steve Morford
Dimensions of Studios: 22' x 15' x 10'
Dimensions of Control Rooms: 10' x 13' x 9'
Tape Recorders: Tascam 808 w/dbx 8 track, TEAC 3440 4 track, TEAC C-3 cassette
Mixing Consoles: Tangent Series 4 (modified) 16 in x 8 out, BiAmp 1682 16 in x 2 out
Monitor Amplifiers: Metron M 400, Biamp TC, OSC (phones)
Monitor Speakers: Cerwin Vega 215S Auratones
Echo, Reverb, and Delay Systems: Lexicon Digital Delay, Sound Workshop Stereo Reverb
Other Outboard Equipment: Biamp EQ210 Graphic EQ, Symetrix limiters, Systech Studio Flanger
Microphones: Neumann, Sennheiser, Shure, Electro Voice, Audio Technica
Instruments Available: Oberheim OBX, Fender Rhodes, Crumar T 1 organ, ARP Odyssey Synth, Fender Twin Reverb Amps, Rickenbacker Bass, Fender Aria, Yamaha guitars. All instruments by appointment
Rates: \$20/hr Basic Rate. Call for Special Block Booking and project rates

••6161 SOUND STUDIOS
also REMOTE RECORDING
6161 N. Lemont Ave., Chicago, Illinois 60646
(312) 282-6961
Owner: Jim Poulson & Fred Reynolds
Studio Manager: Jim Poulson & Fred Reynolds

••SON SWEEP SOUND STUDIO, LTD.
also REMOTE RECORDING
19789 Norborne, Redford, Michigan 48240
(313) 537-2664
Owner: Ray A. Geisert
Studio Manager: Millie Geisert

••STARBEAT RECORDING STUDIOS
also REMOTE RECORDING
9 East Larkdale Drive, Deerfield, Illinois 60015
(312) 945-3555
Owner: Steve Cronen
Studio Manager: Steve Cronen

••STIX & LYCS, INC.
31925 Van Dyke, Warren, Michigan 48093
(313) 882-6018
Owner: Beau Williams, Tim Holmes, Mark Novachcoff & Joel Faddell
Studio Manager: Mark Novachcoff

••SOTO SOUND STUDIO
also REMOTE RECORDING
931 Sherman Ave., Evanston, Illinois 60202
(312) 475-9556
Owner: Jerry & Claudine Soto
Studio Manager: Jerry Soto

Engineers: Jerry Soto
Dimensions of Studios: 30' x 30' w/vocal booth
Dimensions of Control Rooms: 15' x 25'
Tape Recorders: Tascam Series 70 8 track, (2) TEAC 2440 4 track, Otari MX5050 1/2 track, Ampex PR10 1/2 track, Pioneer RT710 1/2 track, TEAC & Sharp cassettes
Mixing Consoles: Tascam Model 10 12 in x 4 out, Tascam Model 10 8 in x 4 out, Tascam Model 5 8 in x 4 out, Tascam Model 2 A 6 in x 4 out, Tascam Model 1 8 in x 2 out
Monitor Amplifiers: Phase Linear 700, QSC 51, Technics SU7300, Alter 128H
Monitor Speakers: Altec Ionics, Bic Ventun Formula 4's, Auratones, Realistic 40 1247's, Transistor radio
Echo, Reverb, and Delay Systems: Roland Space Echo RE 201, MXR Flanger, Tapco reverb
Other Outboard Equipment: dbx 160 161 compressor limiters, Symetrix CL100 compressor/limiter, dbx noise reduction, Soundcraftsman HF 2201 R graphic equalizer, Gerard Zeno 100 turntable, MXR noise gate
Microphones: Sennheiser, AKG, Shure, Electro Voice, Audio Technica
Instruments Available: Guitar keyboard & bass amps, Ludwig drums, Hammond B 2 organ (w/ percussion), (2) Leslie speakers, Fender Rhodes, Moog Prodigy Synthesizer, Wuritzer baby grand, Space Drum, asst percussion, guitar voice-box, Gibson Les Paul "Gold Top", Epiphone bass, Acoustic guitar, Rhythm



machine click track strings
Rates: 1 4 trk \$15/hr, 2 8 trk \$30/hr or 6 hrs \$135
Extras: Studio musicians available, guitar, keyboard arrangement or production services available by Jerry Soto
Direction: We're the only studio in this region to our knowledge that can arrange your lyrics to music, record your voice on your song with a complete rhythm section & more! Having done this for numerous clients (including "Mr. Cub" Ernie Banks) We feel we can amaze you with our specialized talents. We record bands too! Rock, R&B, Funk, new wave, Italian, Classical, Greek, Salsa, Gospel, Blues, Reggae, Jazz, music for dance companies, Film Soundtracks for the CTA, radio spots, Video Soundtracks for WLS-TV channel 7. We're very interested in meeting you

••STUDIO 66
66 Sycamore, Wyandotte, Michigan, 48192
(313) 284-4311
Owner: Allen Bates and George Milkovich
Studio Manager: Al Bates

••SUGAR BUSH RECORDING INC.
also REMOTE RECORDING
RR #5, Sullivan, Indiana 47882
(812) 268-5605
Owner: Ron Lucas, James Lane, B.T. Bean
Studio Manager: James Lane, Ron Lucas
Engineers: Ron Lucas
Dimensions of Studios: 16' x 21'
Dimensions of Control Rooms: 12' x 16'
Tape Recorders: Scully 280 B 1" 8 track, Pioneer RT 2022 2 track, Pioneer RT 1050 2 track, Nakamichi 580 cassette
Mixing Consoles: Quantum QM 168 16 in x 16 out
Monitor Amplifiers: Yamaha P 2200, Yamaha P 2050, Sansui
Monitor Speakers: JBL 4311 Control monitor, JBL 4301 Control monitor, Auratone monitors
Echo, Reverb, and Delay Systems: Master Room Studio B Reverb
Other Outboard Equipment: Sesscom direct boxes, DOD direct boxes, MXR Distameter, Conquest Sound Cables, 8 channels dbx, Yamaha Headphones
Microphones: Neumann, AKG, Shure
Instruments Available: Yamaha Conservatory grand piano, Fender Rhodes, Yamaha G 50 112 guitar amp, Peavey bass guitar, Peavey bass amp, Martin D-35 guitar, Gretsch drum kit, Musser Marimba, Percussion acousty, Hammond M 3 w/ Leslie, Synthesizers by appointment
Rates: 8, 4, 2 Track record, mix, edit \$40/hr, Block time \$35/hr

••THIN AIR RECORDING
also REMOTE RECORDING
410 Allen St., Maumee, Ohio 43537
(419) 893-0337
Owner: Ben Solomon
Studio Manager: Ben Solomon

••TIN EAR RECORDING STUDIO
also REMOTE RECORDING
1437 W. Howard St., Chicago, Illinois 60626
(312) 274-8999
Owner: Bill Landow
Studio Manager: Claudia Landow

Direction: Affiliation with Acoustic Revival Records. We are primarily specializing in Acoustic music especially Bluegrass & Gospel records & we have established a reputation for clean & pure sound quality without the use of "gimmicks." Two current record releases are Larry Sparks' "Ramblin' Letters" & Wade Hampton Miller in the "Days I went A Courtin'." Both on Acoustic Revival—Our experienced staff & top quality equipment make the difference

••T.J. SOUND PRODUCTIONS INC.
27040 Ryan Rd., Warren, Michigan 48092
(313) 751-7476
Owner: Jeff Briggs, Tom Lambaugh, Adam LaRose, Barb Hasselfield
Studio Manager: Jeff Briggs

••TOM MIX RECORDING TETRASONICS
705 Mall Germain, St. Cloud, Minnesota, 56301
(612) 253-6510, (612) 253-6860
Owner: Mark Thelen
Studio Manager: Tom Schmidt

••TOUSANA RECORDING STUDIO
also REMOTE RECORDING
8825 So. Oglesby Ave., Chicago, Illinois 60617
(312) 731-6297
Owner: Louis Tousana Jr

••TRACKS ON 5th
250 East 5th Street, Suite #105, St. Paul, Minnesota 55101
(612) 225-8102
Owner: Michael McKern
Studio Manager: Michael McKern

••UNIVERSITY RECORDING STUDIOS
also REMOTE RECORDING
1896 North High Street, Suite No. 35, Columbus, Ohio 43201
(614) 291-7800
Owner: Tom Howard
Studio Manager: David Sheward

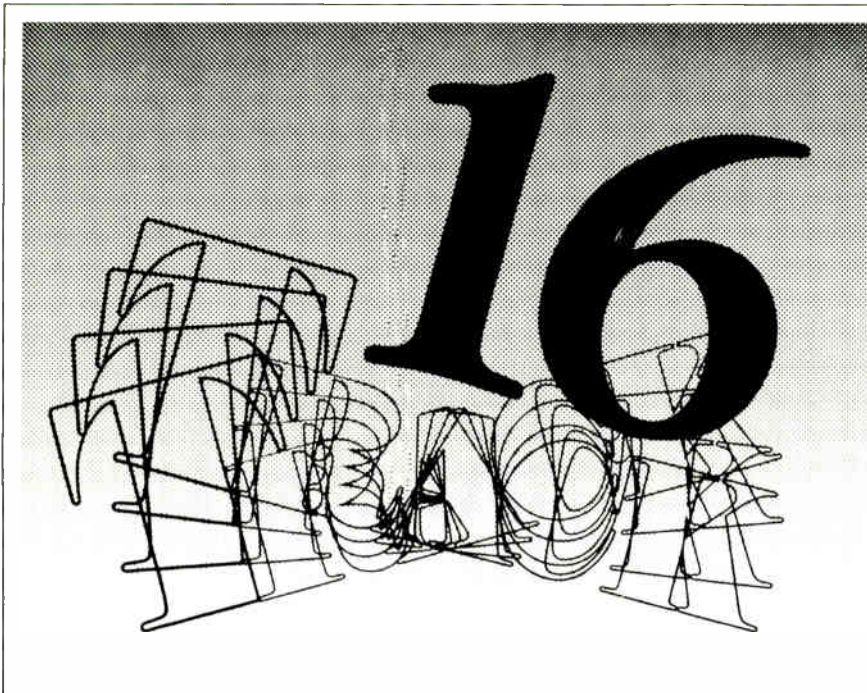
••RON WHEELER ENTERPRISES
also REMOTE RECORDING
202 West Plum Street, Robinson, Illinois 62454
(618) 544-7898
Owner: Ron Wheeler

••WILBUR-SCHWARTZ PRODUCTIONS
also REMOTE RECORDING
1209 Indian Rock Lane, Salina, Kansas 67401
(913) 825-7029
Owner: Tom Wilbur, Don Schwarz
Studio Manager: Don Schwarz

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All studio information listed has been supplied to the Mix by studios responding to questionnaires mailed in July, 1981. People, equipment and locations change, so please verify critical information with the studios directly. The Mix does not take responsibility for the accuracy of the information supplied to us by the studios.



•••AGENCY RECORDING, INC.
676 N. LaSalle St., Chicago, Illinois 60610
(312) 236-3632
Owner: John Garamoni
Studio Manager: John Garamoni

•••AUDIO SERVICES COMPANY INC.
also REMOTE RECORDING
3016 Home Street, Mishawaka, Indiana 46544
(219) 255-5198
Owner: Audio Services Company Inc., President Phil Ostrander
Studio Manager: Bill Mullin
Engineers: Rick Bakos, Jim Greulich, Jeff Grauel, Cindi Hatfield, Traffic Mgr Cindi Hatfield
Dimensions of Studios: 25' x 35' x 11' x 14'
Dimensions of Control Rooms: 12' x 15'
Tape Recorders: Scully 16 track, (2) Otari MK II 2 track, Crown 800 2 track, Ampex 440 mono, Telex duplicator
Mixing Consoles: MCI 24 channel, Tascam model 5
Monitor Speakers: EV PI-15-3, Sentry V, Sentry 100 Auratones
Echo, Reverb, and Delay Systems: Lexicon digital delay
Other Outboard Equipment: dbx noise reduction compression/limiting, Tapco 10 band graphic
Microphones: Electro-Voice, Shure, RCA, AKG
Instruments Available: 6' Kawai baby grand, Rhodes piano, ARP Omni, ARP 2600, Ludwig drums, Hammond C-3
Rates: 16 track \$65/hr, 8 track \$40/hr, block booking



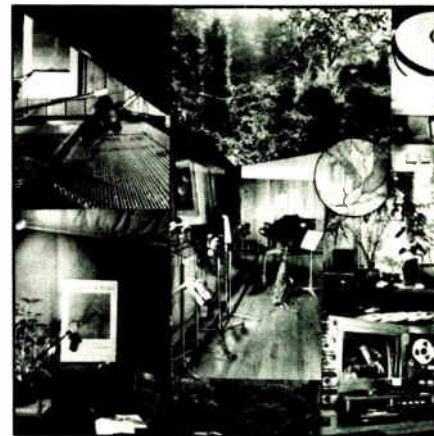
Audioloft Studios
Macks Creek, Missouri

•••AUDIOLOFT STUDIOS
P.O. Box 7-11, Old Hwy. 54, Macks Creek, Missouri 65786
(314) 363-5432
Owner: B.J. Carnahan
Studio Manager: B.J. Carnahan, Brad Edwards

Engineers: Brad Edwards, B.J. Carnahan
Dimensions of Studios: 20' x 30'
Dimensions of Control Rooms: 14' x 15'
Tape Recorders: TEAC 85 16 16 track, TEAC 80-8 8 track, TEAC A7300RX 2 track, TEAC A7300 2 track, TEAC 3340S 4 track, Pioneer & Nakamichi cassette decks.
Mixing Consoles: Tangent 3216 24 in x 16 out
Monitor Amplifiers: Bose, Crown
Monitor Speakers: JBL, Klipsch, Auratones, Beyer DT-100 Headphones
Echo, Reverb, and Delay Systems: AKG BX-10, Tapco 4400, Lexicon Prime Time
Other Outboard Equipment: dbx 160 limiters, Sony turntable, dbx and Dolby Noise Reduction
Microphones: Beyer 160, 88, 101 201, 500, Shure SM-57's, AKG 451's, PZM's, AKG D1000, UREI Direct Boxes
Instruments Available: Fender Twin Reverb, Fender Bassman, Slingerland drums, Fender Rhodes, Kawai grand piano, Lester Tack Piano, Elka String Machine, several assorted guitars, bass, Sho-Bud pedal steel
Rates: Call for rates

•••AUDIO MEDIA
Suite, L127, Manchester Building, Fargo, North Dakota 58102
(701) 237-6863
Owner: Lee Massey
Studio Manager: Lee Massey
Engineers: Lance Legler, Tony Rheault, Doug Geston
Dimensions of Studios: Studio A 12'3" x 17'4", Studio B 23'8" x 33'6"
Dimensions of Control Rooms: Studio A 10'10" x 11'6", Studio B 13'10" x 15'11"
Tape Recorders: Scully 100 16 track, Scully 280B 2 track (2) Otari MX5050 2 track, Revox A77 1 track, TEAC A 7300 1 track
Mixing Consoles: Tangent 3216 20 in x 16 out, Oakwood Audio 12 in x 4 out
Monitor Amplifiers: Crown 1 D150A, 1-D150, 1 D50
Monitor Speakers: JBL 4311's, Auratones
Echo, Reverb, and Delay Systems: MICMIX Master Room Super C 3 MXR Digital Delays
Other Outboard Equipment: 2 UREI LA4 compressor/limiters, 2 Spectra Sonics 610 compressors, Orban Parasound Parametric Stereo Equalizer, dbx 154 Noise Reduction, dbx 157 Stereo Noise Reduction, Pioneer, Sharp and TEAC Cassette Decks
Microphones: 2 Neuman U87's, 2 Km84's, 2 PZM's, 3 Neumann U47's, 2 Electro-Voice RE 20's, 3 Shure SM57's, SM7, SSM5
Instruments Available: 5 piece drum set, Mini Moog, Tympani, Sequencer for Mini Moog, Howard baby grand piano, Yamaha CP-70B piano, Mini Korg Synthesizer, Fender Rhodes
Rates: Available upon request

•••AUDIO MIXERS RECORDING COMPANY, INC.
740 North Rush Street, Chicago, Illinois 60611
(312) 943-4274
Owner: A M H C Inc
Studio Manager: Steve Schwartz



Audio Village Recording Studio
Bloomington, Indiana

•••AUDIO VILLAGE RECORDING STUDIO
also REMOTE RECORDING
1000 West 17th Street, P.O. Box 291, Bloomington, Indiana 47402
(812) 332-7475
Owner: Wayne Gunn, Michele Jamson
Studio Manager: Wayne Gunn
Engineers: David Burks, Wayne Gunn, Wayne Jackson, Jack Burke
Dimensions of Studios: Main Room Live end 12' x 14', Dry end 11' x 14', Drum Booth 10' x 10', all asymmetrical, isolated vocal booth 10' x 12'
Dimensions of Control Rooms: 12' x 25' (flat ±4 db)
Tape Recorders: MCI JH16 16 track, MCI JH110B14 2 track, Ampex (3 ea) ATR 700 2 + 1/4 track, Nakamichi, TEAC, BIC cassette duplication system, custom cassette loading
Mixing Consoles: Carvin MX1604 16 in x 4 out, TEAC Model 3 8 in x 4 out, Tapco 6200 6 in x 2 out
Monitor Amplifiers: Sansui, Pioneer 250W
Monitor Speakers: ADS 910H, ADS 700, Auratones
Echo, Reverb, and Delay Systems: XL305 MasterRoom, Ham mond spring, Delta Labs DL2
Other Outboard Equipment: Kepex II (2 ea) Gain Brain II, analog delay, dynamic noise filter, graphic equalizers
Microphones: Neumann KM84 (2), AKG 414 (4), Sennheiser 421 (2), EV RE-55 (2), 1776, RE 20 (2), Beyer M500 (2), Shure SM57 (2), Sony 990, EV665
Instruments Available: Grand piano, 6' (1980), Rhodes 88, (various synthesizers and other instruments can be hired locally at very low rates)
Rates: \$45/hr, 3 hour blocks \$100, 2 track \$25/hr Rehearsals 4 hours for \$25 as available
Extras: Five acre wooded "Relaxed Country Setting", Kitchen, home-like atmosphere, camping, 2 blocks to liquor store, 6 blocks to hotels
Direction: Up the gravel road behind the faceless strip development of contemporary America is the home of Audio Village, occupying the still verdant section of the hillside. Wayne, Dave and Michelle who make sound, music, pottery, (and silly prose) in this "relaxed country setting" are dedicated to helping you be creative in the realization of your project at the lowest possible cost. Bloomington is the home for most of the year for music students from around the world. With live symphonies we have access to a variety of musical talent usually available only in a major metropolitan area (former studios of Gilroy Sound)

•••CHAPMAN RECORDING STUDIO
228 West 5th, Kansas City, Missouri 64015
(816) 842-6854
Owner: Chuck Chapman
Studio Manager: Chuck Chapman

•••CHICAGO TRAX RECORDING STUDIO
2656 N. Wayne Ave., Chicago, Illinois 60614
(312) 525-6565
Owner: Reid Hyams, Tom Kee, Al Ursini
Studio Manager: Reid Hyams, Tom Kee
Engineers: Al Ursini
Dimensions of Studios: 20' x 22' Isolation Booth A 7' x 8', Isolation Booth B 4' x 5'
Dimensions of Control Rooms: 12' x 10'
Tape Recorders: Otari MTR 90 w Autolocator 16 track, TEAC/Tascam 80-8 w ax 8 noise reduction 8 track, Otari MX5050 w/dbx 2 track, AIWA #690X cassette deck, Pioneer RT-701 1/4 track
Mixing Consoles: Tangent 3216 16 in x 16 out, Tangent 802AX 8 in x 2 out
Monitor Amplifiers: UREI 6250, Crown D150A, Crown D75 & D60
Monitor Speakers: JBL 4313's, JBL L 100's, Auratones
Echo, Reverb, and Delay Systems: Echo Plate reverb, Lexicon Prime Time Digital Delay, Orban 111B Dual reverb

Other Outboard Equipment: UREI LA4's dbx 165 compressors; Eventide 910 Harmonizer, UREI 545 Parametric Equalizer; Pultec EQH-2 Program Equalizer, UREI 530 Graphic Equalizers, Orban Stereo Synthesizer
Microphones: Neumann U-87's, AKG 414 EB's, D202E; Crown PZM's; Electro-Voice RE-20's; Sony ECM 22's, ECM 51's; Beyer M260's, Audio-technica 813; Shure SM 81's, 57's; RCA 77-DX.
Instruments Available: 6½' grand piano, Rodger drums w/4 snares, Fender, Traynor, Ampeg & Yamaha guitar amps; Keyboard synthesizer
Rates: 16 Track recording \$40/hr, 8-2 Track recording: \$30/hr, block time rates available

***CREATIVE IMAGES
 also REMOTE RECORDING
 1321 Summit, Toledo, Ohio 43604
 (419) 241-5961
 Owner: David H Peterson
 Studio Manager: Rene Cordell



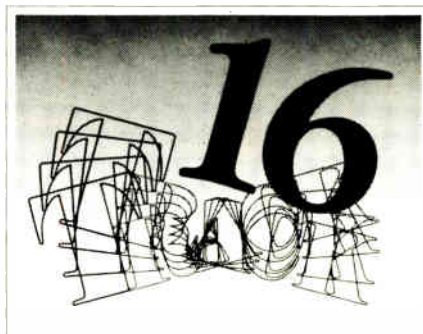
Crosstown Recording
 Kalamazoo, Michigan

***CROSTOWN RECORDING
 601 East Crosstown Pkwy., Kalamazoo, Michigan 49001
 (616) 343-7972
 Owner: Brandon Wade
 Engineers: Brandon Wade
Dimensions of Studios: 35' x 30'
Dimensions of Control Rooms: 26' x 16' (7 sided windowless control room)
Tape Recorders: MCI JH114 16 track; MCI 110 2 track, 3M 64 2/4 track, Nakamichi cassette recorders
Mixing Consoles: Soundcraft 1624 24 in x 24 out
Monitor Amplifiers: BGW
Monitor Speakers: UREI 813, JBL 4313B, Auratones, Altec Model 19
Echo, Reverb, and Delay Systems: Echoplate, MICMIX Master-Room, Eventide Harmonizer/delay
Other Outboard Equipment: UREI LN1176, Teletronix LA-2A, Gain Brain, Kexex, Eventide Flanger, Peterson Strobe Tuner, dbx 165
Microphones: Neumann 87, 84, 47, Sennheiser 441, 421, AKG 414EB, 451; Electro-Voice RE-20 & RE-16, Shure SM56, SM81, PML DC-73; Sony ECM-50, Countryman 101, Crown PZM, Direct Boxes by Countryman, Ax-Max; Sesscom and Westlake
Instruments Available: Baldwin SD-10 9' concert grand, Hammond B3 with Leslie, Mesa Boogie Amplifiers, Fender Super reverb, Ampeg B-15N Bass Amp, Sonor and Ludwig Studio drum sets, Fender Rhodes
Rates: 16 track \$60/hr, \$350 per 7/hr block, 2 track \$50/hr

***ELEPHANT RECORDING STUDIOS
 also REMOTE RECORDING
 21206 Gratiot Ave., East Detroit, Michigan 48021
 (313) 773-9386
 Owner: Al Abood, John Gaiser
 Studio Manager: John Gaiser

***EAST RECORDING STUDIOS
 11 East Hubbard St., Chicago, Illinois 60611
 (312) 644-0589
 Owner: Jim Poulison and Fred Reynolds
 Studio Manager: Jim Poulison and Fred Reynolds

***GATTUSO BROTHERS RECORDING
 also REMOTE RECORDING
 1300 Market Ave., Canton, Ohio 44714
 (216) 456-2806
 Owner: Gattuso Music Center
 Studio Manager: Michael Lamb
 Engineers: Michael Lamb, Brad Dutton, Rick Gattuso



Dimensions of Studios: 26' x 22'
Dimensions of Control Room: 18' x 22'
Tape Recorders: 3M M-79 16 track, Otan 5050B ½ track, TEAC 3300 SX2T ½ track, Otan 50508 HC 8 track, Otan 5050 BQ-2 4 track
Mixing Consoles: Sound Workshop 24 in x 16 out
Monitor Amplifiers: Yamaha P2200, Phase Linear A30, BGW 100
Monitor Speakers: JBL 4333, JBL 4311, Little David 500, Auratone 5C sound cubes
Echo, Reverb, and Delay Systems: Orban Parasound IIIIB, Delta Lab DL-2 w/memory module, Lexicon PCM41, Yamaha E1010 analog
Other Outboard Equipment: Symetrix Duel noise gates, dbx 165, EXR exciter, White 4005 Equalizer, MXR Pitch Transposer, Eventide Harmonizer, White 4001 Equalizers, MXR Flanger Doubler, MXR DDL
Microphones: Neumann U-87, AKG 414, Sennheiser 441 & 421, AKG D12, E-V PL20, Shure SM7, SM82, SM57
Instruments Available: Yamaha CP-80, GS-2, CS-80, Hammond B-3, complete drum kit, Hohner Clavinet, LP congas & percussion instruments, variety of amps and guitars
Rates: \$50/hr flat rate. Special package rates are negotiable
Extras: Game room, studio musicians, video demos, cassette duplication, refreshments, 24 hr recording, arrangements, production, 45's, albums, radio jingles, instruments are supplied for free
Direction: Gattuso Brothers' Studio—the first professional 16 track 2" studio in the AkCan area. At Gattuso's you'll find a uniqueness, a professional studio within a full service music company. Known throughout northeastern Ohio as "The Musician's Choice", the studio was designed for musicians by musicians. A fantastic selection of instruments, electronic effects, and synthesizers are provided absolutely free. An easy going atmosphere, professional people to work with, and affordable rates makes Gattuso Brothers' Studio your #1 choice for all of your recording needs. Call or write today for further information about this fine facility

***HIGH FIDELITY RECORDING, INC.
 also REMOTE RECORDING
 1059 Porter, Wichita, Kansas 67203
 (316) 262-6456
 Owner: Corporation James Stratton, Pres
 Studio Manager: James Stratton
 Engineers: Jim Stratton, Jim Wedel, Nancy Stratton, Newton Graber, John Salem
Dimensions of Studios: 25' x 28' x 11' x 6'
Dimensions of Control Rooms: 15' x 25'
Tape Recorders: IEM 2" transports w/64 pt search to cue 2" format, 14" reel capacity 16/30 tracks; Ampex ATR 102 w/search 2 track, Otan ½" Mark II-4 4 track; 7) Crown Recorders 800 series full tr, 2 tr, ¼ tr, IEM location system 14" reels 16 track; Ampex MM 1000 8 track, and numerous cassette & 8 track cart deck, TEAC 3340
Mixing Consoles: Custom record console 28 in x 21 out; Custom mixing console 33 in x 2 out, Tapco 6200 w/phantom for 2 tr location/video
Monitor Amplifiers: LF & Control room 4 ea 220 watts/8 ohms, (HF horns) 2 ea 30 watts/16 ohms, (headphones) 2 ea 55 watts/8 ohms, (fast slew & 0.02 THD)
Monitor Speakers: Control Room JBL 4315 components w/passive. Studio similar but is bi-amped, Auratones, EV Interface 3
Echo, Reverb, and Delay Systems: EMT plate, Lexicon Prime Time digital delay, Lexicon PCM 41 digital delay, MXR digital delay
Other Outboard Equipment: Noise Reduction: 2) Dolby A301, 2) 361, 320 stereo "B" System, Compressors 2) dbx 160, 2) 161, 162, 165, 4 custom Variable speed, API Minimag synchronizer (modified to reduce lock-up time), Stereo synthesizer: Orban 254E, De-Esser custom 2 ch, Orban 516EC 3 ch Outboard EQ: Orban 622B parametric 2 ch (infinite notch av), 2 ch low cut (5th order butterWorth), 4 ch shelving EQ
Microphones: Steinway seven ft grand, Hammond B3 organ, Mellotron, Bell Lyra, synares
Instruments Available: \$50/hr week days, \$60/hr: evenings & week-ends, Video \$125/hr with two 3 Sabccon cameras, TBC, character generator & all studio equipment (includes crew) Location Audio \$75/hr 4 hr minimum Video location-ask

***KEYSTONE RECORDING CO., INC.
 also REMOTE RECORDING
 8144 Zionsville Rd., Indianapolis, Indiana 46278
 (317) 875-0149
 Owner: John Helms
 Studio Manager: Jim Bogard
 Engineers: John Helms
Dimensions of Studios: 19' x 27' x 12½'
Dimensions of Control Rooms: 14' x 17' x 11½'
Tape Recorders: MCI JH-10 16 track, Tascam 80-8 8 track, Otan (2) MX50/50 2 track
Mixing Consoles: Neotek Series one 20 in x 16 out
Monitor Amplifiers: BGW 250-D, Crown D-60, BGW 100
Monitor Speakers: JBL 4313 (2), JBL L300, (2) Auratones
Echo, Reverb, and Delay Systems: MICMIX Master-Room XL 305, Lexicon Prime Time
Other Outboard Equipment: Eventide 910 and 949 Harmonizers, Orban De-Esser, MXR Flanger/doubler, Har Parametric EQ, dbx, Ashley, UREI compressor/limiters
Microphones: Neumann, AKG, Sennheiser, Beyer, Shure, Electro-Voice, etc
Instruments Available: Kimbal grand piano, Pearl drum kit, ARP and Yamaha synthesizers, Fender Rhodes electric piano, LP perc., Fender amps
Rates: \$65/hr—16 track, \$500/day for 8 track mobile

***KINGSMILL RECORDING STUDIO
 1033 Kingsmill Pkwy., Columbus, Ohio 43229
 (614) 846-4494
 Owner: Kingsmill Recording Studio, Inc
 Studio Manager: Don Spangler

***LAKE RECORDING
 418 Lake Street, Maywood, Illinois 60153
 (312) 344-8760
 Owner: Robert Kaider—Kurt Reetz
 Studio Manager: Robert Kaider

***LAUSCHE RECORDING STUDIOS
 9526 Winton Rd., Cincinnati, Ohio 45231
 (513) 521-0015
 Owner: Louis F. Lausche
 Studio Manager: Louis F. Lausche

***LIVONIA SOUND RECORDING
 also REMOTE RECORDING
 15018 Beatrice, Livonia, Michigan 48154
 (313) 522-7274
 Owner: Henry Vartanian
 Studio Manager: Ed Moon

***MARITZ COMMUNICATIONS CO. SOUND
 also REMOTE RECORDING
 1315 N. Highway Dr., Fenton, Missouri 63026
 (314) 225-2768
 Owner: Maritz Communications Co
 Studio Manager: David B. Duster

***MOONSOUND, INC.
 also REMOTE RECORDING
 2828 Dupont Avenue South, Minneapolis, Minnesota 55408
 (612) 872-4200
 Owner: C. Moon, A. Herrmann, M. Geske
 Studio Manager: M. Geske

***MULTI-TRACK RECORDING STUDIOS INC.
 also REMOTE RECORDING
 25533 Five Mile Rd., Redford, Michigan 48239
 (313) 535-3950
 Owner: Nicholas G. Canzano
 Studio Manager: Breck S. Watt
 Engineers: Jeff Jones, Nick Canzano, Breck Watt, Lloyd Grace
Dimensions of Studios: Studio A: 35' x 20' x 10'; Studio B: 22' x 20' x 10'; Studio C: 10' x 12' (iso booth)
Dimensions of Control Rooms: A, B, C: 25' x 20' x 12'
Tape Recorders: Ampex MM1000 16 track; Technics 1506 2 track, Tascam 25-2 2 track
Mixing Consoles: Quantum Gamma A 20 in x 16 out
Monitor Amplifiers: Crown, Bozak, Sankyo, Marantz
Monitor Speakers: JBL 4313's, Rogers, LS-3, Time Aligns, Auratones
Echo, Reverb, and Delay Systems: Custom reverb chamber, DeltaLab DL-2, Eventide
Other Outboard Equipment: Orban Parametric EQ's, compressor/limiters by dbx & Gain Brain, Kexex, UREI Graphic EQ's
Microphones: AKG, Sony, Sennheiser, Shure, Altec, Electro-Voice
Instruments Available: Yamaha piano, Hammond organ, Fender Rhodes, Tama drums
Rates: \$60/hr & block rates available

•••PEARL SOUND LTD.
2705 Provincial, Ann Arbor, Michigan 48104
(313) 971-2414
Owner: Ben Grosse
Studio Manager: Ben Grosse
Engineers: Geoff Michael, Ben Grosse
Dimensions of Studios: Studio 14' x 20', Secondary recording space 25' x 15'
Dimensions of Control Rooms: 10' x 10'
Tape Recorders: MCI JH-100 16 track; Otari MTR-10 2 track. Otari MX 5050B 2 track, Otari MX-5050 2 track; Technics cassette machines
Mixing Consoles: Quantum Gamma-A 24 input x 8 buss/24 tr monitor out
Monitor Amplifiers: Crown & McIntosh
Monitor Speakers: JBL 431 B, Auratones
Echo, Reverb, and Delay Systems: Audicon large plate reverb, Ursa Major digital reverb, live chamber, Lexicon Prime Time
Other Outboard Equipment: Eventide Harmonizer, Instant Phaser, Instant Flanger, Loit Delay/Flanger; Valley People Kepex II's, EXR Exciter, Teletronix LA 2A tube limiters (3), DLC Dual limiter, Omnicraft noise gates, Orban Parametric EQ, Orban De-Esser; Hiamp Graphic EQ (6); dbx noise reduction
Microphones: Neumann U87, KM84; AKG 414's, 451's, D12, Shure SM56, SM57's, RCA DX77 ribbon mikes, Sennheiser 441, 421's; EV RE-20's; PZM's
Instruments Available: Yamaha piano, amps, Marshall, Fender, Vox, Univox, custom made, vintage guitars available, Tama drums
Rates: 16-track \$55/hr, block rate (10 or more hours) \$45/hr; 8-track \$40/hr, 2-track \$35/hr

•••RADEX RECORDING STUDIOS
also REMOTE RECORDING
802 S. Chicago Ave., Freeport, Illinois 61032
(815) 235-9797
Owner: Dexter R. Witt
Studio Manager: Douglas R. Witt

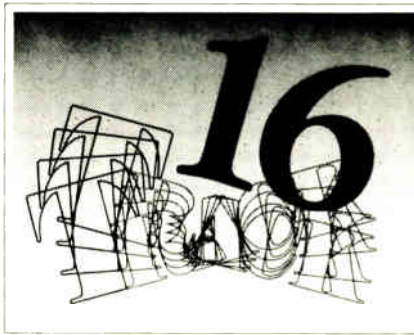
•••RAINBOW BRIDGE RECORDING STUDIO, INC.
117 West Rockland Road, Libertyville, Illinois 60048
(312) 362-4060
Owner: Rockland Road Studios, Inc
Studio Manager: C. Deutscher and Perry Johnson

•••DON D. SHEETS' LITTLE NASHVILLE
Whippoorwill Lane—R #3, Box 212,—Nashville,
Indiana 47448
(812) 988-2000
Owner: Don D. & Marti Mae Sheets
Studio Manager: Don D. & Marti Mae Sheets

•••S.I. STUDIOS
2001 Leech Ave., Sioux City, Iowa 51107
(712) 255-9911
Owner: Sound Ideas Productions, Kraig Wall, Greg Wall, Lon Rochester
Studio Manager: Kraig Wall and Greg Wall
Engineers: Kraig Wall, Greg Wall
Dimensions of Studios: 23' x 20'
Dimensions of Control Rooms: 15' x 13'
Tape Recorders: Tascam 85-16 16 w/dbx, Otari MX-5050 2 dbx, Otari MX-5050 2 track, TFAC 450 cassette
Mixing Consoles: Tangent 32-16 24 in x 16 out
Monitor Amplifiers: Yamaha P2100, Yamaha P2050 (Phones)
Monitor Speakers: JBL 4313's, Auratones 5C's
Echo, Reverb, and Delay Systems: MICMIX Master-Room XL-305, Tape Delay
Other Outboard Equipment: dbx Model 162 Stereo compressor/limiter, Phase Shifters, Chorus, Flangers
Microphones: Sennheiser 441's, 421's, PZM 150B's, 130A's, Shure SM 81's
Instruments Available: Yamaha conservatory grand piano, Rogers drums w/Zildjian cymbals, Yamaha synthesizer, Fender Rhodes electric piano
Rates: \$60/hr, \$65/hr after 6:00 PM and on weekends Block rates available.

•••SOLID SOUND RECORDING STUDIO, INC.
2400 W. Hassell Rd., Suite 430, Hoffman Estates,
Illinois 60195
(312) 882-7446
Owner: Judd Sager
Studio Manager: Judd Sager/Mike Fraser

•••SOUND HOUSE
424 W. Minnesota Ave., Willmar, Minnesota 56201
(612) 235-6404
Owner: New Life Communications, Inc.
Studio Manager: Ron Huisinga



•••SOUND IMPRESSIONS, INC.
also REMOTE RECORDING
110 River Rd., Des Plaines, Illinois 60016
(312) 297-4360
Studio Manager: Bill Hollane, C.M.S.
Engineers: Todd McGuire—Chief Eng., Timothy Powell—Staff Eng.
Dimensions of Studios: A. 525 sq ft, B. 225 sq ft (Isolation room), C. narration only 40 sq ft
Dimensions of Control Rooms: A. 300 sq ft, C. 400 sq ft
Tape Recorders: MCI JH-10 16 track; Scully 280 MS 4, 2, 1 track; Ampex AG-500 2 track, MCI JH-110 2 track, Nagra III 1 track; TEAC 3440 4 track
Mixing Consoles: MCI 24 in x 16 out, Tascam Model 10 8 in x 4 out
Monitor Amplifiers: McIntosh, Crown
Monitor Speakers: Altec, JBL
Echo, Reverb, and Delay Systems: AKG BX20, Eventide Harmonizer
Other Outboard Equipment: UREI I.N 1176 limiters, Kepex Noise Gate, Orban Parametric EQ, Eventide Flanger, dbx NR, Delta Graphic EQ, UREI 565
Microphones: Neumann U87, U47; AKG C451, Shure SM7, SM53, SM57, SM33, Sony ECM377, Electro-Voice 654, 655
Instruments Available: As needed—studio piano—Yamaha grand
Rates: Upon request

•••SOUND MACHINE STUDIOS
also REMOTE RECORDING
131-133 E. Kalamazoo Ave., Kalamazoo, Michigan 49007
(616) 381-5662
Owner: Bryce & Ginger Roberson, Norm & Ann Haas
Studio Manager: Ginger Roberson

•••STAR RECORDING
3708 W. National Ave., Milwaukee, Wisconsin 53215
(414) 645-7826
Owner: P A C Inc
Studio Manager: Michael Larscheid, Andrew Pigeon

•••STAR TRACK RECORDING
also REMOTE RECORDING (6 track)
N. Ridge Rd., East, Elyria, Ohio 44035
(216) 324-4837
Owner: B Vargo & C Shandler
Studio Manager: Maryann Vargo

•••SUNSET STUDIO
also REMOTE RECORDING
117 W. 8th, Hays, Kansas 67601
(913) 625-9634
Owner: Mark Meckel
Studio Manager: Mark Meckel
Engineers: Mark Meckel—Jack Trice
Dimensions of Studios: 20' x 30'
Dimensions of Control Rooms: 20' x 16'
Tape Recorders: Tascam 90-16 16 track, Tascam 25-2 2 track; Nakamichi, TEAC, AKAI (metal) cassette decks
Mixing Consoles: Tascam 15 16 in x 16 out
Mixing Amplifiers: Crown DC-300A, Crown DC150A (phones)
Monitor Speakers: JBL 4311's, Electro-Voice S 153, Auratones and Electro-Voice Sentry V
Echo, Reverb, and Delay Systems: Intersound, Eventide, DOD, MICMIX Master-room reverb system
Other Outboard Equipment: dbx comp/limiters 161 & 162, SAE 1/2 Octave EQ, Eventide H910 Harmonizer, MXR Flanger/Doubler, Omni Craft Noise Gates, Moog Parametric EQ's, MXR Stereo Chorus
Instruments Available: 100 yr. old Steinway grand piano, Moog, Rhodes, Elka Strings, Pearl drum kit, Hammond "D" Organ (Just like "B" only 3 inches smaller), Ludwig bell's Conga, K Zildjian cymbals and a 58 Les Paul, Marshall 50 & 30, Gibson Banjo & Mandolin, Ermonds steel Earth Wood acoustic bass, drum synthesizer, lots of percussion instruments
Rates: \$45/hr

•••SUPER-LYC'S, INC.
31925 Van Dyke, Warren, Michigan 48093
(313) 979-2305
Owner: Beau Williams, Bob Dennis
Studio Manager: Tim Holmes, Mark Novachoff

•••TAPE—TRACKS RECORDING STUDIO
2275 Yargerville Road, La Salle, Michigan 48145
(313) 243-1623
Owner: Bill Cuson
Engineers: Bill Cuson
Dimensions of Studios: 30' x 41', including two isolation booths
Dimensions of Control Rooms: 23' x 15'
Tape Recorders: Ampex MM1000 16 track; Ampex 440-C 2 track, Ampex 351-2 2 track
Mixing Consoles: Tangent 3216 24 in x 24 out
Monitor Amplifiers: BGW 750, 300, Phase Linear 400
Monitor Speakers: Sentry III
Echo, Reverb, and Delay Systems: Echo-Plate, Slap Echo (Ampex), Delta Lab D-D line
Other Outboard Equipment: dbx 904 noise gates, UREI 1176LN comp/limiters
Microphones: AKG; Shure, EV, Sennheiser, Neumann
Instruments Available: Baby grand piano, Hammond Porta-B with Leslie speaker, drums, Peavey bass Amp, Fender Super-reverb (pre-CBS)
Rates: \$50/hr

•••TIMBRE RECORDING STUDIO
11628 South Pulaski Road, Alsip, Illinois 60658
(312) 371-8424
Owner: Jerry Muzika
Studio Manager: Jerry Muzika
Engineers: Jerry Muzika, Scott Rowley
Dimensions of Studios: 30' x 18' drum room; 12' x 9'
Dimensions of Control Rooms: 20' x 15'
Tape Recorders: Tascam 85-16 w/dbx & auto locator 16 track, Tascam 35-2 w/dbx 1/2 track; TEAC X-10 1/4 track, TEAC C-X 270 cassette
Mixing Consoles: Tascam 15 highly modified 20 in x 8 out, Tascam Aux 1 effects mix
Monitor Amplifiers: BGW, SAE, Crown, Nikko
Monitor Speakers: JBL 4313 BWX, JBL 4311, Scott Pro 100, Auratone
Echo, Reverb, and Delay Systems: Master-Room XI, 305, Delta Lab Acousticcomputer, Fairchild 659, Fairchild 658 A, Ibanez AD-230, Chamber
Other Outboard Equipment: dbx Noise Reduction (all tape machines), Burwen DNF 1201 noise filter, MXR Dual Limiters, MXR Auto Phase, Auto Flanger Pro Rack, Omni Craft GT 4 noise gates, SAE EQ, Ashley Parametric Equalizer, Audio Control Equalizer, Audio Control Real Time Spectrum Analyzer, Aphex Exciter, UREI Sub-Sonic Processor, Hycor Program EQ, Valley People-dyna-mite expander, limiter noise gate De-Esser
Microphones: Neumann U 87's, AKG C451 E's, D224 E's, D100E's, Sennheiser MD 421's, Shure SM53's, SM54, SM7, SM57's, SM50's, SM58's, SM61, Electro-Voice 645's, RE 20, Re-11, Audio-technica AT 802, Countryman EM 101, Turner, Barcus Berry piano Transducer system
Instruments Available: Adam Shalt Grand, Start concert upright, Singierland all wood drums, Rickenbacker amp, Ovation amp, full rental service upon request
Rates: \$38 00/hr

•••ZEM RECORDING STUDIO
3709 South 60th Court, Cicero, Illinois 60650
(312) 656-1544
Owner: Ed and Sue Zajda
Studio Manager: Sue Zajda
Engineers: Ed Zajda, Jennifer Zajda
Dimensions of Studios: 30' x 24'
Dimensions of Control Rooms: 16' x 10'
Tape Recorders: Tascam 85 16 16 track, Ampex ATR 102 2 track, Otari 5050B 2 track, Nakamichi 562 cassette deck
Mixing Consoles: Tangent 3216 24 in x 16 out
Monitor Amplifiers: Yamaha P-2200 (2), Crown D75
Monitor Speakers: JBL 4343's, 4313's, Dahlquist DQM-9's; Yamaha NS-10M's, Auratones
Echo, Reverb, and Delay Systems: Lexicon 224 Digital Reverb system, Eventide Harmonizer H949; Lexicon Prime Time (2), Delta Lab DL 2 Acousticcomputer
Other Outboard Equipment: 18 channels dbx type I, 2 channels dbx type II, Dolby A system 361, High Com II Noise Reduction, UREI 1176 (2) comp., dbx 160 (2) comp., Gain Brain (4), Kepex (4), dbx 900 rack, Orban-Parametric, EXR Exciter (2), Aphex Exciter
Microphones: Neumann, AKG, Sennheiser, Shure, Electro-Voice, Sony
Instruments Available: Yamaha Electric concert grand, Ludwig drums, ARP 2600
Rates: Upon request
Extras: No "extra charge" for all available equipment or musical instruments
Direction: We are a fully equipped studio using a 1" tape format. Our main goal is to get the best sound on tape at the lowest cost to the client. Music production and assistance are also available. We encourage our clients to experiment with new techniques and equipment as it becomes available and/or as it may enhance the musicality of their production.



••ZENITH/db STUDIOS
 676 N. LaSalle, Chicago, Illinois 60610
 (312) 944-3600
 Owner: Coken & Coken, Inc.
 Studio Manager: Ric Coken
 Engineers: Michael Moats, Joel Sears, Mike Minuskin, Pete Gale, Michelle Landes, Richard A. Coken, Ed Golya, Curt Frisk, Jim Moore, Hans Wurman
 Dimensions of Studios: 9 Studios from 700 sq. ft. to 200 sq. ft.
 Dimensions of Control Rooms: 5 Control rooms approx. 500 sq. ft. each
 Tape Recorders: MCI 16 track, Scully 8 track, Ampex 4 & 2 track
 Mixing Consoles: Custom & Studio Designs 24 in x 16 out
 Monitor Speakers: Electro-Voice (Sentry III), Auratone Sound Cubes
 Echo, Reverb, and Delay Systems: UREI Orban, Burwen Allison, Audio & Design, Pultec
 Other Outboard Equipment: Separate iso Booth, Drum Booth, Multi Level Man
 Microphones: Neumann, PML, Sony, AKG, Sennheiser, EV, Shure
 Instruments Available: Steinway Piano, Hammond B3 organ, Pearl drum kit
 Rates: Film \$135-\$40/hr., Music \$100-\$40/hr., Production \$65-\$35/hr.



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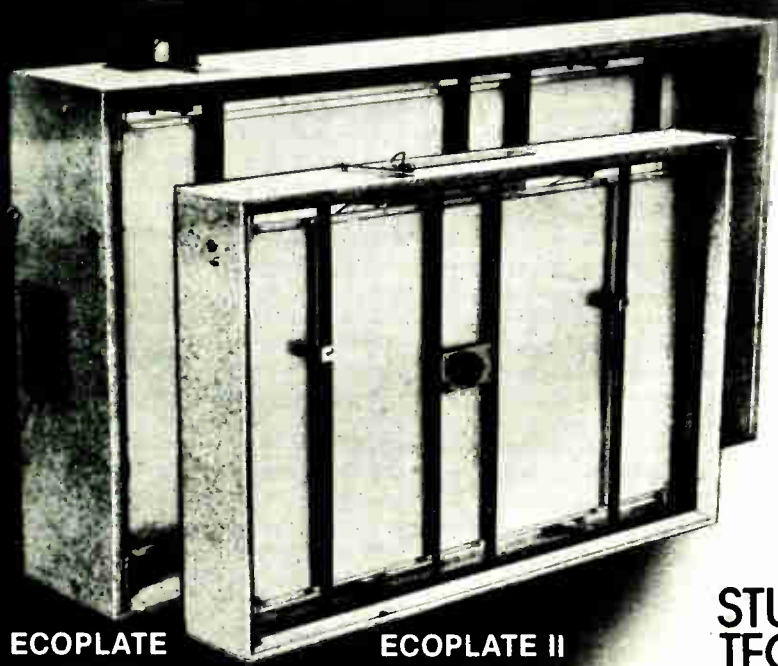
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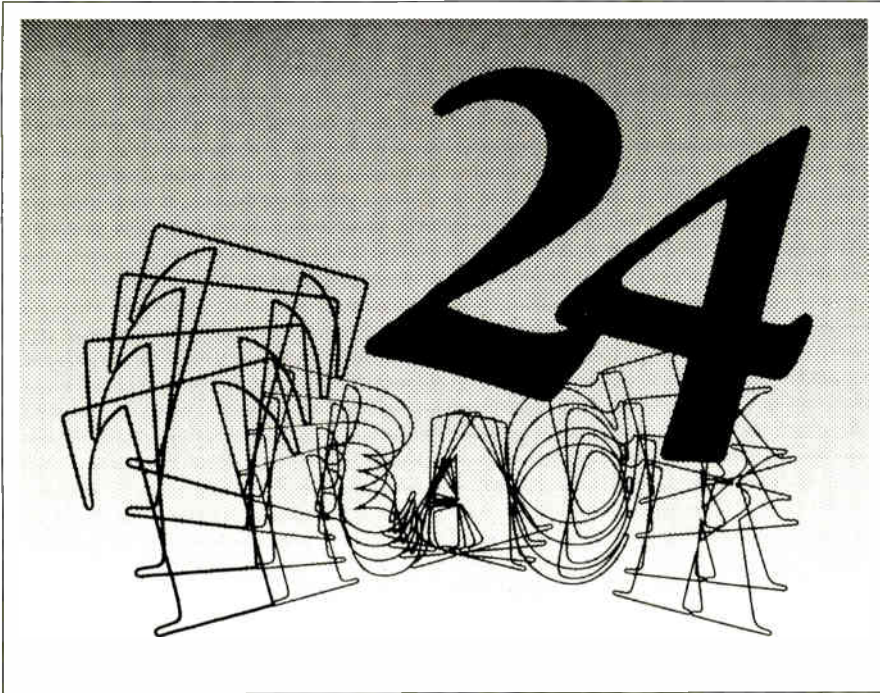
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••••A SQUARE STUDIOS

3691 Morgan Road, Ann Arbor, Michigan 48104
(313) 434-2141

Owner: Robert June Jr., Al and Dee Hurschman
Studio Manager: Al Hurschman

Engineers: Al Hurschman-Chief Engineer, Dee Hurschman
Dimensions of Studios: 60' x 40' Main Room, Isolation rooms 10' x 20' & 12' x 18'

Dimensions of Control Rooms: 18' x 18'

Tape Recorders: MCI JH 24 24 & 16 track, MCI JH-110A 2

track, MCI JH-110B 2 track, Scully 280B 2 track

Mixing Consoles: Neotek Series III 28 in x 24 out

Monitor Amplifiers: Crown DC300A, SAF P-50, Crown D-60, McIntosh 275

Monitor Speakers: JBL 4333A, 4311A, Auratone 5C

Echo, Reverb, and Delay Systems: EMT 140, Eventide Harmonizer, Marshall Time Modulator, Delta Lab DL-2, Sound Workshop 262, Time Tech, Acoustic Chambers (2)

Other Outboard Equipment: dbx 165, UREI 1176 LN, Teletronics LA2A, 208 dbx noise reduction (all channels) Orban Limiter, Omni Craft Gates, Scamp Rack, EXR

Microphones: Neumann U89, U87, KM84, KM56, EV RE-20, RE-15, CS-15, RE-55, Shure SM58, SM57, SM81, SM54, AKG 414 EB, 452, 109, 190

Instruments Available: Steinway grand piano, Thery Upright grand piano, Hammond B-3 organ with Leslie, extensive drum kit, several amplifiers

Rates: Base rate \$100/hr, packages available

Extras: Guest houses, game room, producers lounge, swimming pool, Jacuzzi Whirlpool and sauna all located on a five acre music complex

••••AFTER DARK RECORDING STUDIO INC.

also REMOTE RECORDING

5510 Pearl Rd., (lower level) Cleveland, Ohio 44129

(216) 845-5455

Owner: Kirk Yano

Studio Manager: Mary Jo Difino

Engineers: Kirk Yano-George Sipl

Dimensions of Studios: A' 24' x 16'; B' 14' x 16'—Live room.

Dimensions of Control Rooms: 19' x 15'

Tape Recorders: MCI 114-24 24 track, MCI 110-2 2 track, Otari 5050B-2 2 track, Sony 854 4 4 track; Technics M 65 2 track

Mixing Consoles: MCI 424 (modified by Randy Blevins, Nashville, Tenn) 24 in x 24 out (5534 chips & light meters)

Monitor Amplifiers: BGW 750, Crown D-60, Marantz 140

Monitor Speakers: JBL 4343, 4311, Auratone cubes, 6' x 9' car

spks

Echo, Reverb, and Delay Systems: EMT 240 Gold Foil, Eventide 910 Harmonizer, Lexicon Prime Time, Cooper Time Cube, Delta Lab Digital Delay, Tape Echo

Other Outboard Equipment: Allison, Kepex, Gain Brains, UREI LA-4 limiters, Pultec Tube EQ, Trident Parametric EQ, UREI 10-band EQ, UA 17B Tube limiter, MCI Mono tube limiter, EXR Exciter, Vocoder

Microphones: Neumann U-87, U-67 (tubes); Sennheiser 441, 421, Sony 377P, 22P, Shure SM-57-58-59-81, EV-RE-15-666, AKG 414, 452, 451, P2M; RCA Ribbon.

Instruments Available: Yamaha grand piano, Fender Rhodes,

Ludwig drums, Prophet V, Roland, VOX guitar amps, ARP 2600, PRO soloist, Stringman, Marshall Super Lead, 100 4' x 12" lab

Rates: \$75/hr—24Trk; \$30/hr—2Trk

••••AMBIENCE RECORDING INC.

also REMOTE RECORDING

27920 Orchard Lake Road, Farmington Hills,

Michigan 48018

(313) 851-9766

Owner: Jerome A Silecchia "President"

Studio Manager: Gerard Smerck

••••A & R RECORDING STUDIOS

also REMOTE RECORDING

2700 Ford St., Ames, Iowa 50010

(515) 232-2991

Owner: Steve Monroe

Studio Manager: David Kingland

••••ARTIST WORKSHOP RECORDING

2228 E. Maple, Kankakee, Illinois 60901

(815) 933-7090

Owner: George M Marakas

Studio Manager: George M Marakas

••••ASI STUDIOS

711 W. Broadway, Minneapolis, Minnesota 55411

(612) 521-7631

Owner: Audiotek Systems, Inc

Studio Manager: Sandi Milani

••••AUDIO RECORDING STUDIOS, INC.

also REMOTE RECORDING

601 Rockwell Ave., Cleveland, Ohio 44114

(216) 771-5112

Owner: Audio Recording Studios, Inc (Corp)

Studio Manager: Mary Anne Rettger

••••AUDIO TRAK INC.

also REMOTE RECORDING

1025 West State St., Rockford, Illinois 61102

(815) 968-2902

Owner: Stan Valulis

Studio Manager: Stan Valulis

Engineers: Joe Guarino, Jim Guarino, Stan Valulis

Dimensions of Studios: 33' x 39'—five isolation rooms

Dimensions of Control Rooms: 18' x 21'

Tape Recorders: MCI JH-114 24 track, MCI JH-110A 2 track;

Scully 280B 2 track, Revox A77 2 track

Mixing Consoles: MCI JH-536C 28 in x 24 out

Monitor Amplifiers: BGW 750, 250, Crown DC300's

Monitor Speakers: UREI 813's, JBL 4311, Auratone 5C's

Echo, Reverb, and Delay Systems: Echo Plate, Live Chamber,

Eventide H-949, Delta Lab DL-4, Marshall Time Modulator, Pan-

dora Time Line.

Other Outboard Equipment: 24 track dbx noise reduction,

UREI LA-4's, 1176LN Peak Limiters, ADR Expander Gates, S-300's, S-36's, Dual Gates, Kepex Gates, Orban Silblance Con-

trollers

Microphones: AKG 414's, 452's, D12F's, Neumann U87's, Electro Voice, Shure, etc

Instruments Available: Steinway B, Oberheim Polyphonic,

Pearl drums, various amps and keyboards

Rates: \$75 00 24 track, \$35 00 2 track, set up time free

Extras: Comfortable working atmosphere, lounge game room, package prices available including rooms, food, and transportation

Direction: We are committed to achieving the highest quality recordings for all our people no matter what the size of the project. We also give pre-production consultation to musicians unfamiliar with studio work. A full jungle production company is also based out of our studio

••••MARTY BLEIFELD PRODUCTIONS, INC.

1650 Cass Street, Fort Wayne, Indiana 46808

(219) 424-4014

Owner: Marty Bleifeld, Lynda Bleifeld, James Markton

Studio Manager: Lynda Bleifeld

Engineers: Marty Bleifeld, Bret Angel

Dimensions of Studios: 25' x 35', Isolation Booth 12' x 9'

Dimensions of Control Rooms: 20' x 20'

Tape Recorders: MCI 24 track, 4 track, Studer B-67 2 track

Mixing Consoles: Sound Workshop 1600 28 in x 24 out

Monitor Amplifiers: BGW 600, 100, Crown D-150A, D-60

Monitor Speakers: UREI Time Aligned, Auratone-Control

Room: Yamaha NS 1,000's-Studio.

Other Outboard Equipment: Echoplate, Lexicon Prime Time,

MXR Digital Delay, Fisher Space Expander, Orban Parametric

EQ Model 622B, UREI LA 4 limiters.

Microphones: Neumann, AKG, Sennheiser, Sony, EV

Instruments Available: Yamaha C3D grand, complete instru-

ment rental available

Rates: Please call.



Chicago Recording Company
Chicago, Illinois

••••CHICAGO RECORDING COMPANY

528 North Michigan Avenue, Chicago, Illinois 60611

(312) 822-9333

Owner: Alan S Kubicka

Studio Manager: Joe Sturm, Susan Divita

Engineers: Chns Sabold, Hank Neuberger, Phil Bonnano,

Tommy Hanson, Dennis Anderson, Mike King, Gary Hedden

Dimensions of Studios: A' 27' x 45'; B' 23' x 35'; D' 35' x

67'; Studio C-1, C-2, E & H designed for voice-over & produc-

tion

Dimensions of Control Rooms: A' 19' x 20'; B' 22' x 22'; D'

26' x 26'

Tape Recorders: MCI 24, 8, 4, 2 track and mono

Mixing Consoles: Cadac Series E 36 in x 32 out, MCI JH-532C

36 in x 32 out, Flickinger Model D 32 in x 24 out

Monitor Amplifiers: Crown

Monitor Speakers: Cadac, UREI 813's, Westlake/Eastlake

Echo, Reverb, and Delay Systems: EMT-140's, 240's,

Echoplate; AKG BX-20; Master-Room; Eventide Harmonizers &

Digital Delay, Lexicon Prime Time & digital delay, Marshall Time

Modulators.

Other Outboard Equipment: All ancillary equipment available,

we are a true world class studio (Automation, SMPTE Time Code,

Video Sweetening, etc.)

Microphones: Neumann, AKG, Shoepes, Sennheiser, Sony,

Shure, Electro-Voice, RCA, Altec plus many classic tube

microphones

Instruments Available: Bosendorfer grand piano, Steinway

grand piano, Fender Rhodes, Clavinet, Harpsicord, Hammond

organs, Sonar & Rogers drums, Minimoog, Polymoog, ARP

2600, ARP Omni, ARP String

Rates: Studio A & D' \$185/hr; Studio B' \$165/hr. Production

Studios: \$55-\$100/hr, rates available for block bookings

Extras: 46-track recording, automation, SMPTE Time Code,



THE CHICAGO RECORDING COMPANY
Chicago's
World Class
Studio

CHICAGO RECORDING COMPANY

528 North Michigan Chicago

FOR RATES AND BOOKING INFORMATION, PHONE 312/822-9333
ALAN KUBICKA, PRESIDENT

video sweetening, the best working environment in the city
Direction: Since we opened our doors in 1975 we have been Chicago's true world class facility. Our staff is considered the best in the city and we service our clients to the very hilt. Recent record clients include Ramsey Lewis, Jerry Butler, Todd Rundgren, Marshall Tucker Band, The Ohio Players, Styx, Cameo, Steve Goodman, Dee Dee Sharp and Gambler. Commercial jingles to our credit include hundreds of spots for McDonald's, Coke, United Air Lines, Wrigley's Gum, Schlitz, Sunkist, Kellogg's and Sears. If it can be done, CRC is known as the studio that can do it.

****CLOUD BORN PRODUCTIONS, INC.
 18000 Mack Ave., Grosse Pointe, Michigan 48224
 (313) 882-0566
 Owner: Gary Praec
 Studio Manager: Mary Ann Mathello

****CREATION AUDIO RECORDING, INC.
 5002 West Old Shakopee Road, Bloomington, Minnesota 55437
 (612) 881-6020
 Owner: Terry Grant, Steve Wiese
 Studio Manager: Terry Grant

****CREATIVE AUDIO
 ALSO REMOTE RECORDING
 705 Western Ave., Urbana, Illinois 61801
 (217) 367-3530
 Owner: Michael Day, Michael Reed, Dana Walden, Leon Reeder
 Studio Manager: Michael Reed

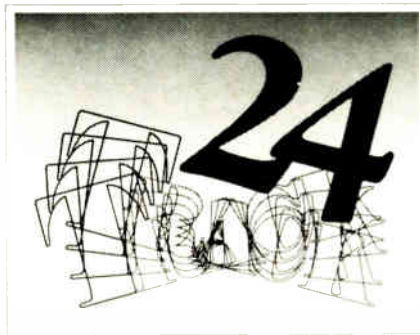
****CURTOM STUDIOS
 also REMOTE RECORDING
 5915 N. Lincoln, Chicago, Illinois 60659
 (312) 769-1439
 Owner: Curtom Studio
 Studio Manager: Roger Antensen

****CYBERTEKNIKS
 also REMOTE RECORDING
 1953 East Third Street, Dayton, Ohio 45403
 (513) 258-2463
 Owner: Philip Mehaffey

****5TH FLOOR RECORDING STUDIOS
 517 West Third Street, Cincinnati, Ohio 45202
 (513) 651-1871
 Owner: Richard Goldman
 Studio Manager: Richard Goldman
 Engineers: Staff, Richard Goldman, Greg McNeely, freelance engineers available & welcome
 Dimensions of Studios: 20' x 25'
 Dimensions of Control Rooms: 20' x 15'
 Tape Recorders: MCI JH-114 24 track, Studer B67 2 track, Ampex 44B 2 track, Scully 280 2 track, Sansui SC1110 cassettes 2 track
 Mixing Consoles: Sphere Eclipse A 28 in x 24 out
 Monitor Amplifiers: BGW 500, BGW 250
 Monitor Speakers: UREI 813 Time Aligned, JBL 4311, Auratones
 Echo, Reverb, and Delay Systems: Lexicon 224 Digital Reverb, Echo Plate, Lexicon Prime Time Digital Delay, Marshall Time Modulator, Cooper Time Cube
 Other Outboard Equipment: Orban 622B Parametric EQ, UREI 1176 LN Limiters, UREI LA3A limiters, dbx 160 limiters, dbx 160 De-Esser, dbx noise reduction 26 channel, Audiotronics EQ
 Microphones: Neumann tube U47's, U87's, KM 84's, KM 86's, Shure 57's & 58's, EV RE-20, RE-16, 666, RCA 77's, Beyers M500 Schoeps
 Instruments Available: Steinway 7 grand, Fender Rhodes, Rogers drums, Synthesizers available by appointment
 Rates: Available upon request

****GERIM RECORDING, INC.
 2120 S. Michigan, Chicago, Illinois 60616
 (312) 326-5450
 Owner: Gerald Sims & Kathleen Newman
 Studio Manager: Kathleen Newman

****HEDDEN WEST RECORDERS
 1200 Remington Road, Schaumburg, Illinois 60195
 (312) 885-1330 / (312) 885-9378
 Studio Manager: Michael Freeman
 Engineers: Iain Burgess, Mal Davis, Kevin Vogts, Joe Ott, John Nevin, Bill McQueen, Corey DeMattes
 Dimensions of Studios: A 1100 sq. Ft., B 800 Sq. Ft.
 Dimensions of Control Rooms: A 650 sq. Ft., B 400 Sq. Ft.
 Tape Recorders: MCI JH 16 24 track w/Autolocator Mx II, Studer B67, 2 track, Revox A77's, 1/4 track, 1/2 track, AIWA 6900 cassette deck
 Mixing Consoles: Sphere 'Eclipse' 32 in x 24 out, Sphere custom



24 in x 16 out w 24 trk monitoring
 Monitor Amplifiers: Yamaha P2201
 Monitor Speakers: UREI 813, JBL 4311 Auratone
 Echo, Reverb, and Delay Systems: EMT Gold Foil, Lexicon 102 EMT 140
 Other Outboard Equipment: Eventide Harmonizer, Flanger, dbx 160 comp limiters, Omni Craft & Kepex noise gates, assorted equipment available on a rental basis
 Microphones: Neumann U47, U87, KM84, KM86, KM88, Sennheiser 441, 421, Beyer 260, 160, AKG 414, 451, 452, D202, D224, EV RE 15, RE 20, DS-35, Shure SM81, SM33, P2M, Altec C195, Sony C38
 Instruments Available: Yamaha 7 grand piano, Steinway B 7 grand piano, Fender Rhodes, Hammond CV w Leslie, Ludwig drums, Yamaha drums, assorted amplifiers
 Rates: Studio A \$50/hr 10am-12mid, \$40/hr 12 mid 10am, Studio B \$40/hr, subject to change without prior notice

****K & R RECORDING STUDIO
 also REMOTE RECORDING
 29111 Greenfield, Southfield, Michigan 48076
 (313) 574-2080 & 557-8276
 Owner: Ken Glaza
 Studio Manager: Pat
 Extras: Our new studio C at a location to be announced on completion will be on the order of a sound laboratory whose comfort, table & proper design will lend itself to the creating of music. No others have combined 16 & 24 track pinch rollerless machines, post production abilities w/qualified writers, musicians & producers (our present specialty), non EQ'd monitors, floppy disk automation, non compromising mix board, good cross selection of mikes including ribbons, dynamics condensers old & new, instruments, cassette duplication, pressing service, successful marketing & packaging services plus 14 years of audio technical knowhow to always produce high quality & creative sound without a doubt. Based on samples of our LP, commercial & video sound work, put at Studio B, you can get an idea of what is to come. Ask any of our clients about our uniqueness.

****KBK/EARTH CITY SOUND STUDIOS, INC.
 also REMOTE RECORDING
 4288 Rider Trail, Earth City, Missouri 63045
 (314) 291-4840
 Owner: Kent & Marilyn Kesterson
 Studio Manager: Marilyn Kesterson

****LANSING SOUND STUDIOS, INC.
 also REMOTE RECORDING
 2719 Mt. Hope Rd., Okemos, Michigan 48864
 (517) 351-6444
 Owner: Bob Baldon
 Studio Manager: Lou Firpin

****McCOY RECORDING COMPANY
 also REMOTE RECORDING
 7018 West Warren Avenue, Detroit, Michigan 48210
 (313) 361-2444
 Owner: Edward L. McCoy
 Studio Manager: Cheryllyn McCoy

****PARAGON RECORDING STUDIOS, INC.
 also REMOTE RECORDING
 9 East Huron St., Chicago, Illinois 60611
 (312) 266-0075
 Owner: Martin J. Feldman
 Studio Manager: Nancy Gardner

****PEPPERMINT PRODUCTIONS CORP.
 also REMOTE RECORDING
 803 East Indianola Ave., Youngstown, Ohio 44502
 (216) 783-2222
 Owner: Gary L. Rhamy
 Studio Manager: Larry Repasky
 Engineers: Gary Rhamy, Larry Repasky
 Dimensions of Studios: A 40' x 30', B 20' x 15'
 Dimensions of Control Rooms: A 30' x 10', B 20' x 7'
 Tape Recorders: Scully 284 B 12, 16, 24 track, Ampex 440A 2, 4 track, Ampex 351 1 track
 Mixing Consoles: Custom containing Altec Automated Processors Fairchild components 24 in x 44 out, Custom Universal

Audio components 12 in x 4 out
 Monitor Amplifiers: Crown McIntosh
 Monitor Speakers: JBL 4320's and custom Altec Voice of the Theatre
 Echo, Reverb, and Delay Systems: Loft 440 DDL, Eventide Instant Flanger, Acoustic Echo Chamber, Sound Workshop Tape Echo
 Other Outboard Equipment: 16 MM film sound, variable speed on all machines interlock between studio a & b
 Microphones: Neumann U87, U67, KM86, KM84, Telefunken 251, Shure, Sony, EV, RCA etc.
 Instruments Available: Steinway piano, Hammond C 3 organ, string ensemble, tympanies, misc. percussion instruments
 Rates: 24 trk \$95/hr -16 trk \$65/hr, -8 trk \$55/hr -4 trk \$45/hr

****PIERCE ARROW RECORDING
 1911 Ridge Ave., Evanston, Illinois 60201
 (312) 328-8950
 Owner: Sam Lynn & Frank Seater
 Studio Manager: Frank Seater
 Engineers: Gus Mossler, Paul Klingberg
 Dimensions of Studios: 2400 sq. ft.
 Dimensions of Control Rooms: 20' x 20'
 Tape Recorders: Ampex 1200 24 track, Ampex ATR 102 2 track, Ampex ATR 104 4 track
 Mixing Consoles: Neve w/Neam 8078 computerized 40 in x 48 out
 Monitor Amplifiers: Crown 300
 Monitor Speakers: Hidy TM 11, JBL 4311's, JBL 4333's
 Echo, Reverb, and Delay Systems: AKG BX-20, Echoplex EMT 240, Lexicon 224
 Other Outboard Equipment: Allison Gain Brains, Kepex's dbx 160 limiters, Eventide Harmonizer, Eventide Digital Delay units, Eventide Flanger, UREI Parametric Equalizer, LA 3A limiter
 Microphones: Neumann AKG's, Beyer, Electro-Voice, P2M, Sennheiser, Shure & Sanyo
 Instruments Available: Piano & Hammond B 3 organ
 Rates: Call for rates

****PINEBROOK RECORDING STUDIOS
 also REMOTE RECORDING
 P.O. Box #146, State Road #9 South, Alexandria, Indiana 46001
 (317) 724-7721
 Owner: Bill Gaither, Dan Posthumus, Bob MacKenzie
 Studio Manager: Randy Hammel

****PRISM RECORDING STUDIOS
 also REMOTE RECORDING
 16036 Union Ave., Harvey, Illinois 60426
 (312) 339-8015 Booking & Info. Studio: (312) 339-8145
 Studio Manager: Steve MacCarthy
 Engineers: Bob Yulek, Steve McCarthy
 Dimensions of Studios: 40' x 16', 15' x 10'
 Dimensions of Control Rooms: 15' x 20'
 Tape Recorders: Otari MTR 90 24 track, Otari MX 5050B 2 track
 Mixing Consoles: Neotec Series III 28 in x 24 out
 Monitor Amplifiers: (2) Crown PSA 2, (1) Crown DC 300A, (2) Crown D-75 AB Systems 105
 Monitor Speakers: (4) Electro-Voice Sentry III, (2) EV Sentry 100, (2) Auratones
 Echo, Reverb, and Delay Systems: Lexicon Prime Time, Eventide H949, Ursa Major Space Station, MXR Digital Delay, Pitch Transposer, and Flanger Doubler, Delta Lab DL4 and DL2, Master Room XL305, Echo Plate
 Other Outboard Equipment: Omnicaft Noise Gates, UREI and dbx compressors, Orban Equalization, Orban Stereo Synthesizer, Scamp, dbx 900 Series rack, EXR-EX III
 Microphones: Neumann, Electro-Voice, Sennheiser, Crown, P2M, AKG, Shure, Sony, PML
 Instruments Available: Hammond C 3, Rhodes 88, Kawai 6 piano, ARP Strings, Kora RM55, Ludwig 9 piece kit w cymbals, Slingerland 6 piece kit w cymbals, complete percussion Lab Series amps, complete studio instrument rental service (all brands)
 Rates: \$24 trk-\$70/hr, 2 trk-\$40/hr

****QCA RECORDING STUDIOS
 2832 Spring Grove Ave., Cincinnati, Ohio 45225
 (513) 681-8400
 Owner: Edward R. Bosken
 Studio Manager: Jim Bosken

****THE RECORDING CONNECTION, INC.
 also REMOTE RECORDING
 23330 Commerce Park Rd., Beachwood, Ohio 44122
 (216) 464-4141
 Owner: Arne Rosenberg
 Engineers: Paul Schwartz, Chief Lydia Ternon, Asst Eng Dale Peters, Ken Tomsick, Jim Carroccio
 Tape Recorders: Studio A MCI w/SMPTE JH 24 transformerless 48 track, MCI JH-110B 2, 4 track, Studio B MCI JH-24 transformerless 24 track, MCI JH-110B 2, mono A6B TEAC 3C cassette, Remote MCI w/SMPTE 48 track

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 15-24 25-34 35-44 45+
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How long involved in pro audio? _____

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 NAB SMPTE
 NARM PEPS
 CES Other: _____

Mix Magazine, October 1981

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Mixing Consoles: A MCI w/parametric EQ option JH-600 automated 36 in x 36 out, B MCI JH-600 automated 28 in x 28 out. Remote MCI JH 600 automated

Monitor Amplifiers: BGW 750, Crown DC 300 (2) Crown DC150's

Monitor Speakers: UREI 813 Time Aligned monitors, JBL 4313, Auratones (Both A & B)

Echo, Reverb, and Delay Systems: Echoplata & Lexicon 224 (Both A & B)

Other Outboard Equipment: UREI 1176 limiters, UREI LA 4 limiters, Scamp racks, Lexicon Prime Time, Marshall Time modulators, Eventide H949, Harmonizer, (Both A & B) Duplicating (3) Otari MX5050B, (2) Nakamichi 6080Z cassettes, Telex Cartridge recorder

Microphones: (4) EV RE 20's, (2) EV RE 15's, (2) Shure SM7's, (3) Shure SM 57's, (4) Shure SM81's, (5) Beyer M88's, (6) Beyer M160's, (2) Neumann U 47's, (6) Neumann U 86's, (6) Neumann U 87's, (6) Neumann KM-84's, (7) AKG C 414's, (2) AKG C452's, (4) Sennheiser MF421, Sony ECM 50's

Instruments Available: A Yamaha 9' grand B Yamaha 7' grand, 2 Hammond organs, Thunderoad 73, Hohner Clavinet, Leslie speaker, Ludwig drum set, guitar & bass amps

Rates: Call for rates

◆◆◆SHADE TREE

Playboy Resort, Hwy. 50 Box 168, Lake Geneva, Wisconsin 53147

(414) 248-2400

Owner: Recreational Recording, Inc
Studio Manager: Paul Davis

◆◆◆SOLID SOUND, INC.

also REMOTE RECORDING
1289 N. Dixboro Rd., Ann Arbor, Michigan 48105

(313) 662-0667

Owner: Robert Martens

Studio Manager: Robert Martens

Engineers: Will Spencer, CE, Rob Martens

Dimensions of Studios: 28' x 23' plus isolation room of 12' x 12', 12' 5' ceilings trapped down to 10'

Dimensions of Control Rooms: 17' x 17'

Tape Recorders: MCI JH 114 24 track, MCI JH 110B 2 track, Otari 5050B 2 track, Nakamichi (2) 582 cassette

Mixing Consoles: MCI JH-636 32 in x 32 out

Monitor Amplifiers: Crown Halter

Monitor Speakers: UREI 813, JBL 4311, 4313, Rogers LS3 5A, Auratones

Echo, Reverb, and Delay Systems: Lexicon 224, Echoplata II, Lexicon Prime Time, Delta Labs DL 1, Roland Chorus Echo

Other Outboard Equipment: dbx 900 rack, UREI LA-3A's, dbx 160's, 165's, Eventide Harmonizer and Instant Flanger, EXR Exciter, UREI 546, Ashly Limiters, 32 channels dbx, Crown RTA-2

Microphones: Neumann U 67, U 47, U 87, AKG 414, 451 (w/omni & cardioid), D 12, D 1000, Sennheiser 441, 421, Shure SM57, SM58, SM-81, Crown PZM, Altec 526 (tube), EV RE 15, RE 20

Instruments Available: Steinway 9' concert grand, Baldwin 9' concert grand, Rhodes 88, ARP 2600 Wuritzer Ele- piano, Lud wig drums, Martin 6 & 12 string guitars, various Fender and Yamaha amplifiers (Also ARP Omni)

Rates: \$85/hr single hour. Several discount packages available. Extra charge for SMPTE/Video lockup

Extras: Private quiet country location very near major transportation options. Both budget and luxury accommodations available. Studio design by George Augspurger

Direction: We are a musician owned and operated studio and we make client comfort our goal. We maintain a production company and a large pool of talented musicians and arrangers. As a sideline we custom load cassettes and wholesale master tape. Solid Sound firmly believes in the music coming out of Southeastern Michigan and we are presently in the planning stages for a new multi studio complex to be built in this area

◆◆◆SOUND 80 INC.

also REMOTE RECORDING
2709 East 25th St., Minneapolis, Minnesota 55406

(612) 721-6341

Owner: Herb Piholer

Studio Manager: Gary Erickson

◆◆◆SOUND PATTERNS DXM

also REMOTE RECORDING
38180 Grand River, Farmington Hills, Michigan 48018

(313) 477-6444

Owner: Dan D. Dallas

Studio Manager: Pelly Dallas

Engineers: Dan Dallas, Jeff Miller

Dimensions of Studios: Studio "A" 31' x 42' asymmetrical, Studio "B" 19' x 36'

Dimensions of Control Rooms: Studio "A" 15' x 26' asymmetrical, Studio "B" 15' x 19'

Tape Recorders: Auto ter Custom made 16/24 track (2"), Ampex A644 B track, Ampex 351 2 2 track, Scully 280 2 track, Tascam/TEAC/Revox and TEAC 1/2" and 1/4" formats

Mixing Consoles: Custom built w/parametric equalizers (Studio "A") 32 in x 24 out, Audio Designs (Studio "B")

Monitor Amplifiers: McIntosh (3)

Monitor Speakers: Speaker Lab (custom), Cizek, DXM Tone Cubes, Altec 604E, Altec A 700, AR3 A



Echo, Reverb, and Delay Systems: EMT 140S Loft, Fairchild Orban, tape

Other Outboard Equipment: Eventide Phaser, Flanger, Loft, Delta Lab, EXR Exciters, UREI 1176LN Limiters, Teletronix LA3A, UREI Filter, dbx Limiter, Outboard Parametrics Orban De Esser

Microphones: AKG 414, Neumann KM86, PZM (8), AKG 451, EV RE 20, Shure SM81, Sennheiser, Beyer, RCA, Altec, and more

Instruments Available: Poly Moog, Minimoog, Kanabe grand piano, Hohner D6 Clannet, Degaan manbambas, Slingerland drum set, Hammond B3 w/Leslie and tone cabinet, amps Ampeg B15, Fender, Music Man, and Peavey



Sound Patterns DXM
Farmington Hills, Michigan

Rates: \$30-\$140 per hour

Extras: Motel accommodations across the street, many restaurants, 1000 ft sauna, pool, bowling, bars in immediate vicinity. 15 minutes to Mt Brighton. Located 25 minutes from Metro Airport

Direction: Sound Patterns is the leading music studio in the metro Detroit area and has many satisfied customers over the past 12 years since its inception. It is one of the first studios in the country totally designed asymmetrically. Headed by Danny Dallas, Sound Pats records rock, jazz, country, gospel, commercials, jingles, radio and TV Program Services, training films, pulsing disk cutting, tape cassette duplication etc.

◆◆◆SOUND RECORDERS, INC.

also REMOTE RECORDING
3947 State Line, Kansas City, Missouri 64111

(816) 931-8642

Owner: Don Sears affiliated with Sound Recorders, Omaha Nebraska

Studio Manager: Jim Wheeler

Engineers: Mark Weddle, Chris Bauer, Jeff Drummond

Dimensions of Studios: Studio A 40' x 40', B 16' x 20', C 8' x 9', Video Soundstage w/hard CYC 44' x 44', Video Insert Stage 12' x 16'

Dimensions of Control Rooms: A 18' x 21', B 15' x 20', C 10' x 12', Video Edit A 15' x 15', Video Edit B 15' x 15'

Tape Recorders: MCI JH 114 24 track, Otari 1 inch B track, Scully 280B 4, 2 & 1 track, Sony PCM Digital System PCM1600B with Editor 2 track, RCA TH200 1 inch C Format Video Recorder

Mixing Consoles: MCI JH 628 automated 28 in x 28 out, Audiotronics 501 26 in x 16 out, Tascam 5 B in x 4 out, Grass Valley Group Video Switchers

Monitor Amplifiers: Phase Linear 700 & 400, Crown DC 300A, BGW 600

Monitor Speakers: JBL 4350, 4330, 4313, 4311, 4301 & Auratones

Echo, Reverb, and Delay Systems: Eventide Harmonizer Model H949 w/Deitch modification, Harmonizer H910, Moog 12 Stage Phaser, MXR Flanger, UREI 1176 limiters, Echoplata

Other Outboard Equipment: FCCO three port SMPTE Time Code synchronizer for Interlocking 24 track to Video—2, 1 or 1/2 inch formats, Digital Recording with Sony PCM system

Microphones: Crown PZM, Telefunken M250, Neumann U64,



Sound Recorders, Inc.
Kansas City, Missouri

U67, U87, & KM 84, AKG C 12, C 60, 414, & 452, Sennheiser 421, RCA 44 & 77

Instruments Available: Steinway & Kimball grand pianos, Tama drums, access to synthesizers, harpsichord & large Pipe Organ

Rates: \$125/hr 24 track Audio, \$175/hr Digital Mixing, \$180/hr Video Interlock w/24 track-SMPTE. Block rates available upon request

◆◆◆SOUND SMITH RECORDERS, INC.

5210 E. 65th St., Indianapolis, Indiana 46220

(317) 842-4905

Owner: Mark Copenhaver and Mark Dodd

Studio Manager: Mike Graham

Engineers: Mark Copenhaver, Mark Dodd, Mike Graham, Al Thompson

Dimensions of Studios: 35' x 20'

Dimensions of Control Rooms: 22' x 18'

Tape Recorders: 3M 59 24 track, Scully 280 B stereo, Otari MX5050B Stereo, Scully 280 B mono

Mixing Consoles: Neotek Series III 28 in x 24 out

Monitor Amplifiers: Crown DC 300A

Monitor Speakers: EV Sentry III, JBL 4331, MDM 4, Auratone 5C

Echo, Reverb, and Delay Systems: EMT 140S, Master Room XI, 305, Lexicon Prime Time 933

Other Outboard Equipment: UREI 1176LN limiters (3) Eventide Harmonizer, Eventide Flanger, Audio Design & Expander (Scamp) Pan effects module, Parametric EQ (2) Expander/Gate (6), De Esser module (2), dbx 162 Stereo limiter, dbx 160 limiter

Microphones: Neumann U 87, KM84, U 64, AKG D 12, 451E, C 414, Sennheiser MD 421, Shure SM 57, SM 53, Beyer M 500, M 400, M 69, Sony ECM 50, RCA 77DX

Instruments Available: Steinway grand piano, Fender Rhodes, Pearl drum set, Hammond B 3 organ, Hohner C 6 Clavinet, Minimoog synthesizer

Rates: 24 track—\$100/hr, 16 track—\$75/hr

◆◆◆STUDIO A

5629 Beech Dale, Dearborn Hts., Michigan 48127

(313) 561-7489

Owner: Studio A Recording Inc

Studio Manager: Marilyn I Morgeson

Engineers: Eric Morgeson

Dimensions of Studios: 20' x 22'

Dimensions of Control Rooms: 9' x 22'

Tape Recorders: MCI JH 114 24 track, Tascam 85 16 16 track, Tascam 35 2 2 track, TEAC 4300 SX 2 track, Onkyo 630 cassette

Mixing Consoles: MCI JH 528LN 28 in x 28 out

Monitor Amplifiers: Phase Linear 200, Nikko 150

Monitor Speakers: JBL 4311 WX, Auratone 5C

Echo, Reverb, and Delay Systems: Lexicon Prime Time Orban 111 B, Tape recorder Delay

Other Outboard Equipment: Stereo Chorus, Flangers, Phasers, Graphic EQ, Noise Gates, compressors, Limiters, dbx N/R

Microphones: AKG 414 EB, EV RE 20, Sennheiser 421, Sony ECM 9 P, Sony ECM 22 P, Shure SM 57, SM 58, EV D0 54, EV DS 45

Instruments Available: 5'9" grand piano, Rhodes 73 Clavinet D 6, ARP Odyssey, ARP Strings, Fender Deluxe guitar amp, Acoustic 150, Peavey standard 6 piece Ludwig drums

Rates: \$75/hr (add \$10 for automated mixing) 24 trk, \$65 hr 16 trk, \$45/hr 2 trk

◆◆◆SUMA RECORDING STUDIO

5706 Vrooman Road, Cleveland, Ohio 44077

(216) 951-3955

Owner: Kenneth Hamann

Studio Manager: Michael Bishop

Engineers: Kenneth Hamann, Michael Bishop, Paul Hamann

Dimensions of Studios: 40' x 28'

Dimensions of Control Rooms: 18' x 25'

1982 studio supplies

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Mixing Consoles: Mid-America Electronics custom 48 in x 24 out

Monitor Amplifiers: JBL, McIntosh, BGV

Monitor Speakers: JBL 4350, 4311, Auratone

Echo, Reverb, and Delay Systems: EMT 140, Delta Lab DDL's

Other Outboard Equipment: Eventide Flanger, Orban De-Essers, dbx Limiters, UREI limiters, Dolby Noise Reduction (30 track), Ampex VSO, Suma Computer systems SMPTE Synch Kexep II

Microphones: Neumann U-47's, 49's 50's, Shure SM-2 87's 56's, 86's 84's Sennheiser M-441's M 421's, RCA 44DX 77 DX, EV's Crown PZM's

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Dimensions of Studios: 25 x 17 x 12

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Tape Recorders: MCI JH-14 w/interchangeable 16-track head stack 24 track, (2) MCI w/Dolby 361 JH 110B 2 track, Dolby M 16 16 track, Technics M-85 cassette

Mixing Consoles: Harrison 3232 w/Allison research Series 65K automation 32 in x 24 out

Monitor Amplifiers: Crown PSA 2 Crown D150's

Monitor Speakers: Electro Voice Sentry 3's Electro-Voice Sentry 4's Koss ESP-9 electronic headphones

Echo, Reverb, and Delay Systems: AKG BX-20E's (2) UREI Cooper Time Cubes

Other Outboard Equipment: UREI 1176 limiters (3), UREI LA-3A compressors (2), Eventide Harmonizer, Cooper Time Cube, UREI digital metronome, ADR Scamp noise gates (8), ADR Scamp compressors (2), ADR Scamp auto panner module, White Series 4000 31 band (2)

Microphones: Neumann U-87's, U 47's KM 84's Shure SM 57's SM 58's EV RE-16 AKG D100F's Sennheiser MD 421's

Instruments Available: Fender Telecaster (gives EB bass Fender Rhodes electric piano Baldwin 4 grand piano 2 drum kits (Premier and Rogers) Micro Moog synthesizer Sequential Circuits Prophet 5, Oberheim OBX Kazoo

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Studio Manager: Foote Kirkpatrick

Engineers: Stu Walder, Bill Bradley, Danny Leake, Richard Fairbanks, Bob Bennett, Diane Hagland, Bill Reis, Chuck Rapp, Dave Lewis, Rick Sweetser, Jeff Palmer, Tom Miller

Dimensions of Studios: Studio A 45' x 54', Studio B 20' x 40', Studio C 15' x 20', Backroom 9' x 12'

Tape Recorders: A (2) MCI 24 track recorders, (2) ATR Ampex 102 recorders, 3M 32/4 track Digital with Editor SMPTE Interlock for all machines using BTX system 4 track Ampex 440 also Ampex 440 mono machines Backroom MCI 24 track (2) ATR Ampex 102 2 track, SMPTE Interlock for all machines, ATP 4 track, B MCI 24 track recorders, Ampex ATR 102 2 track, Ampex 440 4 track, 3M 32/4 track Digital with Editor

Mixing Consoles: Neve w/Neam computer 32 in x 32 out, MCI 28 in x 24 out, MCI 28 in x 24 out automated

Monitor Amplifiers: BiAmp, Crown for all Monitor and Cue Functions

Monitor Speakers: UREI Time Aligned Monitors Auratones Altec JBL

Echo, Reverb, and Delay Systems: A (4) Erho Sends and eight returns Two Room Chambers, EMT plates (2) Lexicon digital echo Separate EQ for echo return B (4) echo sends 4 echo returns one room chamber EMT Plate Lexicon Digital Echo

Other Outboard Equipment: dbx Dolby UREI 3rd 8va equalizer, Orban parametrics, LA 2A 3A limiters extra 1176 limiters, vocal stressor, Eventide Flangers, Harmonizers, Eventide Digital Delay, White 3rd 8va Equalizer, Aphex, EXR Aural Exciters misc MXR equipment

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Dear Mix,

We at JBL were pleased to note Ed Long's
mention of our new model 4430 Bi-radial studio
monitor in his article "The Monitor Field" in the
August issue of **The Mix**. There were, however,
some factual discrepancies which we would like
to correct.

The JBL 4430's shipping weight is 175
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above a 1 volt RMS reference level, the voltage
sensitivity of the 4430 would be expressed as 84
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The list price of the 4430 is \$1,098.00
each; the list price of the dualwoofer 4435 is
\$1,500.00 each. Specification sheets, sales bro-
chures, dealer and delivery information can be
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ducts Division.

Sincerely,
James B. Lansing Sound, Inc.
Mark R. Gander
Applications Engineer
Professional Division
8500 Balboa, Blvd.
Northridge, CA 91329

Dear Mix,

I am writing with some comments on Diane
Sward Rapaport's fine article and listing of educa-
tional offerings in audio in your July, 1981 issue.

A sadly neglected aspect of most educa-
tional programs (including those in audio) is a



clear expression of what they propose to prepare
the student to do. This is not so much a function of
the specific courses or equipment involved, but
rather of the mindset of the instructors and the
curriculum design. As director of one of the few
degree programs in sound recording, I have
been interested to note how few applicants know
anything about the industry in which they desire
to work, or anything about the **rate** at which that
industry is changing. "State-of-the-art" is a mean-
ingless term in education. Your readers would do
well to keep in mind that it is no longer possible to
train on "state-of-the-art" equipment, because by
the time that the student has completed his train-
ing, that equipment is obsolete. Further, the en-
vironment in which the students expect to work
may also be gone. This phenomenon often leads
to students entering the job market with inappro-
priate skills and/or real naivete about their entry
role in the industry. Teaching strategies to deal
with this are all too rare.

People seeking training in this field should
therefore very carefully consider their longterm
career goals, and look toward training that is ap-
propriate. If an entry-level position in local sound

reinforcement is the longterm goal, then quite
rudimentary training (such as the typical 30 hour
beginning course in audio offered widely by
studios and schools), coupled with a lot of roadie
work and the obligatory reading and independ-
ent study is probably the best (meaning most
cost-effective) training.

On the other hand, if your goal is to
ultimately own your own studio after twenty years
of engineering and producing for a major label,
then you probably want a *lot* of education in
music, business, science, audio, and personal
relations, not to mention law. And you are going
to want these things under your belt **before** you
enter the job market.

Sincerely,
David Moulton, Director
Sound Recording Technology
Fredonia State University
Fredonia, New York

Dear Mix,

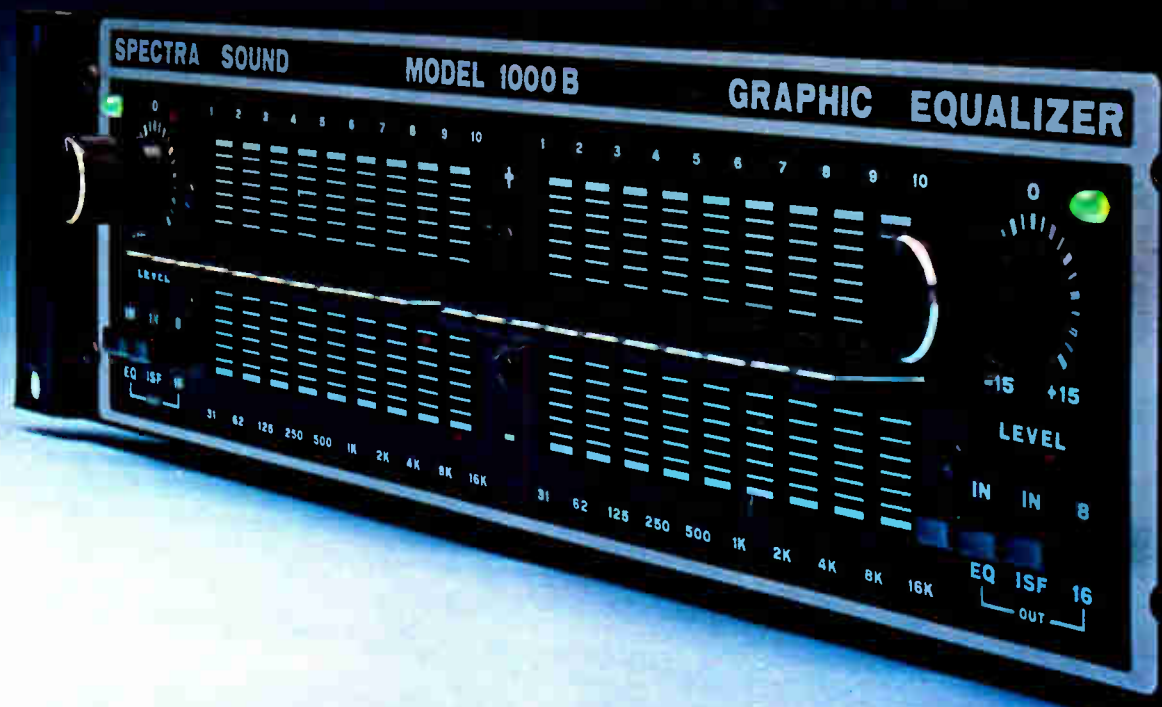
Thank you very much for responding to
our request in sending the Department multiple
copies of "Mix". We find that this is the best
magazine of its kind and has great interest for
myself and for our students. We should be very
pleased if it is possible to continue receiving the
magazine, though we realize that it is quite expen-
sive for you to send it. I first heard of "Mix" when I
was in Poland, and find it strange that I had to go
to Eastern Europe to make this valuable dis-
covery.

Yours sincerely,
David A. Pickett
Lecturer in Recording Techniques
University of Surrey, England

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*Specification unweighted, 20 Hz to 20kHz.	

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