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THE RECORDING INDUSTRY MAGAZINE

# Mix

Interview: George Martin

**Directory:  
Northeast  
Recording Studios**

**Computers for  
Studio Business**

**Stevie, Quincy and Nile  
Record via Satellite**

**The Latest in  
Signal Processing**

**The Neville Brothers  
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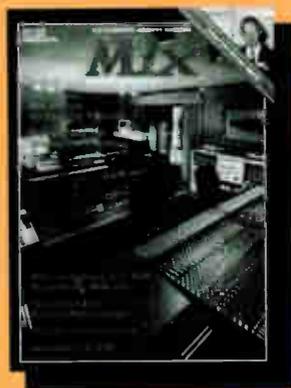
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Cover: The Sandbox, a brand new studio in picturesque Fairfield County, Connecticut, features Neve's new automated "V Series" 48 x 48 console. A luxurious retreat less than 60 miles from midtown Manhattan, The Sandbox incorporates a complete customized MIDI setup that's totally automated and interfaced with all systems, forming a new and creative approach to music production.  
Photo: William Hubbell



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# FROM THE EDITOR

**Y**ou just can't beat this business for

thrills and chills. For the past several months we have been giving a lot of ink to the topic of compact disc-interactive (CD-I), that breakthrough technology by Philips and Sony that has planted the seed for a harvest of megamedia products just a couple of years down the road. Both companies' commitment to a universal, well-defined, easy to use standard design has been an encouraging sign that perhaps we are facing a new dawn of great opportunity for the technologies of information, media and entertainment. Who could have asked for more in the way of both compatibility and international cooperation?

There was only one potential hitch with CD-I. While it was designed as a medium to handle everything from soup to nuts on a CD (provided that the information was digitally encoded), its ability to work with motion video was limited to a partial screen—about one-tenth of the surface area of the screen. Motion video was not considered out of the picture (pardon me), but Philips officials initially referred to those capabilities as becoming available in a few years, when the economics of that level of storage and processing would be more favorable for the kind of home entertainment appliance that its developers are envisioning. Nonetheless, this one shortcoming has been just about the only flak that the CD-I mavins have caught since they stole the show with their big announcement at the first Microsoft CD-ROM conference in March of 1986.

One year later, at Microsoft CD-ROM #2, what should steal the show but a new technology called digital video interactive (DVI). This one-up gamble by consumer electronics giant General Electric/RCA can accommodate one hour of full-screen motion video and otherwise has the same bag of tricks as CD-I.

So where does this new development leave us? Choosing sides for CD-I or DVI? Waiting until each technology stakes its own logical claim on a share of the market? Wondering whether new forms of full media optical storage will emerge from other companies? Waiting to see what casualties will result from the dreaded format wars? Hoping that the superpowers will work out their differences and agree on the best version of the product, opening the new market on a harmonious chord? Certainly no one wants to go through the painful and expensive incompatible format conflicts that have plagued the industry regularly since the days when the disc first duked it out with the cylinder.

There are lots of questions flying around right now on this topic of interactive optical storage on CD. To keep tabs on some of those questions, and to poke around at some of the answers, we are beginning a column this month called "Interactivity." This month we'll take a closer look at DVI. In future months we'll be tracking news, opinions and developments as this new field continues to blossom around us.

Keep reading,

David M. Schwartz  
Editor/Publisher



# CURRENT

## **Digital Video Interactive Introduced by GE/RCA**

To a standing ovation at the second Microsoft CD-ROM conference in Seattle this March, General Electric and RCA engineers from the David Sarnoff Research Center introduced the results of three years of development work in the field of high-density media storage on the compact disc. Digital Video Interactive (DVI), according to the developers, goes one step beyond CD-I, as presently conceived, by adding one hour of full-screen motion video capabilities. CD-I currently allows for interactive text, graphics, audio, software programs and partial screen (1/9) full motion video.

The Sarnoff Center's Larry Ryan conceived the idea of using a custom very large-scale integration (VLSI) chip set to combine non-real time compression of video frames with real time decompression. This development opened the door for full screen video storage and retrieval.

The hardware being used to develop system and application software is a prototype pair of personal computer boards. The Video Display Processor (VDP) chip-set is designed into one board, and an off-the-shelf digital signal processor chip is used to implement digital audio on the second board. The final version of both boards, which is scheduled for completion by the end of 1987, will fit into an IBM PC AT.

## **CD-I Green Book Standard Finalized**

Other highlights of CD-ROM/Seattle II included the announcement by David C. Geest, senior managing director, Philips International Corporate Group Home Interactive Systems, of the finalization of the Green Book, the full function specification standard of the compact disc-interactive system for CD-I licensees and developers. This sets the stage for key components of hardware and software to be available for product development in the second half of 1987.

"We are committed to a well-coordinated system launch, not earlier than the second half of 1988," said Geest. Under this revised timetable, the CD-I system will debut about one year after the market introduction of the new compact disc-video (CD-Video) format.

In response to the introduction of DVI, Geest said that "This announcement proves that we are all moving in the same direction. Meanwhile, all necessary work on high-resolution video compression technologies required for CD-I consumer applications is in progress in the labs of the major consumer electronics companies supporting the CD-I standard. Full-screen, full-motion video will be added to CD-I as soon as the required video compression technologies can be made cost-effective. This will certainly take three to five years to achieve. In the meantime, we see no reason to wait, when we expect that about 80% of all consumer and institutional applications can be accomplished under the current CD-I specifications."

## **Sonic Solutions Forms in San Francisco**

A noise reduction "clinic," aimed at the elimination of noise from existing recorded programs, has been opened in San Francisco as the first application of technology being developed by the recently organized Sonic Solutions. The company's NO-NOISE service employs high speed computers and digital signal processing techniques to remove tape hiss, background noise, clicks and pops from a recording without altering the original desired signal. Sonic Solutions intends to license copies of their system to selected facilities around the country, with some emphasis being placed on dealing with problem analog music recordings being remastered for CD.

Established in mid-1986, Sonic Solutions plans to develop and market innovative applications of digital sig-

nal processing for music recording, film and television post-production, as well as other markets. Company principals include Robert J. Doris, president; Jeffrey Borish, vice-president of research and development; and Mary C. Sauer, vice-president of marketing and operations. All are former executives of the now defunct Droid Works subsidiary of Lucasfilm. They can be contacted at (415) 751-8666.

## **AES May Conference Targets Music and Digital Technology**

The Audio Engineering Society's 5th International Conference, to be held May 1 through 3 at the Los Angeles Biltmore Hotel, will feature nine sessions on Music and Digital Technology. Invited speakers from the music industry, computer industry and research institutions include: John Strawn, S Systems; David Rossum, E-Mu; Robert Moog, Kurzweil; Wendy Carlos, Serendip; Stan Cornyn, The Record Group; Dr. John Chowning, Center for Computer Research in Music and Acoustics at Stanford University; Craig Anderton, *Electronic Musician*; and Ken Pohlmann, University of Miami. For more information, contact the AES at (212) 661-2355.

## **FCC Petitioned to Leave Space for HDTV**

The National Association of Broadcasters, Association of Maximum Service Telecasters, Association of Independent Television Stations and 55 other broadcast organizations have asked the Federal Communications Commission to issue a Notice of Inquiry on high definition television (HDTV). A separate petition seeks a delay in allocating land mobile spectrum space that is vital to HDTV development. In the petition for special relief, the FCC has been urged to postpone consideration of further sharing of the UHF band by land mobile radio, and to take steps toward preserving at least part of the 12 GHz band for use by local broadcasters. ■



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# INDUSTRY NOTES

The formation of **Creative Audio Design & Development (CADD)**, which will develop and manufacture professional audio equipment, was announced by **Pierre Pare**, a principal of **Audio Analysts**. CADD's first products will be announced at the 1987 AES Convention in New York. . . **Otari Corporation** has announced the appointment of **Audio Images Corporation** as the full-line dealer for Otari products in Northern California. . . **John McPherson** has been named vice president of marketing for the Video Communications Products Division of **Sony Communications Products Company**. . . **Eric Pilhofer** joined the sales staff of **AVC Systems** as systems consultant. . . A dazzling array of electronic musical equipment from over 60 manufacturers will be displayed at the **Sam Ash Keyboard and Sound Expo** being held in NYC on May 2 and May 3. For further information, contact **Laura Abrams** at (718) 347-7757 or (516) 485-2122. . . **Augie Blume** of **Music Industry Resources** announced the publication of three new music industry reference directories: the *1987 California Music Directory*, the *1987 Music Business Directory* and the *1987 Music-Radio Directory*. Further information may be obtained by writing **Music Industry Resources** at PO Box 190, San Anselmo, CA 94960, tel. (415) 457-0215. . . **American Interactive Media, Inc. (AIM)** has named **Rodney E. Wood** digital design engineer and **Bernard Barron** vice president, production and operations. . . **Meyer Sound Laboratories** of Berkeley, CA announced the appointment of **Gary L. Hudson** as their first marketing and sales manager. . . **Mobile Visual Productions**, a full-service video production and post-production facility, recently moved to a new 3,900-square-foot facility, featuring two large inter-format video editing suites, a production shooting stage and the latest in state-of-the-art camera and editing equipment. Their new address is 3611 South Harbor Blvd., Ste. 150, Santa Ana, CA 92704, tel. (714) 241-7724. . . **The Institute of Audio-Video Engineering** of Hollywood is sponsoring a summer recording seminar for music educators from July 27 through July 31. For more information, call (800) 551-8877 or (213) 666-2380. . . **Wheatstone Corporation/Audioarts Engineering**, formerly of Bethany, CT, has relocated to new facilities at 6720 VIP Pkwy., Syracuse, NY 13211, tel. (315) 455-7740. . . **The Society of Motion Picture and Television Engineers (SMPTE)** is seeking research papers on motion picture and tele-

vision technology for presentation at the 129th Technical Conference and Equipment Exhibit to be held Oct. 30 through Nov. 4 in L.A. For further information contact **Dollie Hamlin, SMPTE**, 595 West Harsdale Ave., White Plains, NY 10607, tel. (914) 761-1100. . . A new recording group, **Discovery Artists**, has been formed by **Discovery Systems** of Dublin, OH. They also opened a new studio with 24-track digital mastering facilities. . . **A.J. Menozzi** has been promoted to president and general manager of **dbx**. . . **Hal Richardson** is joining **Walt Disney Pictures** as vice president of Pay TV and Acquisitions. . . **SHAPE Optimedia, Inc.** of Sanford, ME, announced the appointment of **James Roe** as vice president and operations manager and **Dennis Hannon** as marketing manager. . . **The University of Miami (FL)** has introduced a Master's degree in Music Engineering Technology, the first degree program of its kind in the U.S. The two-year curriculum emphasizes technical studies including electrical engineering, digital audio, video and psychoacoustics. . . **Soundcraft** has appointed **Jands** as its sole Australian distributor for mixing consoles and multi-track recorders. . . **The National Association of Broadcasters** has commissioned **Worldwide Media Group, Inc.** to prepare a study on investment opportunities in media properties in Western Europe. . . **PCI Recording Services**, Rochester, NY, has opened a 7,000-square-foot motion picture and video sound stage. . . **Martin Gallay** has been appointed executive marketing counsel of **Westlake Audio, Inc.**. . . **PolyGram International** has formed a New Business Division and named **Michael Kuhn** as its senior vice president. . . **Space Logic Design Consultants** of London announced they have joined forces with architect **Alan Gordon Morris** to offer a studio interior design service under the name of **Morris/Logic Architects and Designers**. . . **United Group**, a West Coast distributor of audio and video tape, has announced its move to larger facilities at 6855 Vineland Ave., North Hollywood, CA 91605, tel. (818) 980-6700 or (800) 433-4271. . . **Dean A. Miller** has been appointed executive vice president and general manager of **Nakamichi America Corporation**, whose name has been changed from **Nakamichi USA Corporation**. . . **The Sony Professional Video Division** has relocated to new offices at 1600 Queen Anne Road, Teaneck, NJ 07666; (201) 833-5200. . . **Takashi Tsujii** has been named president of **TDK Electronics Corporation**.

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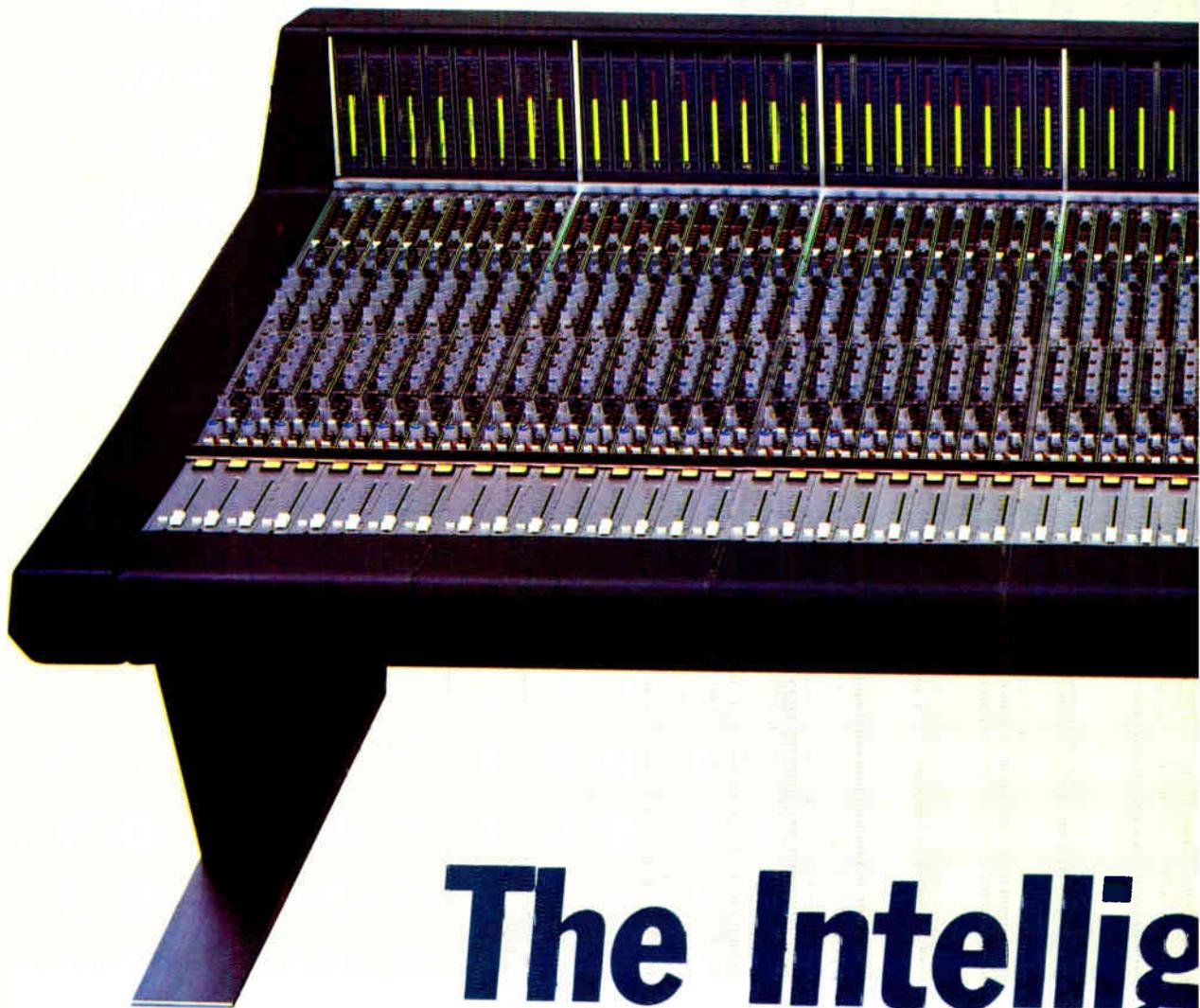
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## NORTH CENTRAL

At **Solid Sound**, Ann Arbor, MI, Christian artist **Don Wharton** put final touches on his album entitled *Pull Together*, with **Rob Martens** serving as engineer and producer. . . **King James Version** recorded their latest album at **Tone Zone Recording** in Chicago recently with producer/songwriter **Gloster Williams** and co-producer **Percy Bady**. Also in at TZ were **In 3D**, working on their second album with **Roger Heiss** engineering. . . At **Seagrape Studios** in Chicago, country singer **Nancy Hays** mixed four songs for a Nashville-bound demo. Instrumental tracks were recorded by **Bobby Thomas** at the now defunct **Alpha Studios** and mixing was produced by **Greg Parsons**. **Joe Tortorici** handled engineering duties. . . At **Studio A**, Dearborn Heights, MI, **Mack Rice**, writer of "Mustang Sally" and "Respect Yourself," laid tracks for a new self-produced single with engineer **John Jaszcz**. . . At **Sparrow Sound Design** in Chicago, **The Dave Gordon Group** brought in some rhythm tracks recorded at their own **Saturn Sound** studio of three original vocal songs. Tracks were then added and mixed at Sparrow. **Peter Bell** offered production assistance on the various aspects of the Gordon project. . . **Michael Morris** recorded part of the music for his next theater musical at **Paragon Recording Studios** in Chicago. The play is based on the story of Sam Cooke, one of Chicago's great artists. The music was written and produced by Morris. . . **Liz Mandville & The Supernaturals**, one of Chicago's hardest working R&B bands, finished recording their first cassette release at **JEM Studios**, Evanston, IL. The material was self-produced by leader and vocalist **Liz Mandville** and the band's guitarist **Willie Greeson**, with JEM's **Scott Exum** at the board. . . Heavy metal quartet **Chastain** were in **Counter Point Studios** in Cleveland finishing their next album, titled *The 7th Of Never*. Other parts of the record were made at **Steve Lawson's** studio in Seattle and **Prairie Sun Recording** in Cotati, CA. . . EMI/Manhattan Recording artists **RJ's Latest Arrival** have been in **Sound Suite** in Detroit digitally mixing with engineer **Tony Ray** for their forthcoming single with the label. . . At **Barn Burner Studio** in Annawan, IL, **Lynn Allen**, popular Midwest band, finished the final tracks and mixed their latest album *Symbols*, for the Revolver label. **Bill Peiffer** produced. **Harry Heath** was engineering with **Michael Morrison** assisting. . . At **IVO Sound Recorders**, Hastings, NE, **Robin Harrell** has finished her solo album, titled *Friends from Home*. Harrell co-produced with **Don Robertson**. . . **SoundStage**

**1 Recording** in Battle Creek, MI, completed production on a number of music/soundtrack projects including **Denoyer Chevrolet**, **Gilmore's**, **North American Van Lines** and more. . . At **Amerisound** in Columbus, OH, jingle producer **Frank Pierce** recorded and mixed two 60-second spots for **Warner Cable** and **White Castle Systems**. Co-producer **Dan Green** engineered. . .

## SOUTHEAST

At **Allen-Martin Productions** in Louisville, KY, the national "Say Nope to Dope" campaign had its first recording session with **Michael Gibson** producing and **David Blythe** engineering. . . **The Producers** recorded a three-song demo on 24-track digital at Atlanta's **New Age Sight & Sound**. The project was produced, engineered and mixed by **Rodney Mills** and assisted by **Mitchell Dorf** and **Jason Bonnette**. . . At **Air Studios** in Hendersonville, TN, **Rudie Whaling** and **Bill Dryden** were in cutting demo tracks with engineer **Dave Cline**. And young rocker **John Carter Cash** has been working with producer **Robert Solomon** and engineer **Denny Knight**. . . **Spencer Herzog** of **Creative Sound Concepts** recently produced and engineered a cover version of "Thank You For Being A Friend" for Corporate Media Communications, Inc. in Atlanta. . . At **Treasure Isle** in Nashville, Ed Seay was overdubbing and mixing Los Angeles-based songwriter **Michael Smotherman** for CBS Records. And the legendary **Duane Eddy** was in tracking with producers **Art of Noise**; **Bill Deaton** engineered the project for Capitol Records. . . At **Reflection Sound Studios** in Charlotte, NC, producer **Don Dixon** has been cutting tracks for his own Enigma LP with **Marti Jones**, **Anton Fier**, **Jim Brock**, **Jamie Hoover**, **Let's Active**, **The Woods**, and others. **Mark Williams** and **Steve Haigler** are engineering. . . At **Sixteenth Avenue Sound** in Nashville, West Coast producer **David Foster** teamed with **Tim DuBois** and **Scott Hendricks** to produce **Restless Heart's** recording of a song from the Universal feature film, *The Secret Of My Success*, starring **Michael J. Fox**. **Hendricks** and **Jeff Balding** engineered the project, **Jeanne Kinney** and **Dave Parker** assisting. . . Gospel singer **Keith Pringle** completed mixes on his new album at **Muscle Shoals Sound Studios** in Sheffield, AL, his first on the new Muscle Shoals Sound Gospel label. . . At **D&D Recording** in NYC, **Peter Tosh** was in completing his next album, *No Nuclear War*, for EMI America. **Dennis Thompson** engineered and **John Lepoppsa** assisted. . . Producer **Pete**

**Solley** was in Miami's **Criteria Studios** mixing an LP for Atlantic Records for the Pittsburgh-based group **G-Force**. Solley handled both the engineering and production with **Carlos Nieto** assisting. . . At **Ardent Recording** in Memphis, **Joe Walsh** was in cutting tracks for his new album with Memphians **David Cochran** on bass and **Chad Cromwell** playing drums. **Terry Manning** produced and engineered. . . At the **Power House Studio** in Memphis, rocker **Bill Beaty** has begun a solo project with studio owner **Steve Hauth** co-producing. . . Working on a new album at **Acorn Studios** in Hendersonville, TN, were the **Fox Brothers**, being produced by **Eddie Crook**, co-produced and engineered by **Bill Vorndick**, with additional engineering by **Arnold O'Neal**. . . At Memphis' **Cotton Row Recording**, local rhythm & blues singer **Chick Rogers** has been in recording an independent album with producers **Zabu** and **Ray Griffen**. Engineers on the sessions were **Danny Jones** and **Gerard Harris**. . .

## NORTHWEST

At **Studio D Recording** in Sausalito, CA, **Tremaine Hawkins** finished up an album for A&M Records with **Loris Holland** producing, **Tom Roberts** engineering and **Jim "Watts" Vereecke** assisting. . . **Mitch Woods & his Rocket 88's**, the SF Bay Area's premiere rock-a-boogie band, were in **Fantasy Studios** in Berkeley, CA laying down basic tracks for their second album. The project is being produced by **Woods** and engineered by **Tom Size**. . . Producer **Danny Deardorff** was in **Triad Studios** (Redmond, WA) producing a soundtrack for the **Sisters of Providence**, **Tom Hall** engineering. . . Warner Bros. recording artists **The Pretenders** were at **Avalanche Recording** in Northglenn, CO, mixing live tracks for an upcoming release in the UK. It was produced by **The Pretenders** and engineered by **George Counnas**. . . Chief engineer and co-owner of **Russian Hill** (SF, CA), **Jack Leahy** has produced and remixed historical and rare **Hoo Doo Rhythm Devils** tapes with the late **Joe Crane** on vocals. Several noteworthy musicians have assisted on segments of the project, including **Hoo Doo** member **Glen Walters** on vocals, **Steve Douglas** on saxophone and **Roy Rogers** on guitar. . . **Eddie & the Tide** did pre-production work at **Astral Sounds Recording** in San Jose, CA, for their new album *Looking for Adventure*, which was recorded at **Fantasy Studios** in Berkeley on the Atlantic label. Also recently completed at Astral Sounds was **Robert Seidler's** upcoming direct-to-digital EP, *Cig Sisters*. **Bill Hare** engineered

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the Tide pre-production demos, and Seidler's were engineered by **Raul Saurez**. . . At **Prairie Sun Recording** in Cotati, CA, **Power of Suggestion** was in producing a demo with **Steve Counter** engineering and **Kay Arbuckle** assisting. And **Racer X** recorded an LP for the Shrapnel label with **Steve Fontano** producing and engineering and **Dino Alden** assisting. . . At **Dave Wellhausen Studios** in SF, **Robin Flower & the Bleachers** completed their new album on Flying Fish Records. . . Motown's **Darryl Duncan** finished mixing his new EP at **Granny's House** in Reno, NV. The song "Rock The House" is in the new movie, **Police Academy IV**. Accompanying Darryl to Reno was Motown executive producer **Steve Buckley** and engineer **Norman Whitfield, Jr.**. . . **Coupe Studios** in Boulder, CO, recently cut five TV/radio commercials for McDonald's "new salads" campaign. Tracks were written, produced and engineered by **Scott Roche**, **Patrick Cullie** and **Kip Kuepper**. . . At **CD Studios** in SF, **Flame** recorded four songs for an EP release. **Bill Cutler** produced the project, with **Gary Mankin** engineering and **Deanne Franklin** assisting. . . Action at **Starlight Studio** in Richmond, CA, included an EP from **The Mysteries**, produced by **Norman Kerner**. . .

## NORTHEAST

The **Force MDs** were in at **I.N.S. Recording** (NYC) cutting vocal tracks on "Your Love Drives Me Crazy" for Tommy Boy Records. **Jim White** produced and **Jeff Neiblum** was behind the board. . . At **Long View Farm** in North Brookfield, MA, **David Jones of The Monkees** and **The Grassroots** did overdubs and mixing for David's solo project. **Bobby Cohen** engineered with **Kerry Roehr** assisting. . . At **The Warehouse** in Philadelphia, producer **Lance Quinn** cut tracks for Nemo recording artists **Shytalk**, **Obie O'Brien** and **Bill Scheniman** were at the board. . . **Jellybean Benitez** was in Brooklyn's **Bizarr Music** producing a number of projects. He did four sides on his upcoming album on Chrysalis, one side on **Jocelyn Brown** for Jellybean/Warner Bros. Records and two sides on **Jennifer Holiday** for Geffen Records. Engineering on these sessions was done by **Jay Marks** and **Michael Hutchinson**. Assisting was **Don Feinberg** and **Bernard Bullock**. . . At **Giant Sound** in NYC, **Keith Richards** stopped in to do overdubs on a Rounder Records project. **Rob Fraboni** was at the console, **Jeff Cox** assisted. Also, **Sting** has been working at Giant on a new project. **Claude Achille** engineered, **Jeff Cox** assisted. . . The **Blow Monkeys** were back at NY's **D&D Recording** working on their next album with producers **Michael Baker** and **Axel Kroll** of Simple Simon, Inc., and **Douglas Grama** engineering and **John Leposa** and **Michael Rogers** assisting. . . MCA/JAZZ/ZEBRA recording artists **Cabo Frio** recorded their new album at **Sound Heights** in

Brooklyn with producer/arranger **Peter Drake**. In charge of the console was **Vincent Traina** with assistants **Matt Malles** and **Tracy Allard**. . . At **The Cutting Edge** in Ferndale, NY, mastering projects included 45s for Studio 213, Thibs Records and Slab City, and an LP for **The Robersons**. . . At **Master Sound Astoria Studios** in NYC, writer/producer **Stu Gardner** finished the **Bill Cosby** music album for CBS Records. Appearances from Jeffrey Osborne, Stanley Jordan, Grover Washington, Gregory Abbott, Herbie Hancock, Nick Ashford, Valerie Simpson and the man himself, Bill Cosby, are just a few of the many recognizable names featured on the album. **Gene Paul** engineered with **Corky Stafiak** assisting. . . **Howard Schwartz Recording** (NYC) engineer **John Alberts** recently mixed a live comedy album, **Live At The Hasty Pudding Theater**, by stand-up comedian **Emo Philips**. Remote recording was by **Randy Ezratty**. . . Album projects in the works at **Trod Nossel Studios** in Wallingford, CT, included **Whim N' Rhythm**, **Brian Russell**, **The Fabulous Farquahr**, and a re-pressing of **The Malarian's** LP. . . Just completed at **Red Rock Recording Studios** in Saylorsburg, PA, were seven songs by **Duke** (Al and Greg Howe) produced by **Cholly Bassoline**, with **Kent Heckman** co-producing and engineering, and **Bernie Worrell** (Talking Heads, Pretenders) assisting on keyboards. . . At **Quad Recording Studios** in NYC, **The Weathergirls** were in singing up a storm with **Richard Scher** producing and **Alan Myerson** at the consoles. **Europe** was also there doing some mixes on their latest album. **Kevin Elson** was the producer and **Brian McGee** engineered. . . **Omega Studios** in suburban Washington, DC, hosted Island Records' **Trouble Funk** in Studio A with engineer **Tim Kramer** and producer **Bootsy Collins**. . .

## SOUTHWEST

**Wayne Watson** was in at **Rivendell Records** (Pasadena, TX) completing **Watercolour Ponies** for Dayspring Records. Wayne acted the part of artist/producer with **Paul Mills** of Ars Musica engineering and co-producing. . . Recent sessions at **Goodnight Dallas** included the production of some vocal education tapes for **Silver Burdett & Ginn** by **Darryl Bledsoe**. **Keith Rust** engineered the project with **Don Seay** assisting. Also, independent engineer **Tom "Gordo" Gondolf** completed work with Dallas artist **David Jewell**, and **Ruben Ayala** engineered sessions for the group **No Strings Attached**. . . Record producer/engineer **Phil York** finished recording an extensive album project with the techno-rock group **Secret Cinema** at **Studio Southwest** in Dallas. . . **Reelsound Remotes** of Austin, TX, worked on an **Arlo Guthrie** PBS special with David Bromberg, Bonnie Raitt, Jerry Jeff Walker, and Pete Seeger. Reelsound's crew included **Mason Harlow**, **Gordon Garrison**, **Greg Klingensmith**, **Rusty**

**Buckner** and **Malcolm Harper**. . . **Sugar Hill Recording** in Houston has been busy with **Paul (Melody) Beecher** laying down some reggae tracks. . .

## SOUTHERN CAL

**Michael Wagener** recorded and produced **Keel** in Studio A at **Amigo Studios** in No. Hollywood; **Garth Richardson** assisting. Wagener and Richardson also mixed a tune for **Dokken**, for **Nightmare on Elm Street Part 3**. . . Producer **Kevin O'Neal** formerly of The Busboys, was in **Skip Saylor Recording** in L.A. with Macola Records artist **Dee Lacy** working on her upcoming LP. **Tom McCauley** was behind the board, with **Joe Shay** assisting. . . At **Lion Share** in Hollywood, **Julio Iglesias** was in cutting tracks for his upcoming album, with assistance from Stevie Wonder. **Humberto Gatica** engineered and produced, assisted by **Laura Livingston**. Also, in Studio A, **Jose Feliciano** recorded and mixed his "Mozartean Influence" with a 42-piece orchestra. **Hill Swimmer** engineered with **Ray Pyle** assisting. . . **Madonna** was in **Larrabee Sound** in L.A. working on "Causing A Commotion" for the movie **Who's That Girl**. **Steve Bray** and **Madonna** produced and **Taavi Mote** engineered, assisted by **Elmer Flores** and **John Hegedes**. . . Activity at **Master Control** in Burbank included producer **Don Gehman** doing a mix for **John Cougar Mellencamp** with engineer **Dave Leonard** and assistant **Toni Greene**. Also, producer/engineer **Michael Frondelli** was in mixing live tracks from Chrysalis act **The Fountainhead**. Assisting was **Dave Axelbaum**. . . At **Wildcat Recording Studio** in L.A., Orange County rockers **Call Of The Wild** completed overdubs and final mixing of their debut album with in-house engineer **Mark Coffin** engineering and assisting the band with production chores and arranging. . . Producer/engineer **David J. Holman** has been working with producer **David Kershenbaum** at the latter's **Powertrax Studio** in L.A. The two put the finishing touches to **Laura Branigan's** latest album for Atlantic Records. . . Writers/producers **Bruno & Schwartz** are in at Hollywood's **Ocean Way Recording** mixing an upcoming single for new artist **Seisha Black**. **Steve Sykes** is at the board with **Joe Schiff** assisting. . . At **Take One** in Burbank, A&M artist **Bryan Loren** was producing his own album with **Skip Cottrell** engineering, assisted by **Pat Ryan** and **Micajah Ryan**. Also, Warner Bros. recording artist **Robben Ford** worked with co-producer **Scott Ferguson**. **David Henschal** and **Frank Wolf** engineered with Micajah Ryan assisting. . . **Vincent Price** in Hollywood recorded a series of radio spots at **52nd Street's** new production facility to promote the American tour of impressionist and post-impressionist paintings on loan from the Courtauld Institute in London. . . Co-producers of **Debby Boone's** lat-

—CONTINUED ON PAGE 209



# THE LEGEND CONTINUES

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**AND THE BEAT GOES ON**

World Radio History

Circle #007 on Reader Service Card

by Ken Pohlmann

Error correction is essential to the success of digital audio. Without error correction, any digital recording on tape or disc would sound like a badly scratched LP at best, or more likely, simply be unplayable. In fact, it is safe to say that without error correction, digital audio would be an impossibility. Thus, most of the audio communi-

ty owes a great vote of thanks to mathematicians and code specialists such as Hamming, Huffman, Hocquenghem, Bose, Ray-Chaudhuri, Reed, Solomon, Berlekamp and Viterbi for inventing useful codes, and audio engineers such as Vries, Odaka, and Doi for applying codes to digital audio.

Unfortunately, most digital audio users are to error correction codes as

vampires are to crucifixes. Because fear is sometimes alleviated by education it, it may be useful to attempt a look inside the workings of the Cross Interleave Reed-Solomon Code (CIRC), the code so successfully employed in the compact disc family (a Reed-Solomon code is also used in upcoming DAT recorders). While we're at it, let's continue through the error concealment part of the decoding circuitry. And after a look at the theory, we'll consider several practical examples of error correction systems, and their relative success at accomplishing their task.

The CD system uses the Cross Interleave Reed-Solomon Code (CIRC) for error protection. CIRC employs parity checking to correct random errors, and interleaving to permit parity to correct burst errors. The CIRC circuit uses two correction codes and three interleaving stages to encode data before it is placed on a disc, and to decode the data during playback. Importantly, one Reed-Solomon code can check the accuracy of the other code, thanks to cross interleaving.

CIRC's story begins in the encoding stage, in which the data on the master recording is encoded according to the CIRC dictates. Using a combination of interleaving and parity to make the data more robust against errors encountered during storage, the data is encoded before being placed on the disc, then decoded upon playback. The CIRC encoding scheme is shown in Fig. 1. With this encoding algorithm, bits from the audio signal are cross-interleaved, and two encoding stages generate parity symbols.

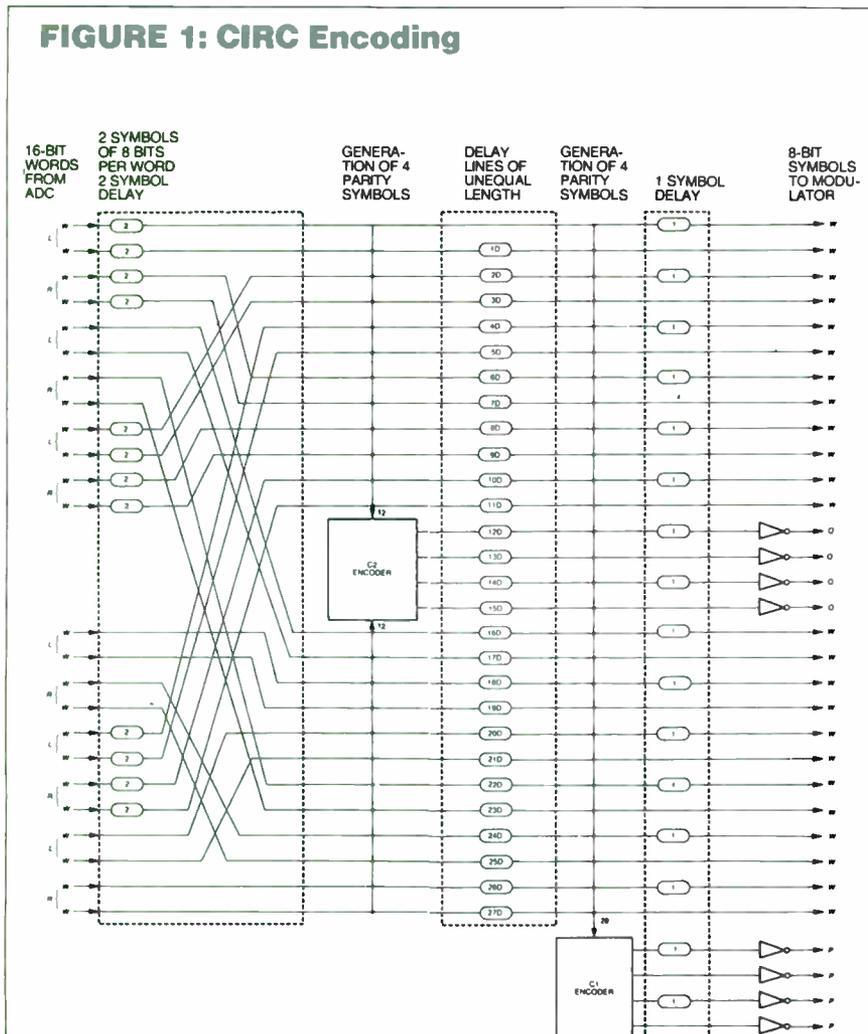
Error protection encoding begins with the first stage of interleaving, designed to assist interpolation. Twenty-four 8-bit symbols are applied to the CIRC encoder. A delay of two symbols is placed between even and odd samples; that is, even samples are delayed by two blocks. Interpolation can be accomplished in the case where two uncorrectable blocks occur. Next, the symbols are scrambled to separate even- and odd-numbered data words; this process is designed to assist concealment.

The C2 encoder accepts the 24-byte parallel word, and produces four bytes of Q parity. Q parity is designed to correct one erroneous symbol, or up to four erasures in one word. The

# CIRC

## THEORY AND PRACTICE

FIGURE 1: CIRC Encoding



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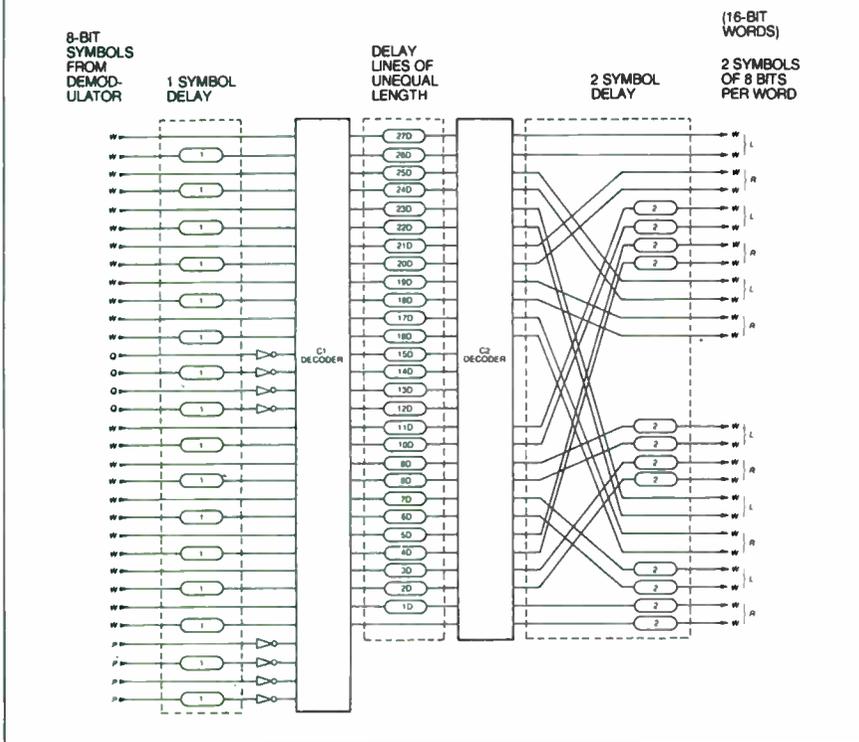
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**FIGURE 2: CIRC DECODING**



parity symbols are placed in the center of the block to increase the odd/even distance and thus permit interpolation over the largest possible burst error.

Cross interleaving follows the C2 encoder. The 28 bytes are delayed by differing periods which are integer multiples of four blocks. This convolutional interleave stores one C2 word in 28 different blocks, stored over a distance of 109 blocks. Mathematically, we have crossed a data array in two directions.

The C1 encoder accepts a 28-byte word (from 28 different C2 words) and produces four more bytes of P parity. The C1 encoder is used to correct single symbol errors and detect and flag double and triple errors for Q correction.

A final interleave stage introduces a fixed delay of one symbol to alternate symbols. This odd/even delay causes the output words to be spread over two data blocks. This prevents random errors from destroying more than one symbol in one word, even if two adjacent symbols in one block are destroyed. Finally the P and Q parity symbols are inverted to provide non-zero P and Q symbols with zero data. Thirty-two 8-bit symbols leave the CIRC encoder.

All data placed on a compact disc thus undergoes considerable error protection encoding. Of course, the error processing must be decoded each time the disc is played back to

de-interleave the data, and use the error correction codes to find and correct errors. The raw error rate from a CD is around  $10^5$  to  $10^6$ , or about one error for every 0.1 to 1.0 million bits. This is impressive performance, but considering that a disc may hold over 15 billion bits of information, the errors add up to thousands per disc. Error correction is thus required.

Upon playback, following demodulation, data is sent to a CIRC decoder for de-interleaving, error detection and correction. The CIRC decoding process reverses many of the processing steps accomplished during encoding; the complete CIRC decoding process is shown in Fig. 2. It utilizes parity from two Reed-Solomon decoders, and de-interleaving. The first decoder, C1, is designed to correct random errors, and to detect burst errors. It puts a flag on all burst errors, to alert the second decoder, C2. Given this prior knowledge, and help from de-interleaving, C2 is able to correct burst errors, as well as random errors that C1 was unable to correct. On the compact disc, random errors are defined to be single symbol errors, or no more than 17T in length. Any longer errors are burst errors.

The use of two correction decoders and cross-interleaving helps tackle a particularly difficult error scenario. Interleaving distributes burst errors, perhaps caused by surface contamination, over different words for easier correction. However, correction is dif-

ficult when a burst error coincides with a random error perhaps introduced by a manufacturing defect. The C1 decoder corrects single random errors, and flags burst errors, so that interleaving can accomplish its task. EFM coding guarantees that a random error will never corrupt more than two symbols, and the even/odd interleave guarantees that a two-symbol random error will always appear as single errors in two different C1 words after de-interleaving. Random errors are thus always correctable and the C2 decoder retains its burst error correction capability.

Although rather formidable looking, the complete CIRC decoder can be analyzed step-by-step to understand the error correction process. During reproduction, the CIRC decoder accepts one frame of 32 8-bit symbols; 24 are audio symbols, and eight are parity symbols. Odd-numbered symbols are delayed and parity symbols are inverted. The delay lines have a delay equal to the duration of one symbol, thus information of even-numbered symbols of a frame is de-cross-interleaved with that of the odd-numbered symbols on the next frame.

This de-interleaving places the even- and odd-numbered audio symbols back into their original order by rearranging their order as read from the disc. Any sequence of errors on the disc is thus distributed among valid data. This aids the C1 decoder's correction efforts, especially for small errors in adjoining symbols. De-interleaving uses a RAM, with about 16K of storage. Time base corrections can be performed with the same memory.

In the C1 decoder, errors are detected and corrected by the four P parity symbols; short duration random errors are corrected, and longer burst errors are passed along. Specifically, the C1 decoder can correct a symbol error in every word of 32 symbols. If there is more than one erroneous symbol, then all 28 data symbols are marked with an erasure flag, and passed on. Valid symbols (those adhering to the encoding rules of C1) are passed along unprocessed.

The delays between the decoders are of unequal length and longer than those at the input to the C1 decoder. This convolutional interleaving enables the C2 decoder to correct longer burst errors. Because the word arriving at C2 contains symbols from C1 decoded at different times, symbols marked with an erasure flag are now distributed among valid symbols. This helps the C2 decoder correct burst errors. Symbols with a flag are assumed error-free, and passed through

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from -24dB to +6dB

Although varying in performance and complexity, most Eq. designs have followed either of two classic principles:

**parametric:** or more usually 'semi-parametric equalisers are almost universally used on console input channels. Normally comprising four filters, two (or sometimes four) of the filters can be 'swept' up or down the audio band to centre on the exact frequency needing attention. Proven to work very well, semi-parametric eq's have two major disadvantages:

1. A tendency for audible phase shift 'ringing'
2. A limited ability to control the entire audio band at one time

For example: having used the 'high mid' to suppress the 'edge' on a singer's voice, there is no facility left to boost the critical 'presence' frequencies that lie either side of the unwanted frequencies that have just been cut.

**graphic:** normally used for system and room equalisation, graphic equalisers use multiple, fixed frequency, fixed bandwidth filters, to generate gentle, essentially phase-free control over the entire audio band.

The graphic principle has one major disadvantage:

1. A limited ability to control narrow band problems.

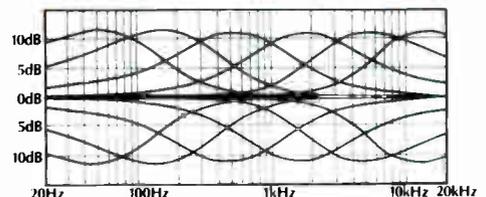
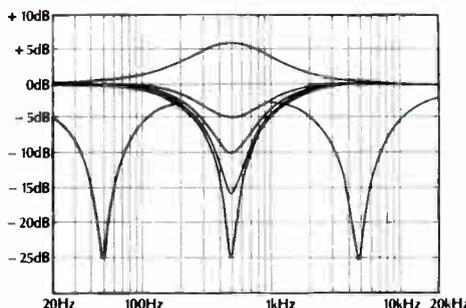
For example: although frequencies in the 'presence' band can be easily and cleanly boosted, that annoying 'edge' to the singer's voice gets boosted as well.

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**Figure 3** (after Vries and Odaka)

*Strategy 1*

**C<sub>1</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else assign erasure flags to all symbols of the received  
word*

**C<sub>2</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else if  $f > 1$   
then copy C<sub>2</sub> erasure flags from C<sub>1</sub> erasure flags  
else if  $f \leq 1$   
then assign erasure flags to all symbols of  
the received word*

*Strategy 2*

**C<sub>1</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else assign erasure flags to all symbols of the received  
word*

**C<sub>2</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else if  $f > 2$   
then copy C<sub>2</sub> erasure flags from C<sub>1</sub> erasure flags  
else if  $f = 2$   
then try two-erasure decoding  
else if  $f < 2$  or if two-erasure decoding fails  
then assign erasure flags to all symbols  
of the received word*

*Strategy 3*

**C<sub>1</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else if double-error syndrome*

*then modify two symbols accordingly assign  
erasure flags to all symbols of the received  
word*

*else assign erasure flags to all symbols of the  
received word*

**C<sub>2</sub> Decoder**

*if single- or zero-error syndrome  
then modify at most one symbol accordingly  
else if  $f \leq 4$*

*then if double-error syndrome and  $L_C = 2$   
then modify two symbols accordingly.*

*else if {double-error syndrome and [ $(L_C$   
= 1 and  $f \leq 3$ ) or ( $L_C = 0$  and  $f$   
 $\leq 2$ )]} or ( $f \leq 2$  and not double-  
error syndrome)*

*then assign erasure flags to all sym-  
bols of the received word*

*else copy C<sub>2</sub> erasure flags from C<sub>1</sub>  
erasure flags*

*else copy C<sub>2</sub> erasure flags from C<sub>1</sub> erasure flags*

**NOTE:**

where  $f$  is the number of erasure flags input into the C<sub>2</sub> decoder, and  $L_C$  is the number of erasure flags agreeing with the error locations calculated from the syndrome.

unprocessed. In the C2 decoder, errors are corrected by the four Q parity symbols; C2 can detect and correct single symbol errors and correct up to four symbols, if flagged. Burst errors, and errors which might have occurred in the encoding process itself (rather than in the medium) are corrected. In addition, C2 can correct symbols mis-corrected by C1 decoding. When C2 cannot accomplish correction, (more than four symbols are flagged) 24 data symbols are flagged as uncorrected and passed on for interpolation. Final de-scrambling and delay is performed. For more efficient correction, decoding must be repeated alternatively, in the form C1, C2, C1, C2.

The final step in error protection is error concealment. Without concealment, an erroneous symbol that escaped error correction could result in an audible click. Thus interpolation and muting circuits follow the CIRC decoder. Although an important part of error protection, they are unrelated to the CIRC. Specifically, they attempt to handle errors too massive for CIRC correction. Uncorrected words are detected through flags and dealt with,

while valid data passes through un-processed. Using error flags from the C2 decoder, the player's signal processing circuits determine whether to output the data directly, to interpolate

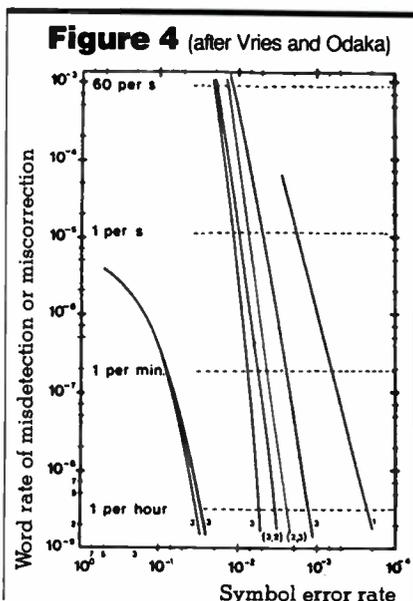
it, or to mute.

Interpolation is the technique of using valid data surrounding an error as a basis of forming an approximation of the erroneous data; errors are thus not corrected, but concealed. However, because of high correlation between music samples, interpolation concealment is generally quite successful. Clicks are thus avoided, but a momentary increase in distortion is produced.

Methods vary from player to player according to the degree of interpolation used. In its simplest form, zero-order interpolation holds the previous value and repeats it to cover the missing or incorrect word. In first-order interpolation, the erroneous word is replaced with a word derived from the mean value of the previous and subsequent word.

When several adjacent samples are flagged, muting is employed to conceal the bad data. The digital audio signal cannot be muted by switching the bit stream to zero; this could result in an audible click. Instead the signal is faded down by multiplying the sam-

—CONTINUED ON PAGE 53



**Figure 4** (after Vries and Odaka)

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# GRP'S DAVE GRUSIN & LARRY ROSEN: *"We're not a record company"*



Dave Grusin (left) with Larry Rosen.

by Neal Weinstock

Meet GRP Records like the press does: at a cocktail party for Diane Schuur, who's coming out with another new album on this young and hot label. The scene is Michael's Pub on a weekday evening. You know Michael's Pub: it's where Woody Allen plays clarinet every Monday, a tourist spot as reliable as the Statue of Liberty. When it's not Monday night, businesspeople inhabit. Today, however, the place has been taken over by Manhattan-based jazz label GRP Records and we're hoping to meet Larry Rosen and

Dave Grusin, who are the "R" and the "G" of GRP. Neither initial is here yet. If they were, the jazz press would undoubtedly wolf them down as hungrily as Michael's greasy Scotch eggs.

The jazz press is an old club—badly dressed, very hungry and very thirsty, not keen about letting in new members. We sit in a corner. A bubbly blonde with a beautiful laugh is led over to us by the only man here wearing a well-pressed suit of recent vintage. We've seen album covers of Dave Grusin, and this is not him, so these two must be Diane Schuur and Larry Rosen.

Moments later, Rosen tells the crowd how Stan Getz found Schuur at the Monterey Jazz Festival in 1979. He took her along on a televised performance at the White House in '82. Nancy Reagan asked Diane back in '84, and then Larry Rosen caught her on TV. Rosen is a controlled, sophisticated man, but also clearly a music enthusiast. He's a recording engineer, too, and has mixed several of GRP's albums. Just as he apologizes for Dave Grusin's absence, Grusin jumps up to the stage—he's just in from L.A.—and skips to the piano to accompany Schuur through a few songs. GRP

Records knows how to throw a party.

Leap ahead in time and space to an unprepossessing building on the low rent end of 57th Street, with a car dealership on the ground floor. We ride up the elevator with Dave Grusin, who doesn't know us yet and, in any case, is carefully studying a report through half-moon glasses. Could this professorial mien be that of the hottest film-scorer in Hollywood and a celebrated jazz composer? We follow him into GRP's door and in a minute meet him again in Larry Rosen's office.

"We met in 1960," says Rosen, detailing the history of their relationship. "We were both musicians; I was a drummer. We spent six years on the road with Andy Williams."

"After that, Larry had an advertising company here in town," Grusin interjects. "He became the business genius we know today. I was then working with films, and in music we moved into a production arrangement with RCA—with John Lucienne over there."

"In the early '70s we did a few records together," continues Rosen. "And a project came up for Earl Klugh. Dave said he didn't want to be a freelance arranger anymore unless he could also be a producer. So Grusin-Rosen Productions was born, and we started to sign whoever we could. After dealing with RCA, we'd gone into what eventually was an unsatisfactory deal at Polydor. We used to tell ourselves, 'Boy, if we ever had our own label we would be able to control this and that'—make everything right. Then we had a logo deal with Arista for five years—our GRP logo on all the records we produced. The situation with Arista was good. We'd sign who we wanted to sign and we had a powerful organization that was able to bring the records home for us. Angela Bofill was one of our biggest signings.

"Basically, during those five years we were getting ready to go out on our own. We worked out our system of Dave in the studio, working with talent; I'd be recording, then both of us would mix. Our first experience with digital recording was kind of the spark; it showed us what we could do on our own. We used the Soundstream 2-track digital system for the *Mountain Dance* album and we were just blown away by the results. Once we heard that, we said, 'Okay, this is it, this is the future.' This was 1980 and 1981, and when it came time to renew our contract with Arista, the industry was in the pits. We wanted an all-digital label, and they were trying to cut back on everything. Times looked tough, so what would we do? Make another production deal? Go to another label? Start our

own label.

"Just then there were a lot of changes in the record industry in distribution. Everybody was leaving independent distribution and we happened to go to a convention of independent distributors. These people were dying for something to sell! We were getting very good feedback on the way our records were selling. You have to understand, when we were at Arista, we never dealt with distributors, we didn't have these relationships at all. Now we got the first news from the street. And the news was that a lot of dealers would buy GRP product even if they didn't know the artists, because there was a consistency to what we were doing. They needed us more than we needed them!"

---

*"Two musicians starting a label! It's like a fantasy! It never works! But we'll work that record as hard as we can work it."*

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"So, here comes compact disc. We started the label with the strategy that we'd release everything on CD—everything would be recorded digitally. We started the label with three albums in 1983: the New York-L.A. Dream Band, Gerry Mulligan's *Little Big Horn*, and the Glenn Miller Orchestra."

They knew from the start that the Miller record (*In the Digital Mood*), a new 32-track recording of the original arrangements, was the right demo record for CD. "It sure was a better way to demonstrate it than the ping-pong recordings they used when stereo came out," says Rosen. Polygram gave away the record to hardware buyers, and the album remains one of the best selling CDs ever. A successful label was born. In two years, Grusin and Rosen were selling \$15 million worth of records a year.

That may be small potatoes to one of the major labels, but GRP is quite satisfied—and is also growing faster than ever. Now that CD player sales are booming, software continues in short supply. But while the majors have difficulty getting as many CDs as they want, GRP has longstanding relationships with pressing plants in the U.S. and Japan.

"Most major companies have run through the first years of the CD with

capacity problems," Rosen comments. "They have to make a difficult decision as to what to release on CD. The last thing they want to release is jazz. Warner Bros. has jazz on CD but they have to get out their Prince and Madonna records first. It allows us to sign people like Chuck Corea, Lee Ritenour, Dizzy Gillespie and the *New Faces* album, with Branford Marsalis and Kenny Kirkland."

Why should a major star, who could sign with a Warners, sign with GRP? "As the CD starts filtering down demographically through the marketplace," says Rosen, "we're just going to be more competition than anybody. We have the ability to manufacture a lot of CDs. We have a corner on the jazz CD market. The majors get interested in jazz every few years, they sign some big names, then they look at their bottom lines after two or three years and they drop it. It's an afterthought, a stepchild. To us, it's everything."

"Two musicians starting a label!" he laughs. "It's like a fantasy! It never works! But we'll work that record as hard as we can work it. We have more in-store presentations than any other label."

Finally, Rosen has to take a breath. Grusin's professor's face breaks into an impish grin. He speaks slowly. "Up 'til leaving Arista, we were always cranking things out. When we became independent, we sort of gave ourselves a year. There are still unsure times. The rules make themselves evident by every piece of experience you have."

Rosen: "One very important thing we've learned is that with the kind of product we make, longevity is not a factor here. The one important factor is the growth of the CD market." He says 65% of the company's sales are now CDs, as opposed to 45% to 50% in 1985.

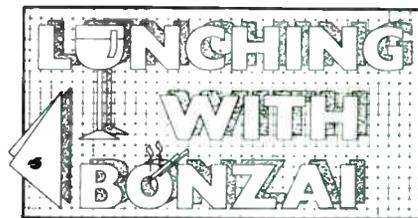
"I'm not sure we even like to call ourselves GRP Records," says Rosen. "We make home entertainment digital software. A jazz label is a small pigeonhole. We're starting here, but we're going forward to this larger concept. We are so different from the record companies, we don't identify with them."

This is confusing: GRP is a record company that is not a record company?

"We're looking at a very different market than the record companies," Rosen responds. "They ride the pop bandwagon, they need radio airplay. It's 18-year-olds in huge numbers; that's the record-buying public. For us it's a totally different view. From a musical standpoint, it's strictly quality music—a wide spectrum of approaches but all with a great deal of attention to quality." ■

# SONGS IN THE GEOSYNCHRONICITY OF LIFE

by Mr. Bonzai



Mrs. Bonzai and I said the magic word—*Mix*—and the gates of Wonderland opened. The old studio is warmed by the spirit of Nat King Cole and other legends who have worked there since the '30s. Stevie's redecorating has come slowly, maintaining the deco style. The layout is eccentric, unlike modern ergonomic facilities, and it takes a while to figure out where things are. Stevie gets around quite easily while strangers get lost.

Having both braved the fortress a number of times for previous *Mix* stories, we felt at home as the press ranks were herded first into the air hockey room (Mr. Wonder is the reigning champ) for briefing and lunching. In Stevie's adjacent office, we could hear a young chorus going through some run-throughs for his anti-crack song, "Stop, Don't Pass Go." Co-producer Quincy Jones emerged, waved a friendly hello, and rushed off to the studio.

Wishing to find out early where the action would actually take place, I asked to use the bathroom, knowing that it is on the far side of the building. "I know where it is," I assured a guard, and briskly slipped through the TV crews waiting anxiously.

I spotted engineer Bob Harlan warming up a synthesizer—a friendly face in the crowd of strangers. Mick Parish, a bespectacled Englishman who

*Stevie Wonder and Quincy Jones in the studio.*

PHOTO: MR. BONZAI

has been tending to technical needs for over a decade, said "Nice to see you, mate." Synth wizard Bob Bralove, looking like a beatnik professor, nodded hello. I had the scene wired, but what was going to happen?

Following a test on the 25th of February, this was to be the historic March 4th debut of an actual bi-coastal digital fiber optic satellite studio recording session. We've got Nile Rodgers in New York with his guitar and a teenage chorus. In L.A. we've got Stevie Wonder, Quincy Jones, and another teenage chorus. We've also got news crews and spectators crowding both NY's Master Sound Astoria and Wonder-

land. Stevie's engineer, Gary Olazabal, informed me that the original goal was to record both choirs simultaneously, but because of the current laws of physics it is impossible. Overdubbing the choirs in sequence is a cinch, with two machines and a digital delay offset to allow for the half-second it takes to get a signal up to the satellite, down to New York, back up again and down to L.A. Afterwards you just digitally bounce it back to the master tape and you've got it. But actual simultaneous dueting can't work, even if we could



PHOTO: MEDIA PHOTO GROUP, INC.

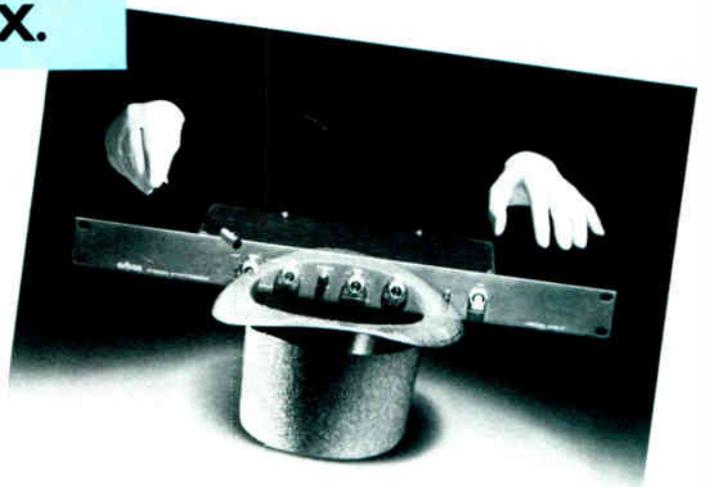
**Nile Rodgers at the board of Master Sound of Astoria in New York.**

put a digital delay in the brains of one coast. Our esteemed editor Indiana Schwartz sums it up, "We can't record in the future." It's all a bit boggling to me, so I will leave the explanation to Dr. Buzz Bently, Professor of Anthropomusicosophy (see sidebar).

When Stevie made his arrival, the word quickly spread through Wonderland. As we waited for the press conference to commence, we had the good fortune to be boxed in a corner

with Quincy Jones. When we last met, he was just starting to work on *The Color Purple*. This time we learned he was finishing up the long-awaited sequel to Michael Jackson's *Thriller* and meeting with Robert DiNiro for a film which Quincy will direct next year. Dressed casually in a bulky knit sweater, Levis and boots, and speaking offhandedly about the music and film business, you'd never have guessed he was about to launch a

## MAGICAL STEREO EFX.



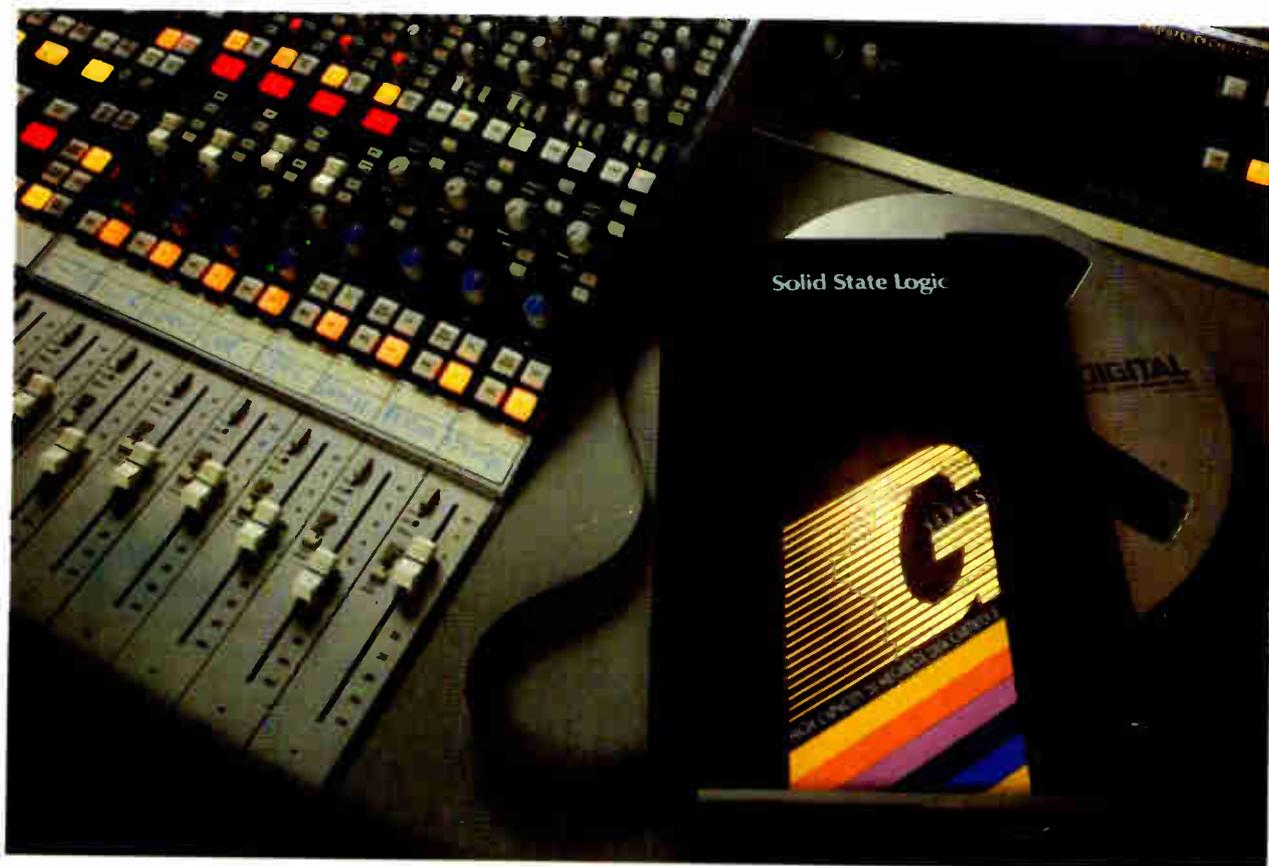
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## G · SERIES STUDIO COMPUTER

new era of recording.

Stevie and Quincy took their places in the center of the studio as news crews began filming. On a large video monitor we could see Nile Rodgers at the console in New York.

Quincy remarked, "Technology like this can really pull the world together. There are many musicians we respect around the world, but it can be difficult to schedule the sessions. Now we can have an American rhythm section, Brazilian singers and African drummers all recording from their homelands. Even though the musicians are separated physically, the technology has risen to the occasion and maintained an intimacy like a typical recording situation. It's a huge step forward."

Stevie commented on the anti-drug song to be recorded: "I felt that because this was a very historical moment in time for us technologically, what could be better than to record a message encouraging us to make a



*Producer Nile Rodgers with choir in Master Sound Astoria's isolation booth #3, overdubbing onto Stevie Wonder's song, "Stop, Don't Pass Go."*

# ... IN THE FAST LANE

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off-line. Individual faders can be instantly updated in rollback. A staggering 20 megabytes of audio mixing information — equivalent to 80 floppy disks — can be stored on just one SSL G Series disk, taking up less space and weighing less than a reel of quarter inch. And all this data can be loaded, processed, edited and copied faster than ever before.

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move against something that is devastating the society of the world. We should use communication to bring people closer together."

Quincy added, "I've been in the

business a long time—starting with 78 RPM, then 45s, LPs, cassettes—and today seems to be a natural extension of what technology is all about."

Stevie concluded, "We talk about

communicating with life on other planets—it's only fitting that first of all we communicate with each other to the maximum degree possible. This technology brings into focus what I believe

### Dr. Buzz Bently Explains...

No, you can't get both singers singing live together on each coast. Say you've got a singer and a tape rolling in L.A., and another singer in NY, connected by a satellite link back to L.A. The signal from L.A. goes to the satellite, about 20,000 miles up, and 20,000 miles down to the NY studio. That takes the radio signal about a quarter of a second at 186,000 miles a second. The NY singer hears the L.A. singer, and sings his part—as far as he's concerned, there's no delay, and he's in sync. So he sings along, and his signal goes back to L.A., which takes another quarter of a second. By the time you pay the taxi and pick up the luggage, it works out to 520 milliseconds for the round trip. So you put the L.A.

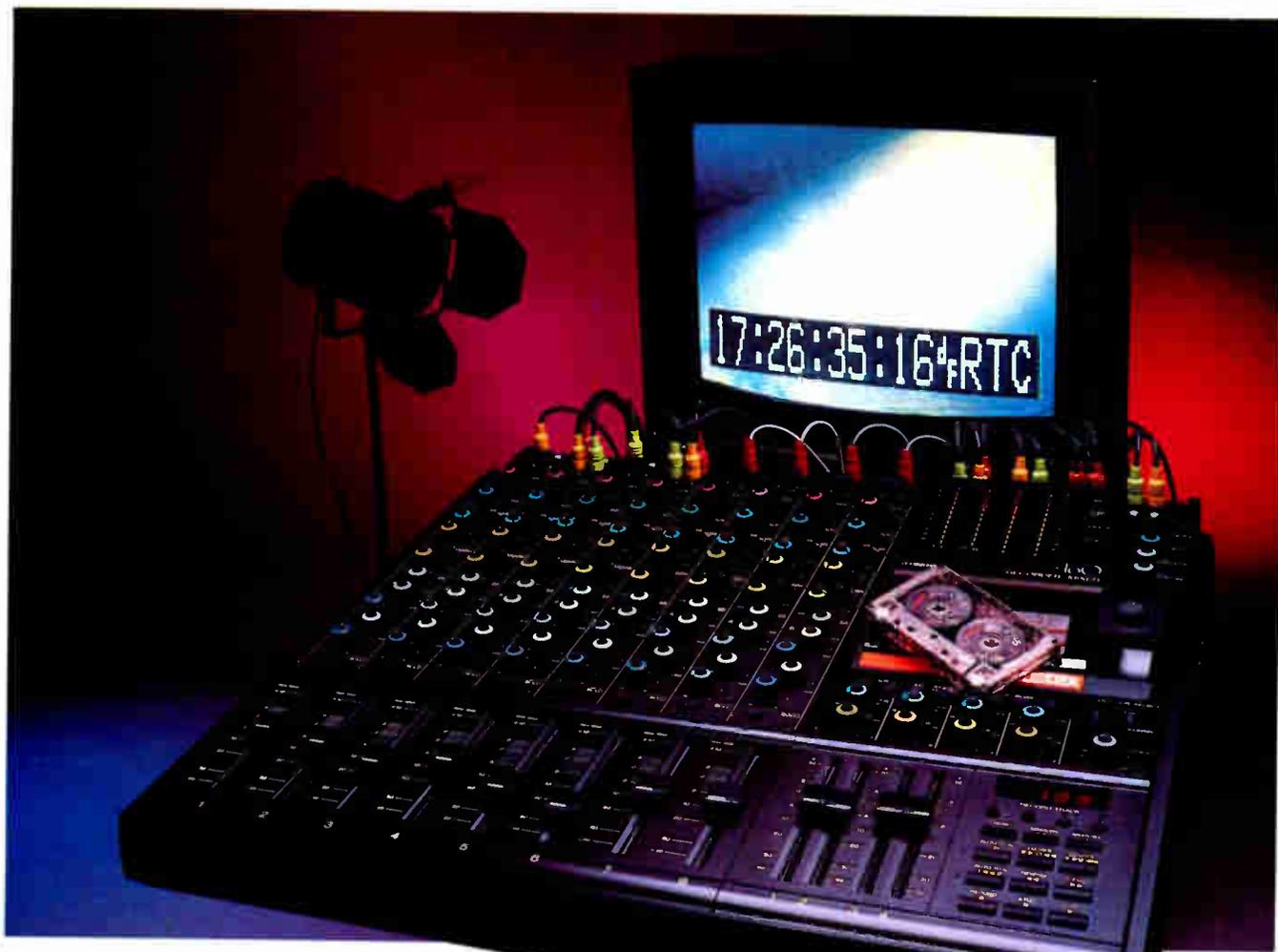
singer's vocal on a 520 millisecond delay before it goes to the tape, and it's right in sync with the NY vocal, no problem.

Except there's a problem: the L.A. vocalist gets the NY vocalist's part a half-second later, so there's no way the two parts can sound in sync to him, though the tape won't know the difference. So he has to sing alone, without hearing the other singer. No way around that delay. If you tried putting the tape machine in the middle, neither singer would hear the other in real time, because they'd both be a quarter-second off.

But we're working on it. We have two ideas. One is a digital delay in the brain of the first singer, so that he hears himself a half-second after he sings, in sync with the second singer. But he has to sing at one time, and hear himself later, so the

interference in the brain has to be bypassed in the thalamus, where the time sense is. Very tough wiring in there, but we have the basic diagrams in the computer.

The other way to go is with a splitter coupled to a time machine, so that the L.A. singer is split in two, one half in real time, one half sitting in a time machine that throws him a half-second into the future. He sings the track in real time but his split hears it a half-second later, along with the signal from NY. But then we need a reverse time feedback to send back to the real time singer, so he can hear himself and the other singer a half-second in the future. That's the part that's giving the guys in the lab fits, trying to make an end run around the Theory of Relativity. Very tough. Talk to me next year.



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the creator has meant for us to do all along. It's a plus; it's tomorrow; it's us in tomorrow today."

With that, we were all ushered into an observation room to watch the session. It was extremely cramped so I asked Bob Harlan if we could go out to the mobile truck where Gary O was engineering. He obliged and whisked us through the studio during a break, and out to the truck, where things were pretty hectic. When we tried to get back to the press observation room we fortunately got stuck in the main room, with Stevie, Quincy, the teenage choir and their mothers.

Standing quietly in the corner, we were close to the artists and far from the technology. This was just two old friends coaching a group of kids and joking with Nile on the other coast. Quincy asked Nile for another take, this time with "a little more grease." To warm the kids up in L.A., Stevie sat at the piano while they gathered around and he sang them through the chorus. On the monitor we could see Nile nodding and grooving. While Quincy and Stevie stepped into an adjoining control room for a playback, the mothers pulled out their cameras and began taking snapshots for the family albums.

Technically, the session proceeded smoothly, only slowed by the demands for perfection by the triumvirate of superstars in charge. Quincy joked to Stevie, "You're gonna get in a lot of trouble—I can see you wanting to record with 17 different countries." "Yes," Stevie agreed, "I want those cellos from Europe—gotta have those cellos."

After the two choirs were finished, Stevie played harmonica for Nile's new version of the *Moonlighting* theme and Nile piped guitar back to L.A. for one of Stevie's tracks in progress. Just another day in Wonderland.

In a telephone conversation with Ben Rizzi and Maxine Chrein, co-owners of Master Sound Astoria, I felt their elation and enthusiasm. "We had a dream situation," Ben informed me. "We're directly interfaced to an earth

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"It's a fairly expensive procedure, but still costs less than flying an artist like Stevie and his crew in from L.A."

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*Key members of the East Coast team (left to right): engineer Mark Schubin, Sony field engineer Bill Sgambati, Sony digital product manager Gus Skinas, and chief engineer/co-owner Ben Rizzi.*

## BICOASTAL OVERDUB

L.A. may have had Stevie Wonder, Quincy Jones, and Mr. Bonzai, but the idea was born in New York. Teleport Communications (TC), which operates a fiber optic network and satellite communications center in the New York City area, ran its fiber network to the Kaufman Astoria Studios, across the East River from Manhattan. To announce the activation of the fiber, a press conference was held in studio A1 at Master Sound Astoria (MSA). Video and audio traveled by laser light on glass fibers between MSA and TC's satellite antenna farm on Staten Island, but nothing much happened after that until MSA's Maxine Chrein and Ben Rizzi met with Kaufman Astoria's Siobhan McCrory, TC's Paul Dujardin, Harry Mendell, and myself on October 16 of last year.

The gist of the meeting was "Okay, we've got some fiber optic connections to the world here. What can we do with them?" Maxine and Ben immediately brought up the problem that music groups face when one member is stuck, say, in London, while everyone else is in New York. Either everyone flies to London, or a non-interactive overdub session occurs, with tapes flying across the Atlantic, only to have an artist or producer complain that the

overdub isn't quite right.

Therefore, the group's first idea was to connect two studios electronically, so that artists could perform together across the width of a continent or an ocean, and, since TC's fibers connected directly to satellite antennas, the simplest connection would seem to be via satellite.

Unfortunately, with communications satellites located more than 22,000 miles above the equator, even at the speed of light, a single satellite hop takes about a quarter-second and a round-trip doubles that. Half a second is not a long time, but it's enough to prevent two artists from performing together simultaneously.

It's possible, however, to cross the country without a satellite. TC's fiber network connects not only to its own satellite antenna farm but also the networks of every major long distance carrier serving New York City. And, with some newly developed terminal equipment, it's possible to send CD-quality digital stereo via a coast-to-coast non-satellite data link operating at 1,544,000 bits per second. Alas, since Master Sound Astoria seems to be the only studio in the world currently connected to either a

—CONTINUED ON PAGE 32

**“I tried it. I’**



# m hooked."

When the elite of Rock knock on your studio door, you'd better sound totally together. That's why producer Nile Rodgers bought a Sony PCM-3324 digital multitrack recorder.

The clarity, the freedom from tape hiss, the ability to make endless overdubs all impressed the uncompromising Mr. Rodgers. So did the ease of using two machines for 48 channels, digital "fly-ins" and full electronic editing.

In fact, Nile likes his 3324 so much, he's used it almost exclusively for the last four years. Both at home and on the road. As Nile says: "It's seen a lot of action, and it's going to see a lot more."

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**DIGITAL**  
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*Producer Nile Rodgers (left) and MSA co-owner/engineer Ben Rizzi (right), at the console during first bicoastal digital recording session, inaugurating a new recording service at Master Sound Astoria, at New York's Kaufman Astoria Studios.*



PHOTO: MEDIA PHOTO GROUP, INC.

station through a fiber optic network. When we first heard Stevie's harmonica we couldn't believe the quality—even the subtlety of his breathing. Nile said he couldn't believe how easy it all was—that there really wasn't much difference between a TV monitor and looking through the control room window.

"A major advantage of the DASH format is that the control track lockup is incredibly accurate. Our time delay offset was .52 seconds and the Sony machines even allow you to offset for phase problems. They lock down to the byte.

"It's a fairly expensive procedure, but still costs less than flying an artist like Stevie and his crew in from L.A. We also wanted to show the possibilities in the most complicated form: full digital satellite transmission and bicoastal broadcast quality video. It is affordable and we feel that it's a service that works well and can save money for the record companies. Within a few years, it will become available to more and more studios."

"It's exciting for us to be pioneering something that is a first for the music industry," Maxine added. "A lot of talented people contributed to this project, and how often do you have Quincy Jones, Stevie Wonder and Nile Rodgers collaborating like this?"

When I spoke with Gary O, I asked if he had any advice for engineers anticipating such sessions. "We were really under pressure because there was testing being done right up until the press conference, and then we had to scramble to do the mundane things like checking mic levels and headphone cues. I think each studio will have their own set of problems to work out—I don't think there's a universal standard checklist at this point.

"To tell you the truth, I was glad when we were finished. I'm sure the next time will go smoother. If we had our own satellite dish and were equipped to do it on a full-time basis, it would be a lot more plausible. Stevie is always asking us to push the technology to the limit. He's even suggested that we take a mobile unit to Las Vegas to send Dionne Warwick's vocal back here via satellite for some tunes he's producing for her. He's a dreamer, but that's part of his reality—and that keeps us constantly on our toes." ■

—FROM PAGE 29, *BICOASTAL OVERDUB*  
fiber optic network or a high-speed data network, this idea was postponed as not being viable for a short-term demonstration.

That left satellites, which can connect to portable antennas on short notice. The delay would still prevent artists from performing simultaneously together, but it could allow instantaneous feedback about what was going on. Thus was born the idea for the first live, interactive, digital, satellite overdub session.

Sony's Gus Skinas arranged for the digital audio processors to be used on each end of the satellite hops. The PCM-1630s take stereo audio, digitize it, and then convert it into something that looks like a video signal. That meant one satellite video channel in each direction for the digital audio. But Siobhan wanted more. To keep the press excited, she wanted regular video to pass in both directions as well.

The rest is history. TC provided four fiber optic links, two satellite downlinks and three satellite uplinks (the third was just in case the small portable antennas in L.A. might have trouble with one of the signals—the uplink was on a frequency for which larger portable antennas were available). GTE Spacenet provided huge chunks of satellite time on as many as five different video channels and IDB Communications supplied two uplinks and three downlinks at Wonderland Studio.

And Sony? MSA is a fully equipped sound studio, but to document this historic event Sony turned it into a more-than-fully equipped video facility. They supplemented MSA's two existing PCM-3324 24-track digital recorders with a PCM-1630, a PCM-16:0

to monitor it, two color video cameras, two video projectors, a 1/4-inch 2-track digital audio recorder, a one-inch VTR with digital audio tracks, another one-inch VTR capable of variable speed recording, video switcher and special effects generator, video and audio distribution amplifiers, video sync generator, lights, photographers, and a roving Betacam camcorder, most of which got hooked up (with two MSA supplied 3/4-inch VCRs) on the morning of the event.

MSA's normally spacious control room features two glass-enclosed multi-track recorder nooks, one for the PCM-3324s and the other for such giant beasts as Ampex's analog ATR-124s. The analog nook was cleared out and filled with the video equipment, literally to the point where it was pressed against the glass. The rest of the control room rapidly filled up with press, their cameras aimed either at the video monitor showing the folks in L.A. or at Nile and Ben behind the console. The large studio was filled with whatever press couldn't fit in the control room, leaving the New York choir to sing in an isolation booth at the rear of the studio.

Fortunately, most of this was totally unnecessary. The week before, a rehearsal was done with just four satellite channels, one PCM-1630 (the PCM-1610 was there just in case), an AMS stereo delay line (there was also a Lexicon DDL standing by for the big event), MSA's own color camera and control room video monitors, and just two members of the writing press (not counting me).

The digital audio was fed from MSA to Wonderland and back, and, by comparing the incoming satellite signal with the output of the

—CONTINUED ON PAGE 34

# How to deliver precisely the mixes you want, exactly where you want them.

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has different requirements, S Series consoles come in a range of sizes. Choose 16, 24 or 32 input frames and load the right number of channels for your job. The S Series PA is designed to go from a simple spoken word production one night to a full ensemble or rock band the next.

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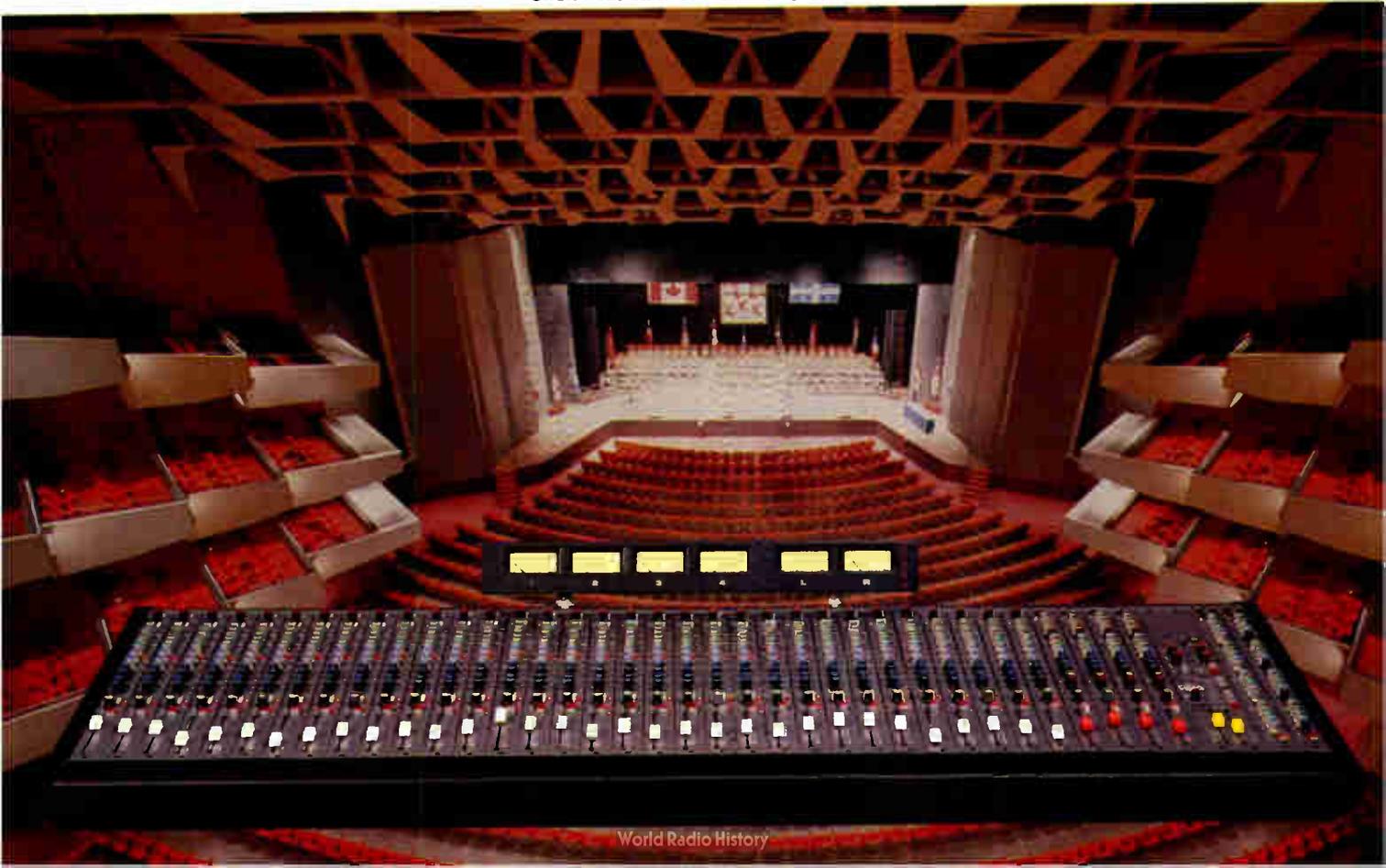
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—FROM PAGE 32, BICOASTAL OVERDUB  
 delay line (fed the same thing going to the satellite), we were quickly able to determine the round-trip delay as 520 milliseconds (just over half a second). The system was rigged so that a monitor mix would be fed simultaneously to the delay line and the digital encoder feeding the satellite. The artist at the remote end would hear the sound after half the delay and perform in unison with the mix. That performance would be returned to the local studio where it would be synchronous with the delayed mix, so the

full effect—performer and mix—could be heard together in both studios, though a quarter-second apart. Recording the performance on a slave recorder and slewing its synchronization by the same 520 ms delay completed the process.

It was when the performers saw and heard each other that it was apparent—even to those of us who had worked on the event from the outset—that something more than just a bi-coastal digital overdub was taking place.

"Wow! Are you sure you're not in the next room?" "I can't believe it!"

"This is all a trick and you're going to come through that door, right?" The comments went on all day.

The rehearsal went without a hitch. Stevie played harmonica to Nile's tracks for the theme to *Moonlighting* in New York, then Nile played guitar to some L.A. tracks with Stevie calling out chord changes as he was playing. That's what wouldn't have happened if a tape was sent instead of having the live hookup. The interactivity would have been lost.

This is not to say that interactivity is all the system is good for. Less than one week after the big event, MSA got a call from a film production company that needed a tidbit of dialog replacement in L.A. from an actor in New York. No interactivity was needed. Yes, a tape could have been sent by air between the two cities, but it wasn't. On short notice, the dialog was transmitted from MSA via fiber and satellite to IDB, where it was recorded for physical delivery to the film mixing suite.

In this case, digital audio wasn't even used. Each fiber circuit has two high fidelity analog audio channels associated with one video channel (still more—up to six—can be added if necessary). Just one of these was used for the dialog replacement. During the big event, only one of the four available analog audio channels was used (to feed time code from New York to L.A. for later videotape synchronization). All audio—even talkback—was carried on the digital circuits. That's why, when the digital satellite channels were disconnected prior to the video channels, Quincy and Nile were left gesturing to one another, raising their glasses in mute toasts to their achievement.

And it all went well except that, as sometimes happens, the event turned up a couple of glitches that didn't show up in the previous week's rehearsal. At one point, when both studios were reconfiguring from recording in New York to recording in L.A., a minor flaw in the way the digital decoder was hooked up in New York showed up, delaying the proceedings by a couple of minutes. The more serious delay came during the *Moonlighting* recording. With high-tech equipment ranging from lasers to satellites just waiting to fail, the biggest delay (besides the seemingly endless speeches) was caused by a reed in Stevie's harmonica.

Whew!

—Mark Schubert

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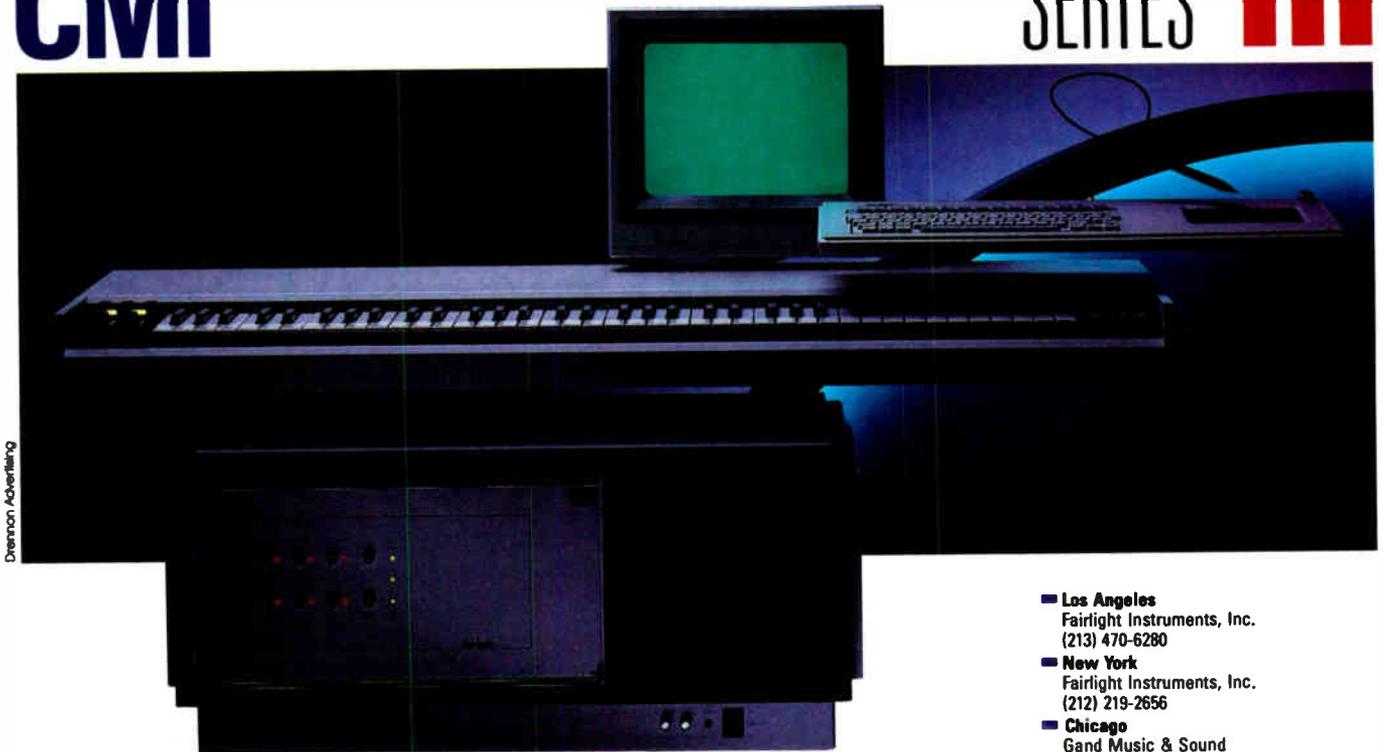
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# COMPUTERS

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## MEAN BUSINESS, TOO

### TAKING A BYTE OUT OF THE DRUDGEWORK

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by Dan Daley

Thousands of column inches a year—sometimes entire publications—are dedicated to the growing place of computers in the recording industry. From increasingly powerful console automation to music software packages that do digital synth patches and will even edit your scores, the musical applications of computers are ubiquitous and expanding.

Another, equally important application tends to get overlooked in this hoopla, though: the business application. While the computer revolution is making a box office hit with its ability to enhance musical creativity, the old CPU can still don a green eyeshade

and sleeve garters when it's time to get creative in accounting.

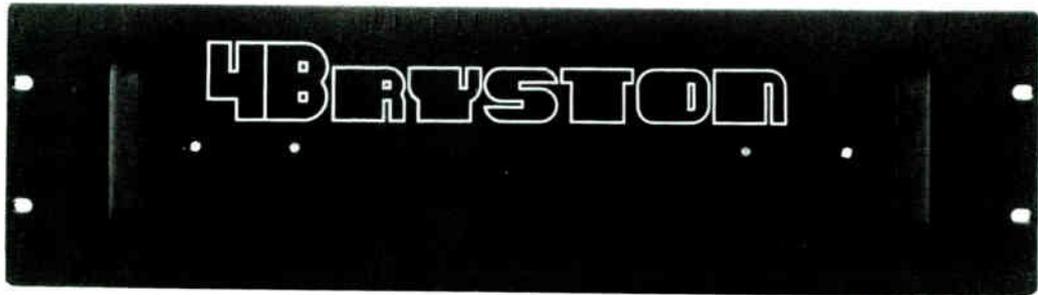
The administrative potential of computers is as vast for recording and production facilities as it is for the Fortune 500 set; accounting procedures, marketing, maintenance scheduling and tape library organization are a few of the on-line ways that computers work in studio offices. But you have to know what to look for and have realistic expectations of what computers can and cannot do. The experiences of three facilities in New York provide some insight on what does and does not compute.

"Never do anything by computer that you can do easier, cheaper and faster by hand," says Shelton Leigh Palmer, whose new and extensively computerized two-room recording and editing studio opened late last year. Palmer's confidence in his approach to the business end of computers is bolstered by his extensive business background and his own expertise at dealing eyeball-to-terminal with software and hardware. Still, the first thing he'll tell you is when *not* to use auto-

*Suzanne Ciani  
of Ciani/Musica*



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2. Long term reliability
3. Product integrity

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Following the burn-in period, the amplifiers are monitored for DC bias stability for approximately

another full day. At this point, they are returned to the test bench for another complete checkout of all operating parameters and functions, at which time a test sheet is made, and included in the packing with the unit.

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mation—he considers it axiomatic that computers require a certain minimum economic environment to be efficient.

"If you write only ten invoices or so a month and you put them on computer, you're crazy," he says. "Our invoices are done by hand on store-bought blank forms. We do keep an invoice database for records, of course. We send out maybe two or three invoices a day. It would be absolutely ludicrous to set up a computer program to generate that few invoices a day. It's so much easier to do that by hand."

Palmer says that computers are efficient only in facilities that are grossing at least \$100,000 per year. "That's the number," he says flatly. "If you computerize your accounting before that, you either love computers or you're a fool."

Shelton Leigh Palmer & Co. began computing early on in its five-year life. Beginning with an Apple II Plus, Palmer used off-the-shelf programs like Dollars and Sense for accounting and db Master as a database. With the advent of the IBM PC in late 1983, he picked up Leading Edge PC clones and upgraded his software accordingly (and went to two accounting packages; one for cash and another for accrual. "If you're doing a million dollars a year, you ought to be doing that," he advises). His mainframe in the new 5,000-square-foot facility is an AT running at 16MHz networked to ten 640K terminals situated throughout the suite of offices.

Palmer utilizes the computer for library cataloging, accounting, time-efficiency analysis and inventory control, among other uses. He also keeps maintenance records on computer file which provide repair engineers with a complete "medical history" of each piece of studio equipment.

Though computer-literate to a high degree, another of his axioms is "Never write a piece of software if you can just apply something from off the shelf." But when off-the-shelf isn't enough, Palmer and his computer whiz younger brother do it themselves. He built a report generator program that keeps track of all aspects of individual jobs, catalogued by number and containing information ranging from client and producer to how much tape was used and how many hours were allotted to recording and mixing. The information is placed in a database that is interrelational with other parts of the package and is cross-referenced.

A simpler version of that program is kept manually. While he states that his system has never crashed, "We're backed up like maniacs," he says.

"And we back up ourselves in the most intelligent way: redundancy. Our Winchester [hard-disk drive] is backed up by another Winchester. The chances of having simultaneous head crashes on two Winchesters are pretty remote. And if you don't touch the computer keyboard for over 15 seconds, the system starts to save information automatically. That was something we wrote into the menu ourselves. It effectively made our computer a coprocessor."

The computer system is crucial to budget estimates, Palmer feels. Using SuperCalc software to store expenses of musicians, singers, arrangers, studio time, tape, etc., he can input client needs and spit out a budget proposal—on letterhead—with the push of a few buttons. "The program can even tell me how much tape I'm going to need because the program knows how many takes I like to do."

Ciani/Musica, the high-tech, direct recording-dedicated studio founded

by synthesizer pioneer Suzanne Ciani, began to incorporate computers for business nearly two years ago for both practical and philosophical reasons. "The business was expanding and I wanted to get our business practices expressed in software to facilitate the production aspect and to protect myself from errors in bookkeeping and scheduling," she says. "Also, it was appropriate because we are a technology house and represent the forefront of technology."

But even though she's employed computers in music for years, incorporating business computers turned out to be anything but easy for Ciani. Looking for a program that would reflect her highly specialized needs, Ciani hired a pair of computer consultants who chose her hardware and devised—at least on paper—what she described as "a beautifully thought-out conceptualized system of databases that worked together and that helped analyze how we worked. It was

## A Pristine Approach to Studio Control

If your studio uses an IBM-PC to handle MIDI manipulation, word processing or spreadsheets, you might consider an addition to your software collection—one that really gives your facility manager (and accountant) a break. The studio-savvy Pristine Systems, Inc. (Hollywood, CA) has written a complete software package from scratch to suit the special needs of large and small recording studios.

Pristine's software speeds up an accountant's work by providing current, correct financial information and accurate records for tax files, and it makes it much easier to find out exactly what's going on and how much it costs, via studio and customer usage reports, equipment and maintenance records and inventory control lists with automatic re-order points.

Pristine's Recording Studio Management System comprises six programs. Available on a floppy (for one- or two-room studios) or hard disk (three to 14 rooms), the Pristine package also comes in a networking version for mega-studios that want multi-user systems.

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get the particulars of equipment maintenance. Tape Library & Sound Effects Management—create reports sorted by tape ID, customer, project, or "released to" info, from libraries containing up to 200,000 effects and tape titles. Billing & Accounts Receivable—designed for those who occasionally stray off the rate card, but still need accounts-receivable aging analyses. Bookings & Work Orders—no more double-booking, or letting an unbilled job fall through the cracks. General Ledger & Financial Reporting—may the IRS god bestow no audits upon you. Accounts Payable & Check Writing—1099s? A breeze.

Pristine integrated their six programs, which means when you post sales activity in one program, for instance, you automatically update your on-hand quantities in another.

A Recording Studio Management System costs from \$765 (three programs on a floppy) to \$5,195 (hard-disk network version, all six programs). Pristine Systems happily arranges demos, performs custom modifications, and offers on-site consulting service. By the way—they're the same folks who developed a PC system that triggers Sony's professional 60-CD compact disc player. Pristine Systems, 6515 Sunset Blvd., Suite 201B, Hollywood, CA 90028.

—Linda Jacobson

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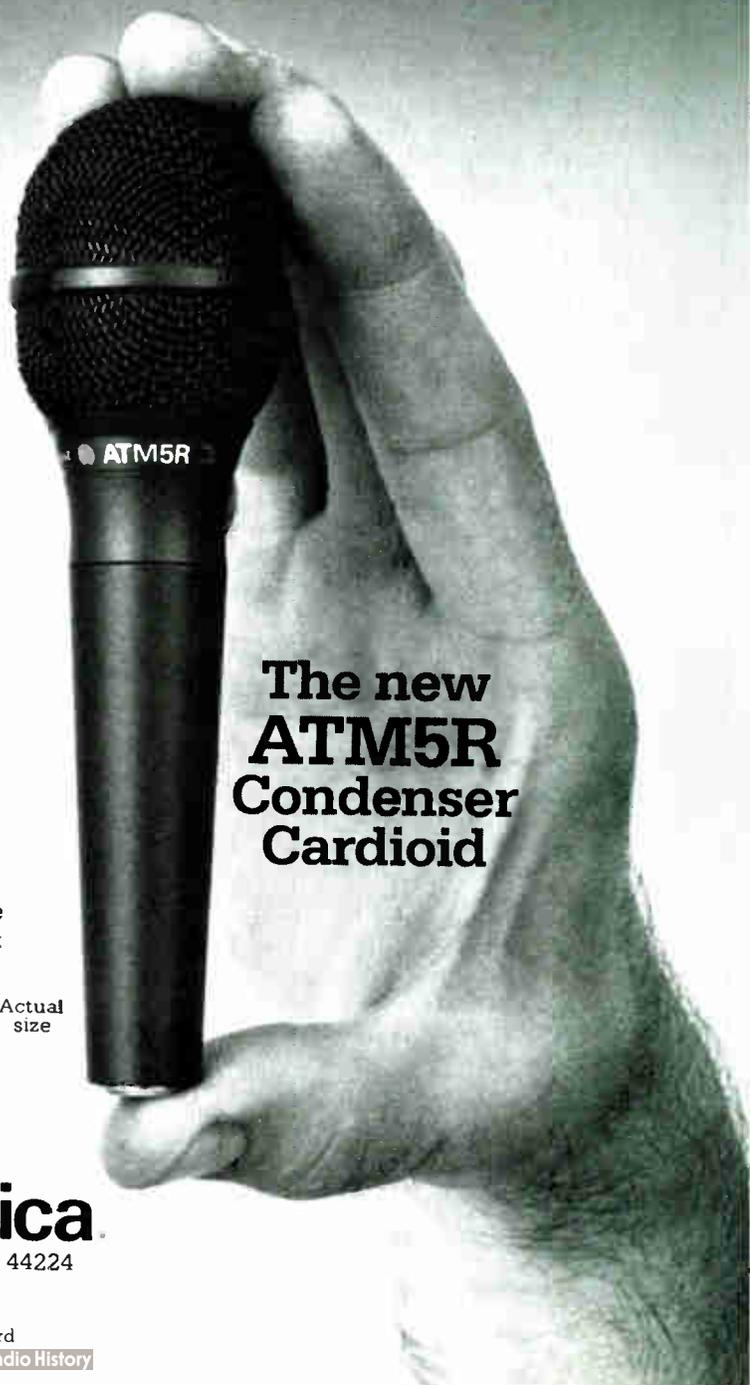
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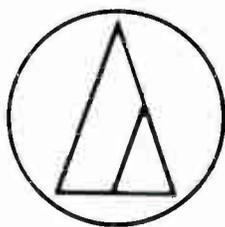
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designed so that when a client called, the name quickly went into all databases: into the client database, into the invoice form, to the production report, to the mailing list. All of our rates were in the interrelational database and the rate tables in there computed estimates depending upon what a client needed."

The custom software program further added formulas for talent—engineers, singers, musicians—to facilitate cost estimates and personnel records. Other aspects included client scheduling, an electronic mailbox, a tape library system that tracked the tape information on every session, and accounting and costing programs that analyzed costs. The client database was also planned to abet marketing and sales, she says. "It was an ambitious program," she admits. "A dream program. In theory it was very beautiful. But we were, in a sense, a victim of timing. At the time, there was no way to feasibly network personal computers, so we ended up going with a kind of industrial strength system called an Advanced Digital with a Winchester hard disk."

The custom software had bugs in it, substantial ones that limited the entire system's usefulness. "In developing custom software, you really need to educate somebody about your business completely," cautions Ciani. "No one can write a meaningful piece of software without knowing the total implications of everything they're designing. So just getting these people inside our business heads took six months. Also we never had documentation—there were no manuals for this stuff because it was all custom."

Despite a staff turnover that compounded software problems—the new staffers never became completely friendly with it—"We could have worked that out, I think, if it weren't for the hardware problems," she laughs, painfully. "The [Qume] terminals began imploding. You'd open your terminal and it would go 'poof!'" She found that various repair consultants gave conflicting reasons for problems, mainly because they were unfamiliar with the custom equipment. Hardware that failed wasn't backed up by the manufacturer in many cases.

All of Ciani/Musica's working information had been entered into the system, "and when the computer went down with your scheduling in it, you had no idea of what you were doing, what the commitments were," she recalls. "It was like a black hole. So we figured if this wasn't trustworthy, we'd have to have a manual backup on paper—a daily calendar. And once you have to do that, you might as well not have a computer."

## Selecting the Right Computer for the Studio

If you decide you need a computer to streamline your studio business operations, here are a few guidelines that can make the process easier and more productive:

- Be realistic about what it is you want a business program to do. Go over your records for the last year and look for patterns in book-keeping, scheduling, etc. Choose your software and hardware accordingly.
- Go with reputable dealers who have a history of standing behind their products. Service down the line is the most important part of the computer package you buy.
- The same goes for choosing consultants; ask around for recommendations and don't be afraid to ask prospective consultants for references.

—Dan Daley

Was Ciani, as technologically literate as she is, intimidated? "Intimidated no; frustrated, yes. When you work with other experts you count on them 100% and in there, there was no sup-

port whatsoever."

Her erstwhile consultants are gone—"I think they left the country," she laughs—and she has initiated litigation with them. "We had a lot invested in this system, financially and emotionally, so we lived in hope." But after two years and \$40,000, all the complex system is now useful for is word processing. "We've really paid a severe price; it's virtually useless."

Ciani is now taking advantage of the PC revolution. She's been adding IBM and Epson computers, but most significantly she's been incorporating off-the-shelf software programs in place of the totally custom approach. "After the problems we had, we're content to only have half of those original capabilities," she says. "You can't afford to have a system down for more than a day or you're dead. We took losses from that problem, plus the psychological problems it causes.

"Computers are great in this type of business because they keep you on top of things. You just have to be clever to adapting stuff to your specific needs. We also learned that your business needs are constantly changing. We designed this elaborate booking system and a year later our needs were completely different. You can't foresee those things. The best way to stay flexible is to look at what's available off the shelf, and get in touch with the

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people who designed the programs. Give them feedback and develop relationships with them. All software is a very personal business. You can get to know the person behind the software, and that will make a big difference."

Over at Editel, a Manhattan video post-production facility, the numbers were bigger and the moves were more conservative. But their experience proved to be a unique mix of customizing and off-the-shelf for what eventually became a \$750,000 computer system.

Editel had worked from Columbia Pictures' Bell & Howell computer when that company owned the facility. But after ScanLine Communications bought the studio two years ago, Editel looked for their own mainframe and settled on a Hewlett Packard HP 3000.

The company chose Dalbar as their primary accounting program, with modifications to allow for more individualized invoicing. The biggest task for the computer, however, according to executive vice president Joan Weade, was to get the vast library system on-line. The first few tries, including an attempt at custom design programming, were disappointing. Then in-house consultant Kirit Joshi found a software package called Minisis (pro-

nounced "min-eye-sus") which, with considerable modification, proved able to handle the 10,000-plus entries in the library. A few bugs caused them to do print-outs every day of all newly-entered information. "It defeated the purpose of having a computer in the first place," says Weade, "but we had to do it because the library is crucial."

The library system can recall tapes in various modes, by title, number, client, job, etc. It works from four separate but interrelational databases, according to librarian Stacey Cahn. Query is the file locator among different fields, Modification changes information, Entry adds new records and Print is self-explanatory. While Weade says a manual card file system worked fine between computers, the sheer volume of the library required automation.

Joshi then turned his attentions to scheduling: Editel has 13 studios and edit suites. But Weade claims that despite best efforts, a reliable, flexible scheduling system for multi-room facilities is still just a dream. "With 13 rooms, sometimes all going at once," she says, "it would be very nice to be able to punch up on a computer and see who's when and where. But the drawback is mainly the second-hold syndrome, where two clients have possible needs for the same time slot

in the same room but can't immediately commit. Pencil and paper is the only really reliable method I've seen of handling that." However, relief may be on the horizon. Weade says ScanLine is looking over a program developed by VTA Technologies in Florida which promises to address scheduling and traffic control.

Shelton Leigh Palmer agrees that, for the time being, scheduling is perhaps best left to less than digital methods: "The analog flexibility of having a gigantic piece of paper up on the wall that says who's doing what, when, and where is so much easier than running to a terminal and punching up a scheduling program."

The computer has proved further useful as a marketing aid. Using the firm's laser printer, Editel sends mailings to clients with updates on the studio facilities and equipment. It also sends reports of work-in-progress to current clients; all client information is stored on record and constantly updated and is available to sales reps.

Shelton Leigh Palmer has also utilized the marketing potential of his computers. One database tracks every person his company has ever done business with, even as the clients move from one employment position to another. "We have a full history of everything they've ever done," says Palmer, "and it's probably more extensive than they have themselves. We could write their resumes.

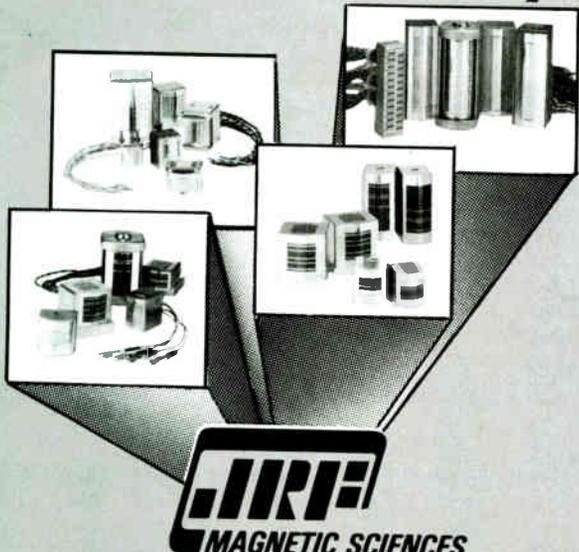
"If I want to send out party invitations, I ask the computer who we've done business with in the last 12 months and out comes a list of every human being we've worked with during that time period. I can also call up names by job titles, like art director or creative director. That's our marketing use of computers."

The same giant strides in the personal computer revolution that have enabled computers to become integral to the making of music have also made the keeping of studio books, as well as myriad other functions, easier for many facility owners. That same revolution has also produced a plethora of choices that can be alternately bewildering and intimidating. Whether you need to be computerized—completely or partially—depends upon a range of factors: economic, technological and ergonomic. But these days, both the hardware and the software exists that can make most studios more efficient places to work. ■

*Dan Daley is a freelance writer, composer and owner of NYC's Pyramid Recording. A Republican by birth, his right-wing activities do not preclude a love of small animals.*

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## THE STATE OF PROGRAMMABLE SIGNAL PROCESSORS

---

"I plucked him once,  
Why pluck him again?"  
—The Fools, "Psycho Chicken"

Remember the days of playing with a piece of equipment for hours to get the right sound and then spending yet more time writing *everything* down in some unique and arcane notation so that you could recreate it some other time? Remember taking Polaroid shots of the console so that your mixing setup could be replicated tomorrow night after somebody else's jingle session during the day? Remember attempting the mix of your masterpiece for the zillionth time because last time you tweaked that delay/feedback knob *just right*, and this time it was so-so? Well, forget it. As every issue of *Mix* tells you, you are incredibly and mightily blessed by the sonic powers that be. This is the '80s, man, and audio equipment has gone past cool, hip, punk, and mellow. Nowadays, everything is programmable!

Calm yourself. I know that you've had your Prophet-5 since the '70s, but that's a synthesizer! Until the '80s, that was about it for programmability, just synthesizers; now, it's everything: console automation, video editing, signal processing, telephones, microwave ovens, coffee makers. Sometimes I get carried away, but you get the picture. Of all these, it is probably signal processing that has gone through the most radical conceptual changes in the last few years. Most other programmable equipment has come from the perspective of a vast enhancement to an existing method of accomplishing fairly well defined tasks. Signal processing, on the other hand, has changed in its most basic nature and purpose with the amazing growth of digital audio. Thus, programmability, which has developed in tandem with DSP as microprocessors have become cheap and powerful, has been an integral part of

by Larry Oppenheimer

this emerging technology for fully half its existence in the commercial world. (Commercially available digital signal processing did not expand past simple delay until the mid-'70s.) The past year or so has seen dramatic innovations in the latest generation of programmable processors, which correspond in impact to the introduction of later generation synthesizers such as the DX7 and the Oberheim Xpander. One reading of the Lexicon 480L owner's manual will tell you that things have reached a point where programmable signal processors are as versatile and sophisticated, and present possibilities as vast, as just about any synthesizer you can name.

As we charge relentlessly ahead towards the June NAMM and October AES shows, both of which will undoubtedly be crammed with still more mind-boggling delights, it seems a good time to stop for a brief moment and take a step back (not literally—you'd have a hard time reading the magazine from there) to look at some

of the trends that we're seeing in programmable signal processing.

### DIGITAL SIGNAL PROCESSORS

#### User Interfaces and Control

As we all know, the big buzzword for the last few years has been "digital," and in signal processing, digital technology has redefined capabilities, user interface, and programmability. These are all interactive, of course: if some new effect is cooked up it is necessary for control to be implemented somehow, which means that a set of programmable parameters and a method of controlling them must be generated. These are not trivial concerns. If a wonderful effect lacks the parameter that you most need to adjust, it may be virtually useless for you. Likewise, if the parameter is more or less there but requires abstruse and obtuse manipulation to adjust.

The degree and ease of control of a programmable signal processor is usually defined by a combination of size and cost factors, in addition to the manufacturer's interpretation of what type of control is necessary. The pressure to fit a processor into the min-

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imum amount of space and the costs of front panel hardware limits the number of controls and the size of display that can be included. This leaves the manufacturer a choice of giving less control or making a few controls do all the work, which increases the difficulty of using the device. The Alesis MIDiVerb and MicroVerb are two examples of the former approach: only a limited set of preset selections is available, no parameter control whatsoever; this is due both to cost/size considerations and to Alesis founder Keith Barr's belief that most users don't want, need, or understand how to use variable parameters. These units are inexpensive, quite small and have no display capabilities or controls other than those required for preset changing and input level. The Lexicon PCM70 or Eventide SP2016 take the latter approach: each offers a plethora of parameters that can be controlled, but only a few buttons and a knob (PCM70) or slider (SP2016) with which to control them, and a single line display to show what is going on. Even with the matrix organization of the PCM70's parameters and program and register memory, adjusting a given parameter involves repeated button punching to scroll through the laundry list of parameters. The Yamaha SPX90, perhaps the most popular of the current crop of programmable signal processors, offers only buttons for selecting and adjusting, but it has a two-line display. Awkward as they may sometimes be, these processors offer powerful control over their programs.

The other end of the spectrum is something like the AKG/Ursa Major ADR68K or the Lexicon 480L, which both have remote control heads offering access to a great many parameters through a number of sliders and buttons, plus a larger display than less expensive devices. Even with half a dozen sliders and a whole glob of buttons, it is still necessary for the manufacturer to set up a page structure on the remote head, which still amounts to scrolling to access a parameter, only with the significant improvement of being able to adjust several parameters at a time. The larger displays help, but they still are not capable of any sophisticated graphics, which would be helpful. There is a simple solution to all of these problems if users really want it: raise the price. Apparently, this is not what most users want.

### Multi-processing

Another very important development in digital signal processing has been the ability of an increasing number of processors to perform more than one function. No longer is a reverb

necessarily just a reverb, a delay just a delay, or a pitch shifter just a pitch shifter. Now, it is likely that the same digital might perform a host of time-based effects including reverb, delay, flanging, and chorusing, and possibly EQ, pitch shifting and special effects like vocoding, autopanning, sampling, and bizarre mangle transformations. Upscale machines like the SP2016, Lexicon 224XL and the Publison Infernal Machine 90 were the pioneers in this arena, but now the SPX90 and Roland DEP-5 are showing the same capabilities in *much* cheaper packages. Of course, you typically get what you pay for, and a less expensive machine is probably making greater compromises (especially in hardware) between the demands of the different programs that the device can execute. The architecture that performs delay and reverb well is not as well suited to pitch shifting or flanging, and so forth.

Just to add compliment to health (as opposed to adding insult to injury), concurrent processing is also blossoming. Concurrent processing is the ability of a device to execute two or more processing programs simultaneously. The 224XL's Split programs, which allowed each input to be treated with a completely different reverb or effect, or perhaps the Infernal Machine, were probably the first examples of concurrent processing. But now the Lexicon 200 and 480L, Eventide SP2016 (running Split programs from First Order Effects), Roland DEP-5, and Ibanez SDR1000 can all perform this task (as, of course, can the 224XL and the Infernal Machine). An important distinction exists between concurrent processing and true parallel processing. The 224XL, 200, SP2016, and SDR1000 all use clever tricks to make a single processor do double duty, whereas the Infernal Machine and the 480L actually contain multiple processing units which operate in parallel.

The ultimate extension of the multi-processing concept lies in the workstations which are being feverishly worked on in several places around the beach ball. None of these devices has become a reality yet: the SoundDroid project is down the tubes, Lexicon's Opus has yet to be delivered, rumored systems from SSL and Wave-Frame haven't been officially announced, etc. Nonetheless, it is only a matter of time until these big bundles of joy actually appear and, hopefully, proliferate. These guys will eventually be capable of performing just about every audio processing task in the digital domain: mixing, EQ, reverb, delay, compression and limiting, and more. If workstations do get popular, can we expect the price to nosedive

as it has in other programmable processors? Perhaps, but the difficulty of creating a system of processors that can pass data around like a bologna sandwich at an elementary school is many times greater than making a single box that does one or two things at a time out of a limited set of possibilities. Just as importantly, it is not yet clear how to give sufficient and intelligent control over mustard, lettuce and tomato without overwhelming the poor kid with more than he needs to deal with. At this early stage, conclusions cannot be drawn about workstations, other than that the situation is slower-paced, less violent, and, ultimately, more enriching than watching *Miami Vice* or *Wheel of Fortune*.

### Cost and Fidelity

Programmable digital signal processing began as a rather pricey proposition, starting at somewhere above \$7,000. An Alesis Microverb now retails for \$249. This is accomplished through the massive reductions in the cost of computer memory, analog-to-digital and digital-to-analog converter chips, and large scale integrated (LSI) digital signal processing chips (often semicustom, as in gate arrays), along with the aforementioned decisions concerning front panel features, and, of course, clever design. Although the Microverb represents the bottom of the cost spectrum, it is indicative of the current price/performance ratio. The SPX90 retails for more than three times the Microverb, but it performs many more functions. The PCM70 costs three times more than the SPX90 but offers even more features. There is no doubt that the incredible reductions in price for digital signal processing have caused it to become widespread—any musician can scrounge up a couple of hundred dollars. In fact, as newer generations, like the DEP-5, become available, the previous generation, such as the Roland SRV-2000, may drop in price. The SRV-2000, one of the first under \$1,500 processors to offer real power and fidelity, can now be found as low as \$500 brand new. This is known in the parlance as "a steal."

The downward spiral in the cost of programmable digital signal processors seems to favor the large Japanese companies that have the ability to create their own LSIs, and the low range (under-\$1,500) of these machines is dominated by entries from the likes of Roland and Yamaha. The two notable exceptions, at this point, are Alesis and ART, both American and both run by the remnants of the groundbreaking company that was known as MXR. It is not clear how long these

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companies can withstand the onslaught of companies with massive resources, but, for now, they're doing all right.

Obviously, price is not all there is to consider in one of these devices. With an audio device of any sort the acid test is in how it sounds. Here, too, however, great strides have been made. Early processors often used only 8 bits of A/D/A conversion, frequently with some kind of companding to extend the dynamic range and limited bandwidth to conserve memory and cover up high frequency funnies that show up with only 8-bit resolution. It is now commonplace for a programmable signal processor to offer a full linear 16 bits of resolution in its converters, and full bandwidth (at least 15 kHz), although lower-cost units still often offer only about 10 kHz of bandwidth. This is an important specification, but there are other variables to consider, as can be evidenced by comparing the sound of two units with 16-bit converters when performing a simple delay function. Since delay requires no mathematical processing of the signal, the difference in sound is in the analog circuitry and the converter design (in theory, at least). Analog circuit design is still important in

audio and will remain so as long as the world continues to be analog in nature. Converter design involves not only the A/D/A chips themselves but numerous other circuits, such as sample-and-holds, anti-aliasing and reconstruction filters, DAC output buffers, etc. These all contribute to the sound, as well as basic design considerations like grounding and layout. This stuff may have gotten inexpensive and easy to use, but there are still subtleties involved in making it, and each factor contributes to the sound.

As soon as any real DSP becomes involved, as in digital reverb and EQ, the design of the digital side of the processor comes into play. Internal math resolution is one important indicator of fidelity, but specifications can never be more than merely indicators, and there are numerous subtleties involved in hardware DSP design, too. The exact configuration of the hardware forms the limitations within which the software must be written. In a good DSP design, hardware and software are essentially designed together, but improvements in software must always contend with previously set hardware boundaries. Even given an excellent hardware implementation, there are still secrets of mathematical and psy-

choacoustics involved in DSP software design which can make huge differences in sound. Many early digital reverbs (and even a few current ones) have a metallic, ringy sound which is often due to poor software.

After ten years or so of DSP design, engineers have improved their algorithms and most units on the market sound at least "good," but change is still occurring in the concepts found in the software. One example of this is in the "early reflections" found in the 480L. In the first Lexicon reverbs, as in virtually every other reverb, the initial build up of the reverberant sound was realized with some number of discrete echoes meant to simulate primary and secondary reflections from room surface. One or more of these echoes were sometimes programmable by the user for delay time and level. It soon became apparent that this was a crude and not very authentic method, which often yielded poor results, notably clicks on percussive material. Some units, such as the SRV-2000, started to offer control over the character of the entire group of echoes, which was an improvement, but still often had the click problem. The number of "early reflections" was becoming a yardstick—a false yardstick—in the evaluation of digital reverbs, and, in many instances, these reflections weren't even desirable at all. In the 480L, Lexicon software ace David Griesinger changed the nature of the early reverberant sound build up. Instead of discrete echoes, there are now diffused groups of echoes, and instead of individual control over delay and level there are high level parameters that describe the behavior over time of these groups.

## **ANALOG SIGNAL PROCESSORS**

Didn't we say somewhere back there that the real world was still analog? So what has happened to analog processing in all this? Well, analog processing has not been standing still, but neither has it made the quantum leaps that have occurred in digital signal processing. The primary motivation for the development of programmable analog signal processors has been that some functions are still difficult and/or cost-prohibitive to do digitally. Although digital EQ is showing up more and more, it is usually packaged within some larger context, and often has some limitations when it is found in low cost devices. The situation is the same with digital mixing: it can be found, but either at a very high price or with limited capabilities. Thus, a market exists, at least for some period of time, for reasonably priced program-

mable analog signal processors.

But where are the programmable equalizers? There have been a few, including dbx's automated RTA/filter sets and two programmable graphics from Polyfusion and J.L. Cooper (neither of which is available anymore) and of course those that are contained in larger systems such as up-scale automated mixing consoles like SSL and Harrison. But programmable equalizers seem to have never caught on the way other programmable signal processors have. MIDI controlled programmable EQs have been announced by ART and ADA, but neither is shipping as of this writing. What's the problem here?

In order to implement programmable EQs, it is necessary to put some sort of gain control element into the resonant circuit that is an analog filter. VCAs have noise problems which are exacerbated in this type of circuit. Multiplying DACs can be used, but these have problems caused by the gain change being quantized into steps, and charge coupling, wherein the control voltage gets coupled into the audio. Thus, programmable EQ is not as easy as it seems.

What about other analog processing? Mixing is perhaps the most reasonable possibility. Programmable mixing is usually referred to as automation, and, up until recently, has been found solely in the domain of expensive studio consoles. Most of the time console automation consists of mutes and fader moves. In the last year or so, several systems providing this capability have appeared, usually under MIDI control. Among these are: J.L. Cooper's MIDIMute, the Akai MPX820, and the new Simmons SPM8:2. AHB has also been offering automated signal routing on a low-cost console for a few years now. The Akai X100 and the MegaMix are two systems that combine PC software packages with VCA boxes to achieve automation on existing consoles. (Of course, the Cooper and Simmons devices could also be used in this fashion if you bought enough of them.) So now console automation can be achieved, too.

One notable analog processing area that has not become programmable is dynamics processing (besides mixing and muting, of course), such as compression, limiting and gating. It seems that the question here is, why do it? Most processing of this sort is done on a case-by-case basis in a set-and-forget sort of way; what would be the point of programmability? Perhaps combining multiband EQ and multiple dynamics processors in one box might merit programmability, but there does not seem to be an over-

whelming demand for this or else we probably would have seen it by now.

## EXTERNAL CONTROL, AKA MIDI

Obviously. Of course. We knew this was coming all along. You can't read any of these darn magazines without this four letter "word" cropping up a million times. Well, if you're not interested you can skip this part. In fact, parents should consider sending impressionable children out of the room at this point. Okay, adults only now, right?

I'm not going to insult you by explaining again what MIDI is, but I will say that it is an event-oriented pro-

ocol devised by a consortium of five manufacturers as a means of allowing electronic musical instruments to communicate control information within a system. Since its inception, MIDI has found considerably more widely varied applications than were originally anticipated, a prime example being the control of programmable signal processors. To this date there have been three types of MIDI control found on devices like the ones we've been discussing: program changes, memory dumping and/or loading, and dynamic parameter control. Any processor offering MIDI control recognizes program change messages, and on most MIDI-controlled processors this



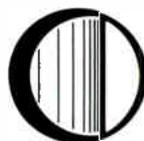
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is the extent of their implementation. As with synthesizers, the problem of mapping incoming program change numbers to desired memory locations exists, and an increasing number of processors include a mapping function which allows a one-to-one correspondence to be defined.

The next level of implementation is allowing the contents of the user memories to be transmitted or received via system exclusive messages. Oddly, this feature has not been widely implemented. Some units, such as the Yamaha SPX90 and the Roland SRV-2000 are capable of receiving system exclusive information but not transmitting it; in fact, there isn't even a MIDI out connector on these devices at all. If this isn't bizarre enough, consider that no hardware or software has yet been introduced to create these sysex messages (other than generalized MIDI data stream editors), so this feature is essentially useless. The original software release of the PCM70 provided dynamic parameter control, but not offloading of memories over MIDI. However, as MIDI control of signal processors proliferates, the ability to dump and load is increasingly incorporated. As with virtually all sysex information, data from one model will not be compatible with other models.

Finally, there is dynamic parameter control, probably the most powerful application of MIDI to signal processors—and the most difficult to implement. There are two primary difficulties in putting this capability into a processor. The first is determining what MIDI messages should be recognized for this purpose and how they should be interpreted, and the second is making the processor respond reasonably to dynamic control without an unacceptable level of glitching, crashing, and other naughty behavior. (Is there such a thing as an acceptable level of these things?) One approach that has been taken to the former problem is to once again use system exclusive messages. This does not always mean truly dynamic control, as in the SRV-2000, which will load the values and execute them, but not cleanly, and it also creates the previously mentioned difficulty of generating these messages. The SP2016

is an example of a device that was retrofitted with MIDI (which is always inferior to being designed with it) and uses a great deal of sysex to accomplish things.

The other approach is that pioneered in the PCM70, which incorporates a mapping function to link any controller message in MIDI to any program parameter. Up to ten parameters per setup can be accommodated, and positive or negative scaling can be applied to ensure appropriate amounts of change for a given MIDI input, (e.g. a large pitch bend, perhaps a fifth, on a synthesizer, may be applied to the PCM70 to cause a small change in delay times). ART has also taken this approach in their Performance MIDI software for the DR1. The great advantage of this scheme is that it relieves both the manufacturer and the user from contending with the issue of unique control codes; standard MIDI messages are received and interpretation is programmable.

This does not entirely eliminate difficulties for the manufacturer, however. In MIDI-controlled mixing it is not at all clear what type of message to use for fader movement and how to deal with discontinuities in the data stream. Each company making MIDI-controlled mixers has made its own decisions on this issue. Thus a sequence of MIDI messages recorded to control one mixer may do unpredictable things when played back into a different one.

The applications of MIDI control to these boxes are quite fun, however. The most obvious applications are to use these abilities in real time to coordinate processing changes with other changes. For example, a performer may link a chorusing program in a processor to a vocal sample in an instrument, such that when the vocal sample program is called, so is the chorus. Dynamic parameter control can be used in performance for phrasing and effects, and to alter a sound depending on what is played or how (e.g. delay feedback level may be controlled by velocity, or chorus rate by pitch). This writer has been developing methods for using MIDI control of processors as a house sound mixer, to orchestrate effects to a musical per-

formance. For processors that receive standard controller messages, parameter manipulations may be recorded into a sequencer, which can increase the complexity of a music or film mix while decreasing the difficulty of executing. With mixers, automation is now available very inexpensively (compared with traditional studio automation systems). The use of SMPTE time code to control MIDI devices adds another level of automation: synchronization to tape, either audio or video.

As you can see, the uses of MIDI in controlling signal processors are very broad, even with the stumbling blocks that still exist. In fact, this is almost virgin territory. The salient point is that neither signal processing capabilities such as are currently available, nor the control of such, has existed in any form before (aside from voltage-controlled synthesis functions such as VCAs and VCFs). This is truly a brave new world.

## A PRIME EXAMPLE

One recently announced product embodies virtually all of the concepts discussed in this article, and that is the Yamaha DMP7. The DMP7 is a "digital mixing processor." This means that it is capable of executing a variety of digital signal processing tasks, mixing being foremost. It offers "CD-quality" fidelity (16-bit conversion, 44.1 kHz sampling rate) and simultaneous mixing, parametric EQ (on every channel), limiting (on the stereo output bus), reverb and effects (via three onboard processors), and a full MIDI implementation, including dynamic parameter control. The user interface isn't ideal, but it does have an LCD and separate faders and panning for each channel. The signal is entirely in the digital domain from the time it enters the channel input until it goes out the mix buses. The price is so low (under \$4,000 retail) that several digital audio manufacturers were severely shaken at the product's introduction.

Only ten years ago, programmability was revolutionary; now it is commonplace. In conclusion, one can only try to absorb the perspective offered by Laurie Anderson: "These are the times, and this is the record of the times." ■

*Special thanks to Steve Hoge of Ensoniq and David Dunetz for providing valuable background information.*

*Larry O is a musician, sound engineer, electronics technician, and consultant, as well as a writer. His company, Toys in the Attic, is based in San Francisco and offers consulting services in the fields of MIDI, product documentation, and signal processing.*

# Rack Magic



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—FROM PAGE 20, CIRC

ples by descending coefficients, usually taken from a half cycle of a cosine waveform. The fade-out must begin prior to the bad data. This is accommodated by feeding the signal through a delay before the muting circuit. The mute signal thus arrives before the bad data. Following the bad data, a fade-in is accomplished similarly. Smooth mutes are surprisingly inaudible.

Following error correction and concealment, the left and right audio channels must be demultiplexed, and their respective samples joined together in the same sequence and at the same rate in which they were recorded.

Following this process, the audio data has been reconstituted to the player's best ability. After a quick trip through the D/A converters and low pass-filters, the signal is ready for amplification.

A measure for the overall correction performance is the number of interpolated sample values for a given BER (bit error rate) in a given time. The lower the interpolation rate for a given BER value, the better the random error correction quality of system. Alternatively, BLER (block error rate) measures blocks containing errors.

An assessment of system performance must also account for uncorrected errors that pass through the error correction circuitry. These errors may result in an audible click on the output. It should be noted that CD players are not created equal in terms of error protection. Any CD player's error correction ability is limited to the success of the strategy chosen to decode the CIRC code on the disc.

Finally, let's consider the performance of error correction systems. While the CIRC encoding used in the CD system is etched in stone (i.e. the Red Book), the method used to decode CIRC certainly is not. As Vries and Odaka have demonstrated, the choice of decoding greatly determines the success of correction.

In theory, CIRC detects and completely corrects burst errors of up to 4,000 bad bits, or a period of 1.9 milliseconds, or a physical defect 2.5 millimeters long. Interpolation can conceal errors of up to 12,300 bad bits, corresponding to a physical defect of 7.7 millimeters. Looked at in another way, after CIRC (in theory) the error rate is between  $10^{10}$  and  $10^{11}$ , or about one uncorrected error in every 10 or 100 billion bits (down considerably from  $10^5$  to  $10^6$ , or one error in every  $10^5$  to  $10^6$  bits before correction). In practice, for CDs that are in reasonably good shape, you might find one uncorrected error per disc, to be dealt

with by error concealment methods.

One variable in the outcome is the playback hardware itself. Specifically, the error correcting performance of different players is not alike. Depending on the CIRC decoding strategy used, the theoretical probability of an error occurring can vary from quite often to almost never.

Three different CIRC decoding strategies are shown in Fig. 3 and their random error correction performance is shown in Fig. 4. Although the simplest strategy, number 1, is satisfactory for most applications, clearly Strategy 3 is much better. In the example, other strategies were developed by cross-interchanging the C1 and C2 decoders of Strategies 2 and 3. Strategy (2, 3) uses the C1 decoder from Strategy 2 and the C2 decoder from Strategy 3. This illustrates the effect of different error conditions on the success of the correction strategy. For example, Strategy 3 is superior to Strategy 2 primarily because of its ability to correct two independent errors at the C1 decoder. Thus, for burst errors, Strategy 3's superiority could be drastically reduced. To complicate matters, it is difficult for designers to evaluate error correction performance prior to real use.

So, while CIRC and error correc-

tion topics aren't exactly simple, they aren't imponderable either. Moreover, like everything else in audio, their performance is a function of the care and expertise of those designing the circuitry. At least in that respect, digital audio is comfortably like analog.

Do you have industry or product information for Insider Audio? Send it in to Ken Pohlmann, University of Miami, PO Box 248165, Coral Gables, FL 33124. ■

Doi, "Error Correction for Digital Audio Recordings," *Digital Audio Collected Papers*, AES, 1983.

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Vries and Odaka, "The Error Correcting Code for the Compact Disc Digital Audio System," *Digital Audio Collected Papers*, AES, 1983.

*Ken Pohlmann is an Assistant Professor of Music and heads the Music Engineering Department at the University of Miami in Coral Gables. Author of Principles of Digital Audio and The Compact Disc Handbook, he works independently as an electronics and acoustics consultant, recording engineer, and technical writer.*

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## DVI: Digital Video Interactive

by Greg Riker

*RCA has leapfrogged over existing video technology with some exciting new video features that could revolutionize the way consumers think about their televisions.*

DVI was introduced at the second annual Microsoft CD-ROM conference, March 4, 1987. Its public debut occurred in a crowded session during the first morning of the conference. Preceded by mundane announcements trumpeting Lotus with yet another acquisition, the GE/RCA announcement stood out as the most significant event of the conference. Upon the conclusion of the DVI demo, the audience responded with a standing ovation.

For the last three years, RCA has been quietly working at the Sarnoff Labs in Princeton, New Jersey with image compression technology. Using the data transfer rate of a CD as a limiting guideline, they pursued reduced data requirements as a solution to the full motion, 30 frames per second video challenge.

Using VAX computers, individual frames of full motion video are compressed through a pyramid delta encoding scheme to a size of 5k. (The first frame of a new scene requires 15k.) Assuming broadcast television resolution of 24 bits per pixel (16 million discrete colors), a single uncompressed frame of 320 x 200 video would require 197k of RAM. Thus, 5k per frame represents compressed video data a mere 2.5% the original size.

A full motion video sequence covering the entire screen (actually, 256 x 240) requires nearly the full bandwidth of the CD. Therefore, a DVI disc could play nonstop full motion video for 72 minutes (not including audio). Presumably, 60 minutes of full motion video accompanied by reasonable quality audio would fill the disc nicely.

The display processors that perform these video miracles are called VDP1 and VDP2. Between them, they can

handle 8, 16 or 24 bpp displays. There is also a 12.5 MIPS (yes, *millions* of instructions per second) video processor that contains onboard RAM for custom microcode. A new program can be loaded within 120 microseconds (two scan lines). This is the processor that performs the real time decompression of the encoded graphic stream arriving from disc.

In a word, the demo was awesome. So what was wrong with it?

On an analog RGB monitor, the images looked somewhat fuzzy and washed out. However, on a regular home television, color saturation helped to fill in the pictures, and they looked fine. The highest resolution that can be supported at 30 frames per second is currently 256 x 240, somewhat less than regular NTSC television and certainly less than PAL requirements. Due to limitations of the compression technology, not all scenes encode equally well. Scenes that encode easily are simple scenes that have a static background or a smoothly scrolling background, with simple large objects moving in the foreground. Scenes that will not encode nicely have lots of unrelated movement within the frame. In other words, you couldn't take arbitrary program content from the vaults and successfully transfer it to DVI.

One demo called *Palenque* showed a prototype adventure/exploration game set at an ancient Mexican temple. As you roam the ruins in this game, a bar across the bottom of the screen shows the actions that can be taken in that area. (The film was shot with one frame per human step, shooting both the front and rear views simultaneously.) Moving the joystick forward and backward causes the appropriate motion through the scenery. The impact of the reduced scenery is quite pleasant—it left me with a feeling reminiscent of the MIT work, *Aspen*. At certain nodes, a pair of eyes shows up at the bottom of the screen, indicating that a panoramic view is available. At these nodes, the joystick moves your point of view up and down throughout a smooth, 360-degree arc. The feeling is one of a remote control power periscope—nothing was hidden from you.

These panoramic views were created using a camera with a 220-degree fisheye lens shooting from the ground, aimed straight up at the sky. Using a

"warp algorithm" developed by RCA, the digitized image of the entire scene is reconstructed to yield a normal view in real time with no visual distortion. It was spectacular.

The audio section of this chip set is equally impressive. Using ADPCM techniques, variable bandwidth and dynamic ranges are achievable. Based upon recent CD-I demos of reduced bandwidth audio, there's no doubt that high fidelity audio can be sustained with bandwidths of 10% to 25% of the available disc bandwidth.

The demos of DVI were done on IBM ATs equipped with a special DVI video board. OEMs, VARs and content providers were all invited to tell RCA what to do with these chips. RCA stressed the fact that they do not wish to introduce a competing technology or a new standard. Instead, they seek to work with the cooperation of the industry to find a suitable way to bring this technology to market.

So what does it all mean? RCA has created an incredibly powerful set of video display processors which can perform stunning visual effects in real time. They have invented compression algorithms that, in conjunction with the chip set, approach full motion video for arbitrary content. They have developed software that enables someone to vicariously take in a sweeping panoramic view of sites they may never see in person. In short, they have leapfrogged over existing video technology with some exciting new features that could revolutionize the way consumers think about their television sets.

In order for this technology to reach the consumer market in a big way, it will be necessary for RCA to work in cooperation with other major consumer electronics companies. As presented, DVI is a technology, not an architecture. In other words, RCA has not attempted to standardize any aspect of how these chips might be used in consumer electronics products.

Philips and Sony have invested heavily in creating an architecture and a format standard for CD-I. It would be exciting to see the architects of the CD-I standards work with RCA to integrate DVI technology into the CD-I specification. This could occur as an approved extension of the existing spec, or by reworking the video portion of the spec. We hope that this is the course of action that occurs. ■

*Greg Riker is director of CD-I development at Electronic Arts, a leading publisher of home computer software. Before joining Electronic Arts, Riker spent ten years in the music industry as a professional recording engineer.*

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# STUDIO MAINTENANCE

Technological changes have kept maintenance departments busy with learning and acclimating to changing work methods.

by Greg Hanks

"Any sufficiently advanced technology is indistinguishable from magic."  
— Arthur C. Clarke

Over the past two years I have been railing in this publication and others about many of the different technical aspects involved in the operation of a professional audio facility. With 20-20 hindsight, I see that we have never addressed the fundamental issues.

This business of ours has been changing radically over the years. In earlier times, the recording studio was a hand-crafted facility where the equipment was either built by, or custom constructed for the studio owner. In those halcyon days it was assumed that either the studio owner or someone on the staff was capable of electronic design and repair. The expertise of these individuals would often determine the viability of the studio operation. There were no "off-the-shelf" consoles; outboard equipment consisted of limiters, compressors, equalizers and echo devices. Multi-track tape recorders were as much "production prototypes" as they were mature products. Because of the small number of studios in existence, everybody knew everyone else, and technical information on the "what to do if" and "how do

I?" situations was traded as inside gossip. The "maintenance man" was responsible for the construction, installation, and servicing of all of the equipment used in a studio. When a microphone cable was needed, it was built in the "shop." Before a session, all the machines would require alignment. It was necessary to stock sufficient spare parts to repair anything that might break, for a ready replacement device was not to be found. Audio dealerships were rare and the inventory meager. Equipment rental was something that a studio would do with spare inventory.

Well, things are a little different now, eh? The demand for recording services has grown tremendously, and the number of studios has exponentially increased. The demand for readily available, mass produced equipment has flourished. In the beginning \$100,000 was a large budget for constructing and equipping a control room/studio. These days, a million-plus creates the same status facility. The growth and health of the recording business has made magazines like this possible, and some fundamental changes in the mentality of the equipment suppliers and studio owners were necessary to accommodate that growth.

The modern studio owner is much more of a businessman than in the past, because the burgeoning expansion of facilities has made competition fierce. Technological change has

kept the maintenance department busy with learning and acclimating to changing work methods. Synchronization, automation, sequencers, synthesizers, control tracks, machine controllers, edit decision lists and the like have kept the technically inclined more in an instructional and advisory position than the previous repair technician role. The integration of LSI, automatic insertion equipment, and "Bed O'Nails" testing stations has made the equipment we use much more reliable than their ancestors and they are also more difficult to repair at a component level. The world at large has experienced the same maturation of technology as the recording industry. Capable repair of "high-tech" electronics is becoming increasingly more difficult to obtain, and concurrently the costs are increasing. We are approaching an age of disposable assemblies, where repair consists of replacing modules of relatively modest expense. Herein lies the crux of this article.

Furor is brewing! Disagreement is fermenting in the minds of my readers. I can see it already: "What do you mean, it has become more reliable? It doesn't do what it's supposed to, or what I need." The equipment of today does perform more reliably than in the past, it's relatively less expensive (for moderately featured models) and in general, it sounds better. These points are partially responsible for the proliferation of the home studio. Current studio competition is based upon hourly rate, equipment selection, outboard equipment on hand and the features that the control room can offer. Equipment is expected to operate within specification and to perform the operations for which it was purchased. In a previous era the specifications of most manufacturers were not good enough, so a studio would perform extensive testing and modification of each piece of gear to optimize its sonic purity and electronic interface with the facility. The necessity of modifying the offerings of today are mandated by the situation where the function(s) required are not met by the initial product design. These modifications are *not* repairs.

Today's modern recording facility is a veritable cornucopia of control surfaces comprising a hierarchal command structure, with a variety of syntax and protocol. With the infusion of MIDI controlled synthesizers running via sequencer, controlled by SMPTE time code that is accompanying picture, we have a much greater chance of operator error. In the past, the trouble-shooting of a session problem was dominated by looking for the pressed

—CONTINUED ON PAGE 61

# At last the twain have met.



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solo button, the hidden mute or the wrong operating mode. The same process is involved in the trouble-shooting of today, with the addition of verification of the correct command sequences, switch settings, and the integrity of the data tracks. When a problem was isolated in the past it was patched around until the session broke to afford an opportunity for repair of the offending item(s). These repairs were usually effected by the studio staff using parts from the shop.

This is still the case in some situations today, but those instances are the exception. The economics of studio operation have mandated cutting back on large staffs, and the dearth of qualified personnel at a reasonable salary level has made it difficult to justify the outlay required to keep a maintenance staff. With the main product of the business being the utilization of high technology, things go wrong. Headphones break and mic cables open up and there is an ever present need for another adapter. There are those situations where primary equipment malfunctions, and technical capability is required. Every studio minimally requires the presence of at least one person who is familiar with the operation of all of the equipment required on a session. It is also essential that there be personnel available that can handle a soldering iron and a screwdriver. It is not necessary that this be the same person who can figure out how the edit controller interfaces to the VCR. The combination of these two functions is the job description of the modern day studio maintenance man.

All of this must seem quite pedestrian to many of you, but it forms the basis of the manpower decisions required in staffing the operation. With the knowledge of how the equipment in use is supposed to function it is possible to ascertain whether or not a piece of equipment is malfunctioning, and if it is broken, how we repair it.

There are some preliminary steps that should be taken before we go for help. Is the unit correctly plugged in? Are the controls set correctly? Is the fuse blown? Does it pass audio? What is the specific patch setup so we can duplicate the problem? If we have another unit of the same type, does it do the same thing in the same setup? Common sense (which seems to be in great demand these days) is the first tool in solving a problem. Most of you will perform these steps as an instinctive reaction in a session situation.

Once it has been determined that "The damned thing broke!" there are five primary paths of pursuit possible:

- 1) Fix it yourself

- 2) Have a staff person perform the repair
- 3) Contact the dealer that the unit was purchased from to correct the difficulty
- 4) Have the manufacturer execute the repair
- 5) Contact a service agency that will perform the task

The choice will be determined by your circumstances, such as whether or not the unit is still under warranty

*In the beginning, \$100,000 was a large budget for constructing and equipping a control room/studio. These days, a million-plus creates the same status facility.*

or if you bought it via mail order. But the equipment still has to be repaired. A large portion of the equipment in the facility is not easily shipped and service on it must be done on site. In order for service to be efficiently performed "on location" there are a number of things that the facility should provide. These include:

- 1) All documentation pertinent to the equipment. The owner's manual and/or the service manual will often suffice.

- 2) A complete selection of "user serviceable" spare parts that apply to the gear. Fuses are an example of this. The main source(s) or service that you employ will determine what is your most effective spare parts inventory level. If you rely primarily on in-house labor, such as you or your staff, then it is cost effective to keep a greater depth of module level spares. We will ex-

plore this aspect in greater depth a little later. (For a more detailed analysis of parts that should be kept on hand, see the February '86 *Mix* "Budgeting for the Cost of Maintenance" article.)

- 3) Rudimentary test equipment. Who performs the repair, and how well equipped they are will determine what is required in this department. Most manufacturers and dealership service facilities prefer to travel light, and this means more responsive service if they know that they don't have to carry a scope and VTVM.

- 4) Essential hand tools. In order to perform even the most basic examination on your equipment you will require a complement of screw drivers, wrenches and pliers. In order to repair the headphones and mic cables discussed earlier you will need a soldering iron and solder. (For an in-depth discussion of tools and test equipment please refer to the October '85 *Mix* "A Guide to Cost-Effective Tools and Techniques" article.)

The technical requirements of a studio do not just involve repairs but also include equipment installation, facility modification and custom construction. Functionally, repair can be divided into different classes, such as:

A. Minor repairs. Headphones, mic cables, lamp replacement, routine machine alignment, driver replacement, simple equipment relocation and the like fall into this category. This encompasses the bulk of the technical work in a studio. It is best handled by someone on staff, and major academic accomplishment is *not* a prerequisite.

B. Major repairs. Breakdown of equipment that requires the replacement of internal components, tape machine mechanical alignment and resetting of system gain structure all fall into this category. A knowledge of electronics, mechanics, physics, familiarity with the equipment and a logical mind are required for this type of task to be accomplished competently. For work of this type to be successfully performed in-house, a substantial investment must be made in tools, test equipment, module assemblies and component level spares.

C. Major design inadequacies. When a piece of equipment does not perform a function satisfactorily it is time to call in either the dealer, the manufacturer or a specialist on that piece of equipment. All of the abilities described above are needed, as well as an intimate knowledge of the particulars of the machine in question. The ability to understand and change the fundamental design of the gear in question is also desirable.

The performance of the technical tasks required by your studio should

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be a team effort. It is beyond the capabilities of all but the richest of firms to be able to employ all of the specialists needed to optimally care for the facility. In times of dire need, the manufacturers are most eager to assist you with information and parts. You should avail yourself of this help, for a telephone call to the technical support department can often help lead you to the defective sub-assembly. The ability of the manufacturer to provide you with replacement assemblies "overnight" can reduce the need for expensive spare parts. Most dealerships are required by the manufacturer to provide warranty service on what they sell. Why should you pay your people to fix something that you just bought?

Studios have other needs too, such as major repairs, facility expansion, equipment modification and the like. How do we cope with them? This depends upon a number of factors, like how many rooms you have, what type of manpower is available in your local area and how much that manpower costs. The budget decision to create a technical staff should include cost considerations other than just salary. The type and quantity of tools and test equipment that you must maintain for your staff to effectively accomplish their job(s) can be much more expensive than if you rely on outside sources of labor. With a technical staff, component level repair should be expected if you are going to get your money's worth. This means that you will have to purchase resistors, capacitors, transistors, analog and logic ICs, and many other miscellaneous parts and bits of hardware. An outside service vendor should provide both tools and parts in addition to the technical ability that is the foundation of its rate. This is an important consideration when weighing the financial impact of technical staff.

If you are having repetitive failures, or you seem to be having trouble with many different things concurrently, it may be wise to consult with an outside service organization. Experts may be hired by the hour, by the day or by the job to help you correct a problem or offer suggestions and solutions to your situation. Even a well staffed recording studio can and should profit from the talent that is available in this manner. But it is my contention that if the studio staff is not overworked, then you have too many people on staff! ■

*Greg Hanks, formerly chief engineer at Wally Heider Recording (L.A. and SF) and technical director of Audio-techniques, now heads New York Technical Support, the service company for the New York area.*

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PHOTO BROOKE COMER

## ELLIOTT RANDALL'S *Recording Ranch*

by Brooke Comer

Engineer Larry Collen calls it Randall's Rasta Recording Ranch. Randall's friends call it Elliott's Studio. And for all his landlord knows, it's still a dining room. Call it what you will, Elliott Randall's home studio is a laboratory, where his work as a guitarist, composer, film scorer, engineer and producer transpires. It's no surprise that the first-call session guitarist and

honorary member of Steely Dan is utilizing guitar synthesis to innovate new sounds. It's more surprising that his studio evolved only two years ago. Actually, Randall's interest in a home setup preceeded the availability of affordable technology. The Rasta Ranch is his second stab at home studioship, a prior room having failed in the affordability category. But Akai's MG1212 is proof positive that where there's a will, there's a console—that won't put you into hock.

Long before he dropped out of New York's High School of Music & Art, Randall had cut enough classes to justify his departure. He had nothing against school; it was simply hard to get up in the morning after jamming with Jimi Hendrix until four a.m. Besides, it's debatable whether the 16-year-old's days were more profitably spent in geometry class or earning \$50 an hour session scale doing record dates. "I worked at RCA Studios a lot then, and even though they only

### Partial Listing of Elliott Randall's Studio Gear

- Akai MG1214 console/12-track recorder
- Ross SMC803 10-channel auxiliary mixer for FX returns
- Otari MX5050 2-track
- Toa 312ME 3-way monitors
- Toa P300D power amps
- Visonik David 6000 w/subwoofer (alternate monitors)
- Lexicon PCM60 digital reverb
- Eventide SP2016 signal processor
- Korg SDD2000 sampling digital delay line
- Roland RE501 tape echo/chorus
- Yamaha GC2020 compressor/limiters
- Roland SEQ331 graphic equalizer
- Roland SPV355 pitch to voltage synthesizer
- Yamaha DX7 synth
- Casio CZ-101 synth
- Roland GR700 guitar synth (modified by TTL)
- Akai S900 sampler
- Korg EX8000 synth
- Korg EX800 synth
- Korg DVP1 digital voice processor
- Korg Mono/Poly synth
- Korg DDD-1 digital drum machine
- 360 Systems MIDIbass
- Microphones: Shure, Sennheiser, Sony, E-V
- Amps: Fender, Marshall, Gallien-Kruger, Rockman
- Whirlwind DI boxes
- Bob Ward custom MIDI routing system



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had a 4-track, the more I saw of studio technology, the more I wanted to get involved," he recalls. Despite the appeal of engineering, his desire to emulate rock star idols like Duane Eddy and The Ventures kept Randall on the studio side of the glass.

At about the same time that Elliott Scheiner and Jay Messina were learning the ropes, assisting at New York's Record Plant and A&R Studios respectively, Randall was hot on the session scene. As a friend of both young engineers, he got access to their studios at night to cut experimental tracks. "I knew then that engineering was what I really wanted to do," he explains. Being on hand as boards jumped from 4- to 8- to 16- and 24-tracks was an inspiration too. "In 4-track, you'd cut an entire band on three tracks, and bounce over to the fourth, then start again with the three and keep bouncing." Experimenting with even more tracks to bounce from made the technology even more fun for Randall. "I thought, 'this is what I really like,'" he recalls.

Randall made a few jumps in his efforts to get more involved in the technical side of music making. As a staff producer/musician for Musicor Records, he discovered Tim Wittsett and the Imperial Showband in Jackson, Mississippi, and launched his



PHOTO: BROOKE COMER

*Elliot working out some DX7 tracks at his home studio.*

production career. "While I worked in Jackson's Malaco Studios (which then had a sign on the front door that read "Malaco Studios also Red Worms"), on a dinky 4-track with a terrific sound, I knew that a big chunk of my life would be spent in a studio." He had yet to find out that a big chunk of studio would cause him to spend a lot of time working his way out of debt.

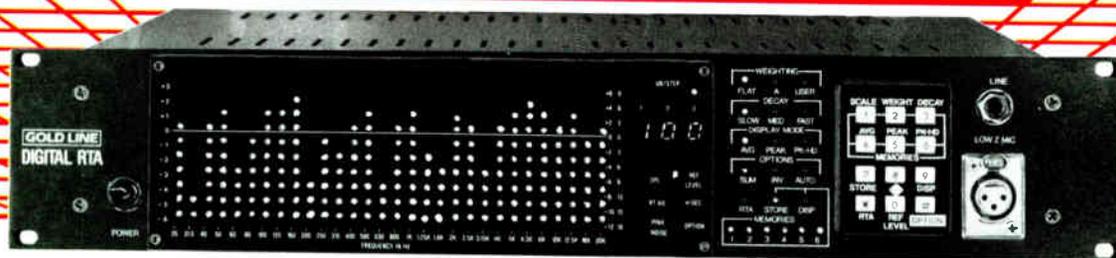
His success with Steely Dan gave

Randall a new surge of confidence. "I wanted to engineer, and since hands-on experience is the only way to learn, I decided I'd have my own studio. I thought, 'wouldn't it be great to have a console the size of a coffee table?'" While Randall was consulting for *Saturday Night Live*, Regent Sound's Bob Liftin asked him if he knew anybody who wanted to buy Studio B's Studer 16 x 8 console and an Ampex MM 1000 16-track tape recorder. Randall bought Studio B, lock, stock and noise-gates. "Bob told me I was crazy, that this equipment wasn't a toy. He pointed out that I didn't know how to run a studio and the maintenance alone would cost a fortune each week. But I ignored his advice."

Studer's console was a lot bigger than a coffee table, but Randall bravely squeezed it into his living room, and turned a bedroom into the studio area. "The idea was terrific," he reflects, "but the cost of all the equipment in addition to the console and recorder, the multi-tracks, limiters and compressors, ultimately came to the tune of a hefty six figures." To pay for the room, he had to book out his workspace. When rental companies came knocking at the door at 8 a.m. to deliver the Fender Rhodes for someone's session that day, Randall's wonderful idea began to turn into a nightmare.

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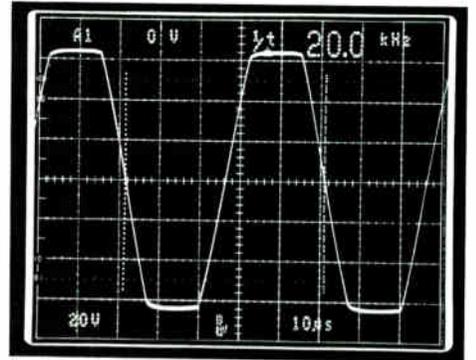
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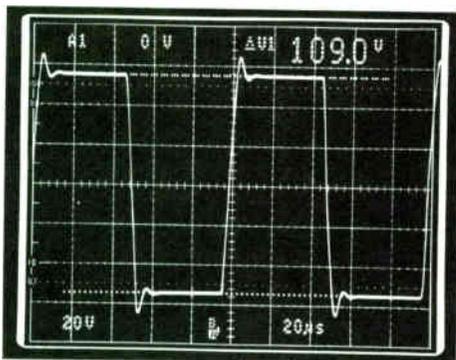
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"It was great being able to experiment, but I had such a miserable time making payments and accommodating clients that I finally had to get rid of everything and wound up taking a real bath," he says. Faced with the choice of personal bankruptcy or paying off debts for years, Randall chose the latter. "I was bitter for a long time," he recalls, "because even though I was making a lot of money, it all went to pay off the mistake I'd made. It felt bad."

After a year-and-a-half in Los Angeles playing and producing, he moved into a new phase back in the Big Apple. "I made index cards of every client I'd ever worked for, and worked feverishly for a year to get back into the New York recording mainstream. I wore a jacket and tie, to let people know I was serious, and on the ball," he notes. The trick worked, building up Randall's client roster until it was even stronger than before.

By the early '80s, technology finally caught up with Randall's dream. At a NAMM show, he found an Akai MG-1212 (he's since upgraded to a 1214) that really was the size of a coffee table. "With a full 12-track recorder, and two extra tracks, you could record SMPTE or sync pulse and have all sorts of options that weren't available for less than a fortune," he notes. And because Akai was as interested in dealing with Randall as he was in endorsing them, he struck an endorsement deal that initiated the Ranch.

Fortunately for Randall, his old apartment building on Manhattan's upper west side is so well constructed, with thick walls and high ceilings, that he didn't have to treat the 18-foot by 24-foot room in any way. "We didn't have to float anything," he says. "You can't even hear what's going on in the room next door." (That's good news, because Randall's across-the-wall neighbor has a home studio as well. The two are patched together.) Even the installation was easy: "everything fit into the passenger elevator, so the doorman didn't even complain."

At first, Randall thought he'd put his work area to cost-effective use by bringing in a limited clientele, "but using the studio to seduce my jingle clients wasn't much fun," he says. "The place wasn't designed to be a production room for somebody else's jingles. I wanted it to be a laboratory." Of course, Randall's been faced with the age-old dilemma of all studio owners, the inevitable requests from friends to utilize the space. As a result, he's gained another valuable learning experience: "I've learned to say no. There are some people I'd let in anytime, friends who have respect for the place. But I've had to be clear with people as

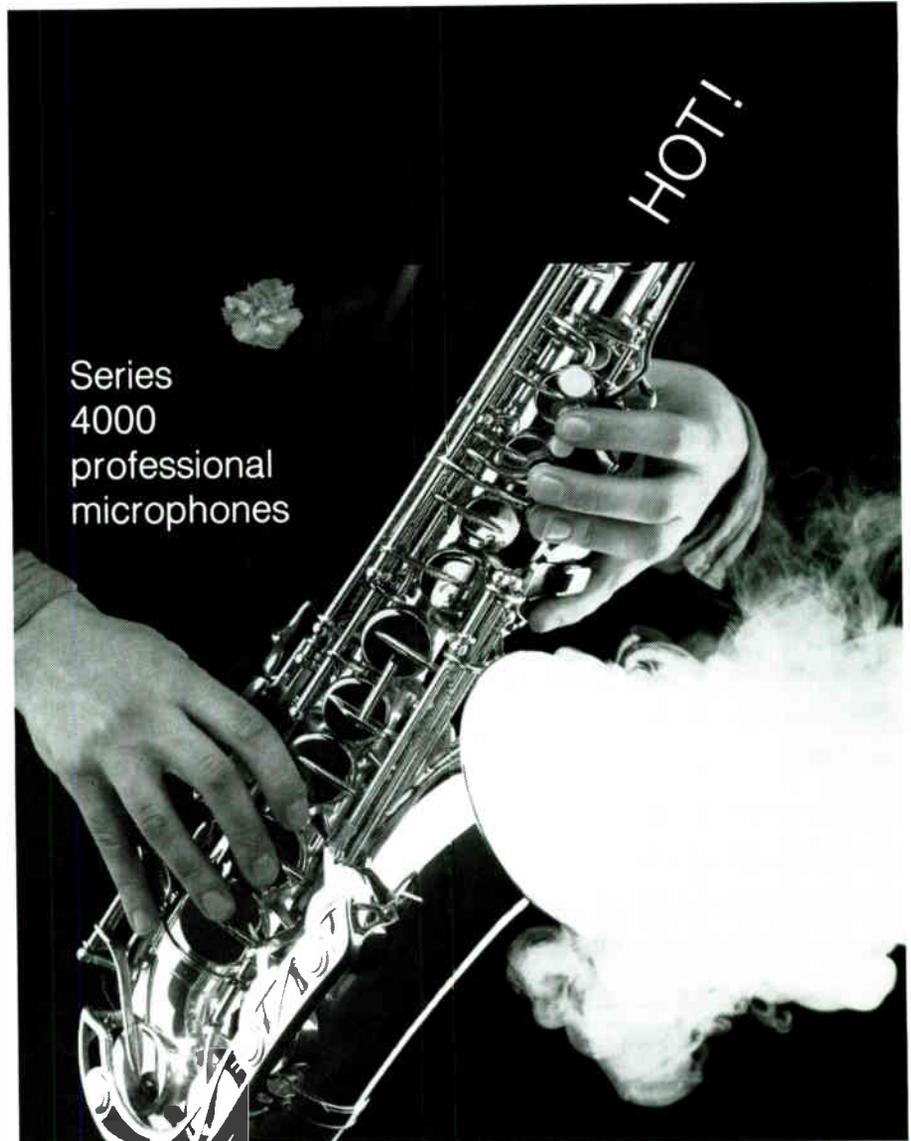
far as that's concerned."

One of his friends, Jeff Baxter (also a Steely Dan vet) even owns an identical home studio. Though Randall and Baxter live 3,000 miles apart, they frequently collaborate on various projects. "We have two different ways of sharing our overdubs," he explains. "Either we can run data using the phone lines, or we can send each other the Akai 1214 tapes via Federal Express." And when the two finally begin an album project they've been planning, no one will have to leave home.

Even though the availability of Randall's Ranch is extremely seductive, he's actually considering a move to an outside studio. "I think there's a real difference—not better or worse—in work-

ing outside your home," says Randall, "as opposed to falling out of bed and going two rooms down to turn on the equipment. Working is such an integral part of not just my life but the space in which I spend so much of my life, that even if it means getting into a train and going downtown, I think I'd like to experience more of the outdoors." ■

*Brooke Comer received her Master's degree from New York University and her bachelor's from UC Berkeley. She is involved in graphic arts and film making, and enjoys hanging out with people who have their own recording studios.*



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# P R E V I E W



## Westlake BBSM-15 Reference Monitors

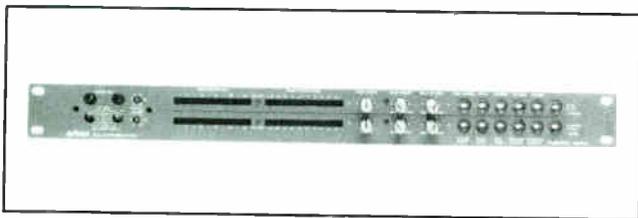
A high-power handling, free-standing or soffitted, single amplifier reference monitor system has been developed by Westlake Audio (Newbury Park, CA). The BBSM-15 is the first in its series to use a horn-loaded, high frequency device incorporating the result of extensive engineering of new horn geometry, according to Westlake. The BBSM-15 reproduces high sound pressure levels while maintaining exceptional phase coherency, low IM distortion, and excellent dispersion characteristics.

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## Opcode Cue Film Music System

Opcode Systems (Palo Alto, CA) announces CUE, a film music system and database for sound cues. Designed for use on a Macintosh computer, CUE stores times (in all professional standards), calculates lengths of cues, finds appropriate cue tempos for "hits," prints out cue sheets and prints out music paper with meter changes, tempos, and the cue reference shown on a click track above the music staves. CUE works with bars and beats, SMPTE time code, feet and frames, and frames per beat, and can translate between them. Also included are a master cue sheet, a performing rights cue sheet, an audio click track from the Mac, and a "free timing" window for simulating "streamers and punches."

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## Orban 464A Co-Operator

Orban Associates (San Francisco) announces the Model 464A Co-Operator, a stereo gated leveler/compressor/HF limiter/peak clipper. It automatically rides gain, controls

excessive high-frequency levels (with selectable pre-emphasis), and effectively limits peaks. Intended for use on single instrumental tracks, voice or mixed program material, Orban says the 464A is ideal for protecting recording tape, broadcast cart machines, microwave links, FM SCAs, cassette masters and sound systems. The one-rack unit is switchable for stereo-tracking or independent dual-channel operation. Two LED bargraphs in each channel display gain reduction (25 dB range) and peak output level. Price is \$959.

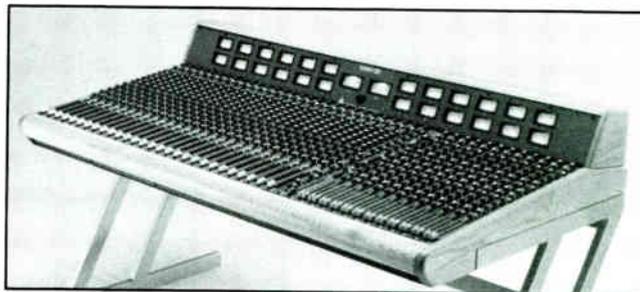
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## Tascam Porta Two

Tascam (Montebello, CA) presents the Porta Two portable studio, offering six mixer channels, 4-channel recording, stereo effects and sync functions. The compact system is compatible with high-level signals from drum machines and synthesizers, providing a trim control at each channel input. The tape sync feature has a separate input, output, and level control. An insert feature on channels 1 and 2 places stereo effects on specific channels. The recorder offers a pro-quality tape transport, dbx NR, and pitch control, along with zero return and analog tape counter. The Porta Two is battery-powered and optional accessories include an AC adapter and a foot pedal for remote punch-ins.

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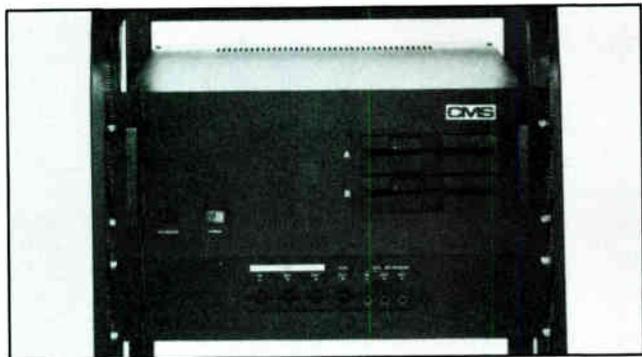


## Trident 24 Recording Console

Trident Audio USA (Los Angeles) announces the Trident 24 Multi-track Recording Console, available in 28- and 36-input frames with 24 output buses and 24-track monitoring and metering. The Trident 24 features separate mic and line inputs with phase reversal, 4-band EQ with vari-

able high-pass filter, eight auxiliary sends, auto muting, solo in place, monitor fader reverse, direct outputs and four echo returns. The 28-input model lists at \$16,900; the 36-input is \$19,900.

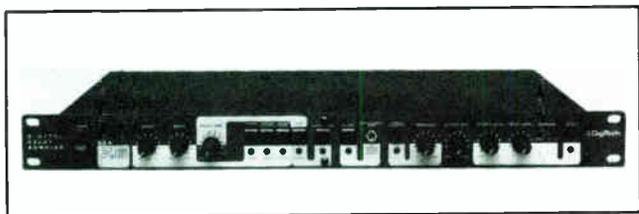
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## CMS Visual Sequencing System

Computer Music Systems (Walnut, CA) presents its IBM-compatible rack mount Visual Sequencing System (VSS). The expandable, programmable "turn-key" VSS includes a Roland-compatible MIDI interface with one input, four outputs, tape in and out, and metronome out. All contained in a four-space 19-inch rack enclosure, the system is designed around an 8 MHz turbo motherboard with 640K of RAM, Hercules-compatible hi-res graphics card, TTL amber monitor, printer port, and two 360K floppy drives. The CMS-VSS runs all IBM-compatible software, as well as a complete line of popular music programs and other options available through CMS. The suggested list price is \$1,299.

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## DigiTech RDS 7.6 Delay/Sampler

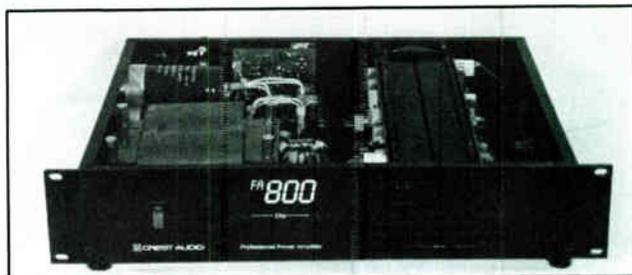
DigiTech (Salt Lake City, UT) debuts a new musical digital delay and sampler with extended delay/sample time of up to 7.6 seconds. The RDS 7.6 digitally records sounds, with delay features such as modulation controls to allow such musical effects as chorusing, flanging, phasing, doubling, echoes, and infinite repeat. Features include soft-touch buttons, input level selection switch, and precise feedback control scheme. The unit's S/N ratio is better than 85 dB, with a 20 to 15k Hz ( $\pm 1$  dB) bandwidth. Suggested retail price is \$379.95.

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## Polyline Half-inch Tape Reel

Polyline Corp (Des Plaines, IL) introduces a professional quality, 10½-inch reel with a 3-inch NAB center for use with half-inch tape. Manufactured of semi-transparent "smoky" brown plastic, the reel may be ordered with or without a hinged white box. The new reel augments Polyline's complete line of professional sound recording and duplicating supplies.

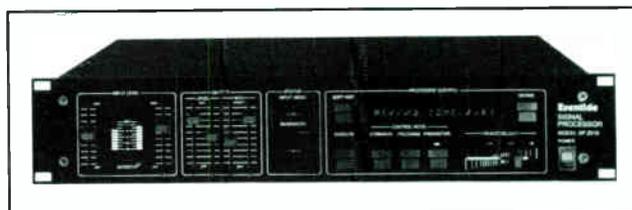
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## Crest FA800 Power Amp

Crest Audio (Hawthorne, NJ) introduces the FA800 professional power amplifier. Rated at 240 watts per channel into eight ohms, or 400 watts per channel into four ohms, the FA800 occupies two rack spaces. It features back-to-front cooling, completely modular construction, full-load protection, and active balanced inputs. The suggested retail price is \$792.

Circle #050 on Reader Service Card



## Eventide SP2016 Update

Eventide (Little Ferry, NJ) has developed a new MIDI interface board for their SP2016 effects processor/reverb, putting program selection and parameter control under MIDI command. The new board (available on new units or as a retrofit) increases the SP2016's ROM program storage capacity by relocating those ROMs, freeing the sockets for additional ROM programs. In related news, a NYC-based company, First Order Effects, has introduced several new effects ROMs for the SP2016.

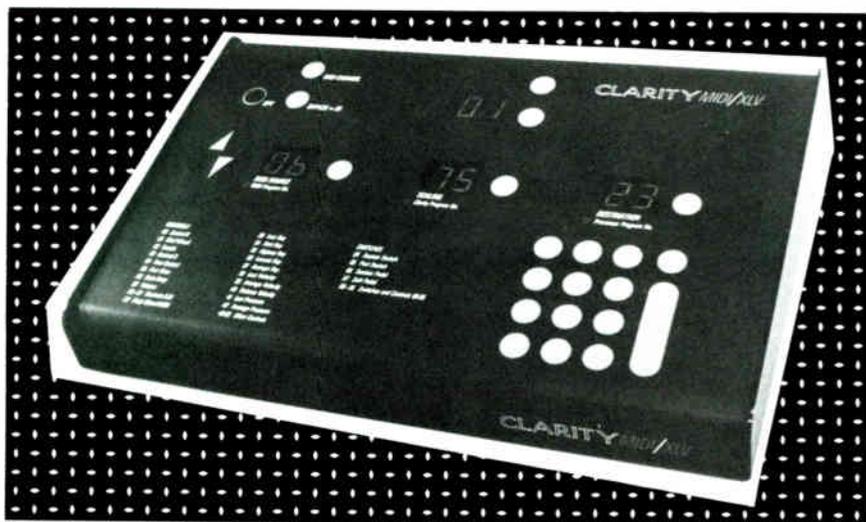
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## Klark-Teknik PMC402 Mixer

The Klark-Teknik Electronics (Farmingdale, NY) portable PMC402 film/ENG mixer, features four inputs and two A/B outputs (all balanced). Each input channel incorporates a signal limiter, -20dB pad, high-pass filter, and a pan pot. Mic powering is available with 12V or 48V phantom and DIN A-B. Battery power provides about eight hours of operation. Direct connection to a Nagra is possible, and a separate mains supply is available. Suggested retail price is \$1,900.

Circle #052 on Reader Service Card



## The Clarity MIDI/XLV Controller

*The XLV provides the Lexicon 224XL with MIDI control of any reverb parameter, the ability to change programs altogether, and even gives you LARC fader automation within a program.*

by Oliver Masciarotte

Using MIDI to ease the workload of pre-production and real time performance has become commonplace. Third party vendors have started to market products that enhance and augment existing devices. One such product is Clarity MIDI/XLV, a MIDI interface/controller for the Lexicon 224XL and devices employing control voltage inputs.

Most installations of MIDI'd equipment have the signal processors sitting there burbling quietly to themselves, since not everyone has the deep pockets or foresight to have purchased MIDI-controlled outboard gear. Fear not, brave soul, for the Clarity MIDI/XLV (XLV for short) allows you to take that 224XL or ARP 2600 and make it do tricks along with the rest of the MIDI stuff. The XLV provides the 224 with MIDI control of any reverb parameter, the ability to change programs altogether, and even gives you LARC fader automation within a program! A great feature for a large spread of equipment is the LARC MIDI output, which allows the LARC faders to be used as remote controllers for any MIDI device. For that spontaneous massaging of the mix, the LARC always remains on-line and one button bypass at the XLV returns you to manual control. Since Lexicon has designed their 480XL to also utilize the LARC control

head, the XLV will work nicely with the 480XL though the 224, lacking a factory MIDI interface, is the standard partner for the XLV.

Included in shipping is a plastic laminated "quick reference chart" that makes the operation of the XLV an easy exercise in pushing buttons. Membrane switches are used for all buttons on the XLV so, like the reference chart, the XLV is basically immune to coffee spills and dirt. The front panel has clearly marked function buttons, ten in all. Included is a "Q" button that allows you to escape from your current situation, a feature lacking on some very expensive boxes. Also, there's a numeric keypad with  $\pm$  and "enter" keys for data entry, increment/decrement keys, and a list of MIDI controls ("pitch wheel MSB, last pressure") and switches printed right on the front panel for quick reference. To keep track of everything, there are four 2-digit displays that are dedicated to particular functions; these are seven-segment LED displays and are the voice of the XLV. That is, they tell you such things as the current MIDI channel for sending or receiving, MIDI source and destination, the current XLV program or "patch" to be used or edited, and whether or not you are in bypass or "special function" mode.

As you may have guessed, the XLV has several operating modes, five in all. They are the "program" mode, the "patch" mode, the "alternate" mode, the "CPT" mode, and the dreaded "special function" mode. The "special function" mode is for moving or clearing program memory, so it should be used with care. In the "program" mode, the user defines which of the 99 programs is the current one, either for editing or controlling. In the XLV are 16 presets in ROM, and space for 83 user programs. A program is made up of a number of patches which are user-defined soft connections consisting of a MIDI source whose data is modified by a scaling factor, sending to a destination where the data is to be received. There are up to 32 patches per program. In "patch" mode, all four displays are used to verify or modify a patch. The scaling factor inside a patch allows for attenuation, inversion, or muting of MIDI data from the selected source controller. There are also four special scaling factors available: a trigger output, keyboard re-scaling to convert data from a 60-key keyboard

to a full 0 to 127 range, and full scale log or anti-log scaling characteristics. Separate patches can simultaneously control the 224XL, provide analog DC control voltages to the eight 1/4-inch sockets on the back panel, and trigger any device accepting a 10-volt pulse. To verify incoming MIDI data, and check the range or value of a current controller, there is the "alternate" mode which gives you real time indication of a control. Lastly, there is the "CPT" or "corresponding program table" mode which enables the XLV to control 224 program selection as well as program parameters. The "CPT" mode allows you to link any MIDI program number with any XLV and/or 224 program numbers. These CPT settings can be saved, along with the rest of the XLV's memory, and retrieved using system exclusive dumps and stores.

On the back of the XLV, there are MIDI in and out jacks, the DB 9 connectors for the LARC hookup, as well as the eight CV 1/4-inch jacks. An outboard transformer pack provides 12 VAC to the back of the unit. Installation requires only a screwdriver and if you follow the manual, you shouldn't have any problems. Of course, my philosophy is "If all else fails, read the manual" and I found my only prob-

lem with the box when, contrary to Clarity's instructions, I powered up the 224 first and wondered why its LARC had latched up in diagnostic mode. After reading the well written 57-page manual, I found that the manufacturer recommends a common switched power source for the XLV and 224.

Although the XLV, when acting as a MIDI remote, doesn't require a sequencer, the designers assume you are using a sequencer in real time and don't have the hands or inclination to rake around your processors' settings. The most excitement with the XLV happens when you have a dedicated sequencer and software as well as some way to insert timing information, if necessary, into the MIDI stream. A merge box or SMPTE-to-MIDI converter allows the XLV to derive an absolute timing reference for its operation. I used the XLV with several sequencers, all of them accepting time code for sync so I didn't have to go with a merge box.

When it came down to using the XLV, there were no problems and only one minor complaint. In truth, I didn't use some of the fancier possible applications such as having the XLV act as a cost-effective MIDI stand-in for a second LARC in a 480XL setup, but I did try various situations which would

be indicative of typical use, such as automating reverb parameters during a mix and straightahead reverb program jumps for scene-to-scene changes in M & E tracks locked to picture. Although it does take time to program a complex patch or set up control parameters for a compressor's side chain, the XLV obeyed its instructions without a hitch. To put it another way: seeing an ancient analog synth come to life through MIDI is a thing of beauty, and fader automation of the 224XL is a joy forever. My one complaint is that there is, as yet, no rack mount kit available. After you're done programming the XLV, it no longer needs to sit on the console or producer's desk and it would be nice to have it in a rack out of the way.

Looking into the future, the folks in Garrison, NY, have updates in the wings for other brands of digital reverb/effects widgets, so watch out for more Clarity fun in the future. At \$1,295, the Clarity MIDI/XLV is a welcome addition to the MIDI arsenal.

• • •

**Editor's note: As this issue went to press, Clarity announced new versions (designed to work with the Quantec QRS, AMS rmx16 and Yamaha REV-1 reverbs) which should be available this summer.** ■

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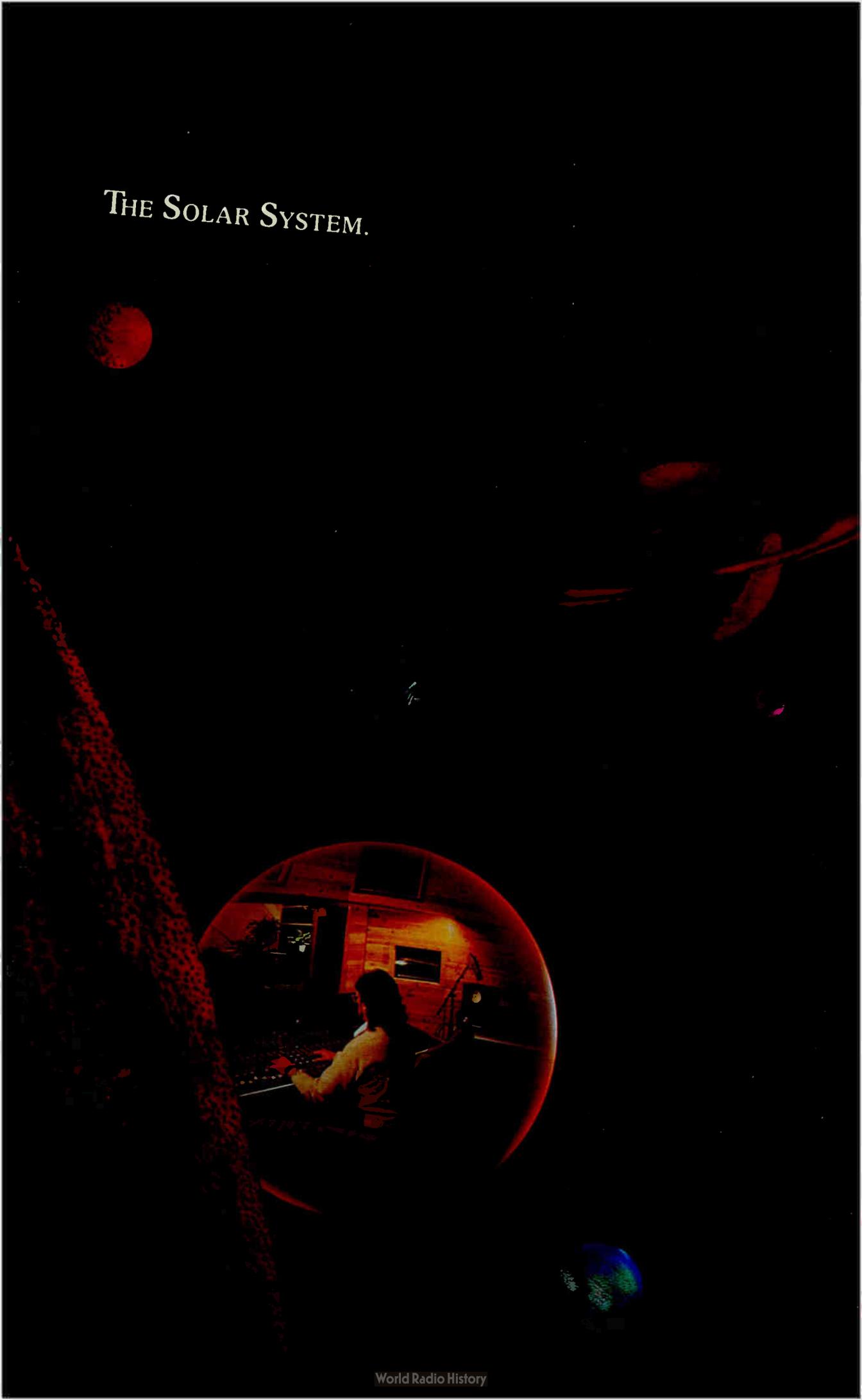
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## PHOTOMAG STUDIOS

*MORE THAN JUST A FACELIFT*

by Dan Daley

**A**s studio director Walter Tannenbaum prepares to conduct a visitor on a tour of the newly renovated PhotoMag Studios, in New York City, his first stop is a small brass plaque hanging in the reception area. The inscription is dedicated to members of the Dichter family—Lillian, Bobby and Murray—who first opened Photo Magnetic Sound Studio over 20 years ago.

"Back then it was a film mixing place," says the avuncular, bearded Tannenbaum. "They specialized in commercial completions and post-production. They did very little recording here except for voiceovers, just like

now. It was a mix place."

The significance of the plaque lies for Tannenbaum in the fact that he feels as though he's a part of a tradition that spans not only time but technology. Since re-invigorating Photo Magnetic Sound Studios as PhotoMag two years ago along with several other investors, he felt that he was doing more than simply replacing the faded art deco wallpaper that characterized the facility with power-color paint and glass-brick walls; more than just updating the equipment and the procedures of the studio.

"Most of the investors involved here, including myself, are people who were clients of the old studio," explains the former commercial producer and ad-

vertising executive. "It's a real nostalgia trip in many ways for me."

The new PhotoMag opened last November after a year-long physical and technological renovation. While Tannenbaum won't speculate on the reasons why the original studio had deteriorated, he does explain why he felt so confident about its rebirth: "Recently, the *sound* of commercials has become so much more important, especially with the coming of stereo TV and digital technology. There is a shortage of finishing/mixing studios in town, and we recognized that it wouldn't be a bad idea to rejuvenate the space and employ the concept here."

Several hardware and software innovations developed by Murray Dich-

ter are still evident and in use, and Beverly Dichter, representing the next generation of the family, was hired by the new owners as director of operations for the new studio. She provides not only expertise in the commercial industry but is also another link to the tradition that Tannenbaum prizes so highly.

Where there were once three studios ensconced in the 9,000-square-foot facility, there are now four: two film mixing studios and a pair of video mixing and sweetening suites. Studio A is the closest to what PhotoMag looked like in its original conception: a mid-sized (15-foot by 18-foot) recording area and a fairly spacious control room housing one of the two older Sphere consoles PhotoMag continues to utilize. "The size of the recording room is so obsolete for today," says Tannenbaum. "It was based on the old radio techniques of having a number of people all doing their parts live at once. We've retained the room at this size because we have intentions of doing some Foley work in there and it's a good size for that."

The Sphere console has a primitive (by modern standards) frame locator innovated by Murray Dichter years ago. The pre-SMPTE on-board device has manual digit counters to mark

frames and was constructed in the studio's own machine shop. The console also sports a couple of disconnected joystick pan pots, relics of the short-lived quad fad of a few years back. "It's still a very viable board," says Tannenbaum, pointing out the tie lines that link the board to centrally located Otari MTR-90 Mark II multi-track decks and chuckling at the contrast of old and new.

Studio C is the other original film room. Even with its aesthetic updating, it still resembles a small movie theater; a drop screen hangs from the center of the room and a high-speed projector peers over the Sphere console that sits in the back of the room. Several Woody Allen films, as well as *Sophie's Choice*, were mixed in this room. "The room itself is designed so that the mixer will get a good idea of what it will actually sound like in the theater," says Tannenbaum. "It's a movie room, but wheel in a monitor and plug in the Adams-Smith [synchronizers] and we're doing video that quickly."

Entering the state-of-the-art-and-design Studio B, Tannenbaum ponders, "In going between Studio A and Studio B, you're essentially moving a time span of 15 years between them. But what's really remarkable is that they're

both very viable for their intended purposes."

Studio B holds one of the two new Neve V Series consoles. The room, designed by Doug Jones, is a live end, dead end design. The live end is tuned more live than usual, notes Tannenbaum. He points to the RPG diffusers mounted on the walls, which Jones placed, along with bass traps, according to a computer-generated reading of the room. The diffusers prevent build-up of standing sound waves. The room is rounded out with BVH-2000 decks and B&W 808 monitors.

Studio D sits on the other side of the wall from its sister room, Studio B. It's larger and houses the same Neve B Series board. This audio-to-video suite was the first room opened under the new management.

Both Neve consoles are loaded with Necam 96 automation, and both share a modification developed by PhotoMag chief engineer Gary Rotta: a primarily-for-television adaptation of the bus matrix system which makes stereo and mono mixes completely compatible and predictable, automatically modifying the sine wave to cut -3dB for stereo/mono A/B-ing.

"The V Series consoles come with two stereo buses," explains Rotta, "designated one and two. We really feel that stereo television, once they decide on a format, will be really big. People will be doing their commercials as well as their programs in stereo. So we wanted a stereo capability on the console. That's why we came up with a four-stereo bus matrix. A, B, C, and D are stereo buses. They in turn dump into the network we developed with Neve. What this does is just combine A, B, C, and D down into stereo through the Necam faders for 2-track stereo mix purposes. What we have then is a full code all broken down. If you decide you love the mix but you want a little more effects, you can pull in the trim out of remix and get a little more effects sending to the one-inch video master at the push of a button. We print to an audio 8-track simultaneously, putting six tracks on it, using track eight as a time code track and using seven as a buffer, or else we can put shaped V-drive [vertical interval; a backup to time code in case it's ever destroyed] on it. V-drive is pretty indestructible.

"The sequence happens this way: the multi-track goes to stereo bus A, for instance, by panning it. Then effects tracks are assigned to B, and dialog is assigned to D. It goes from being those independent elements from this matrix down to two tracks, which are subsequently fed out to the one-inch video, and simultaneously

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go either to a full code or an 8-track. This gives us the ability to do two things: first, since the console is automated, we can save a generation. Instead of printing and then taking that print back to the one-inch—that's two generations—the automated console remembers all the moves, so the mix goes directly to the one-inch.

"The second advantage is if it comes back to us, since EQ isn't automated, we'd have to match the EQ. But since it's printed full-code, we can go to all-tape return and modify the mix in whatever way they want, including matching EQ. Now it's the tape return from the full-code element going to the two mix and then the one-inch. Then we have the identical original mix with the modifications."

In the racks are two Lexicon PCM 60s and a Lexicon 224XL, an Eventide SP 2016 with up-to-date programs, Orban 622B parametric EQ, along with two plates elsewhere in the complex. "We are a little shy as far as out-board goes," admits mixer Rex Rexler.

The core of the complex holds a bank of high-speed film dubbing machines. There are several new 35mm machines, but they are surrounded by over 60 older—though still useful—dubbers. The older machines are being replaced, but they stand as testimony to the heritage of the studio.

The variable speed setup can feed all four rooms. Along with Dolby NR, there is a full film-to-video transfer capability and mag to optical transfer. An adjacent room holds a lab that develops 16mm soundtrack on film through exposure to a sound camera. The Adams-Smith synchronizers are located in the central electronics core and can feed the studios from there.

Sitting in his office near the front of the facility, Walter Tannenbaum estimates that the refurbishment of PhotoMag cost around \$1 million. He figures the two Neve consoles account for nearly half that amount. "For commercials, I think the Neve equipment is a little too sophisticated," he says. "But when stereo really comes in, and whatever comes after that, we'll be ready for it with them."

But questions about overhead, upkeep and other economic aspects draw a less precise response. "I never figured that out," he laughs. "We haven't had time yet to figure out the business end of it. It was just one of those things. However, we decided right from the beginning to go first class and we didn't stop to ask, 'Jeez, can we afford this?'"

"I remember a time when we were demolishing Studio B and considering making it into an audio-for-video studio. Then we started to talk about

the possibility of two studios. For about 15 seconds we thought, two studios, that's great! and nobody stopped to think what it would cost. It's not that there's an unlimited financial well here; it's just that we haven't had time to stop and think that through."

Tannenbaum says that the owners don't feel the need to use sales people to bring in business. He says the studio advertises, and the company has retained a public relations firm. "I don't think we need sales people; you can't knock on people's doors and say please use us. You have to go with a reputable staff and repeat business and rely on connections within the industry."

The PhotoMag client roster reflects its commercial history. Recent customers include J. Walter Thompson, Young & Rubicam, DFS/Dorland and NW Ayer. Video and film are represented by Viacom and Tristar Pictures. The studio recently completed mixing on an upcoming NBC News *White Paper* special telecast, "To Be a Teacher," engineered by staffer Dominick Tavella.

While Tannenbaum says he's not trying to pigeonhole PhotoMag into any one type of a facility, he feels that its strengths are evident: "We come from commercials; that's a language we speak first and foremost. But I hope it expands into everything." ■

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## MIDI GUITAR TIPS

by Craig Anderton

Guitar synthesizers have been "just around the corner" for years now; only trouble was, we kept coming to corners and the guitar synthesizer just didn't seem to be there. Fortunately, matters are improving.

In post-1980 guitar synth history,

the GR-700 was the first out of the box. Although it worked, any time a manual starts off with advice like "don't play open strings," guitarists are not going to be favorably impressed. Subsequent upgrades did improve the performance, but the 700 never did take over the world. Later units (like IVL's

Pitchrider 7000 and the Ibanez MIDI guitar system) offered incremental improvements that helped make the guitar synth more of a musical instrument.

The latest guitar synth, Roland's GM-70, offers not so much a breakthrough in guitar synthesis technology, but rather, a summation of what has gone before and a few extra improvements. I've been looking for a guitar-to-MIDI converter for years; this one isn't perfect, but it works well enough for me to express myself on the guitar with MIDI.

With new technology, however, comes the need to learn new techniques and possibly shed some old habits. Here are some tips I've learned in the process of getting better acquainted with the world of guitar synthesis.

1. *Keyboard synth patches don't always work for guitar.* With keyboard, two hands play fairly open voices over a wide frequency range. With guitar, notes are voiced over a much narrower range, and these notes are selected by only one of the two hands. I tend to go for simpler, more sustained patches as these can better define chord clusters. Another consideration is that adding even the slightest bit of attack time helps cover up glitching and tracking errors that are still a part of pitch-to-voltage guitar/MIDI conversion. Then there is the guitarist's traditional affection for infinite sustain. I ended up re-programming many patches for longer sustain, greater modulation of many parameters during the sustained portions to maintain sonic interest, and longer release—in other words, away from percussive sounds, and more towards washes.

2. *MIDI guitar requires a great deal of MIDI knowledge.* Most units are set



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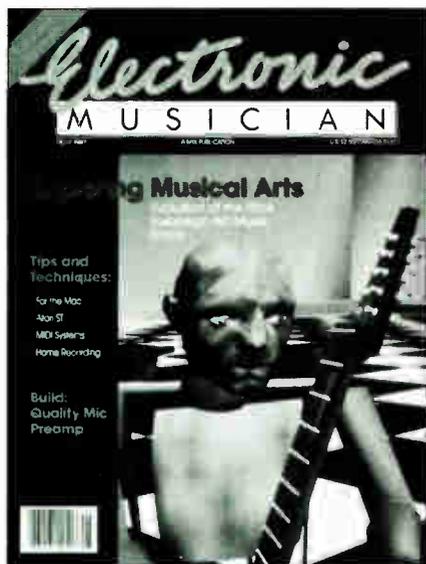
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## REVIEWS

**"Vision" for the Mirage** by Don Slepian  
**Listen: Ear Training for the Mac** by Geary Yelton

up to default for keyboard players—for example, a synth's left wheel almost universally does pitch bend, and the right adds modulation over MIDI controller 01. But the Ibanez controller, for example, lets you assign the electronic "vibrato tailpiece" to any controller number. This means greater flexibility, but also places more demands on the guitarist to know MIDI. Similarly, few keyboard players investigate MIDI mono mode (until they try to get multiple voices out of a sequencer). Guitarists have much greater need for this mode, which is not as commonly used in instruments—nor is it as easily understood or documented. We are therefore in the paradoxical position of having guitarists—some of MIDI's late bloomers—needing a greater command of the MIDI language (to make the best use of guitar controllers) and also a decent knowledge of programming in order to adapt synthesizer sounds for their own uses.

3. *Individual note editing is crucial for guitarists who work with sequencers.* Some sequencers do not support individual note editing; when using a guitar to drive a sequencer, though, note editing is very important. I've played several MIDI'd guitar parts into a sequencer and in each case, some cleaning up was necessary due to glitching (e.g. sympathetic resonances that triggered unwanted notes and the like). To correct each of these by overdubbing is much more tedious than just editing out the errors.

4. *New sequencer techniques may be necessary to work efficiently with a MIDI guitar system.* For starters, with mono mode you need a sequencer that can record on six (or more) tracks at once—yet some sequencers can only record one track at a time. I usually record GM-70 parts in mono mode, which chews up six sequencer tracks. Sometimes, it's handy to have the guitar part on six separate tracks—such as when you want the low "E" string to trigger a deep bass, and the high "E" to trigger bell sounds that have nothing to do with the other strings. But sometimes (for me, most of the time) all you really need is poly mode, which plays polyphonic parts on a single track. With the program Total Music, I used to bounce all six tracks over to a single track, until I learned to take advantage of Total Music's default structure. When bouncing, Total Music will bounce the selected track to the next highest numbered track. So when it comes time to "collapse" six tracks into one, I start at the lowest numbered track, and bounce upwards. For example, suppose a guitar part was recorded on tracks 9, 10, 11, 12, 13, and 14. The

easiest way to collapse these is to bounce 9 into 10, 10 (which now contains 9) into 11, 11 (which now contains 9 and 10) into 12, and so on. As you might expect, this is not the type of operation that keyboards usually require. Most sequencers were written with keyboards in mind, which means that you may have to dig a little deeper into the various commands for the most efficient use with guitar.

5. *Autocorrection is not a given.* Keyboard parts often lend themselves to autocorrection, but much of the appeal of a guitar part lies in the strummed nature of the instrument, where there can be several milliseconds of delay between notes of a chord. (I've tried to create this effect by "spreading" keyboard notes over time; it's a nice effect, but sounds stiffer than the natural delays that occur with guitar.) Generally, I have to really analyze a part and decide what should, and should not, be quantized. I usually try to record the whole part without quantization, and hope that my timing is good enough. If some parts are ragged, I bounce them over to a separate track, and remove that section of the original track. After all the parts with shaky timing have been bounced over to the new track, I autocorrect that entire track, then bounce it back and com-

bine it with the original track. Thus, the strums and "human" feel of the first track remain intact, yet the improved timings are integrated into that original track.

6. *Don't forget layering.* Remember that part of the reason for MIDI's existence was to allow easy layering of keyboards. Adding the direct guitar sound in with the synthesized sound is wonderful. The acoustic sound can provide a quick attack, while the synth drones on in the background with a fill. The synth part can have a little bit of an attack time and no one will notice, either.

7. *Always have your MIDI guitar hooked up to a sequencer.* It's such a kick to get all those new sounds out of a guitar that you'll often find yourself coming up with some great little hooks and riffs. Have the computer ready to catch them! Remember, one of the advantages of MIDI sequencing is that you can take your guitar parts and cut and paste until you come up with a great part (or lose patience entirely).

The MIDI guitar is not perfected, but its current state of development is sufficiently refined to allow the guitarist to explore some exciting new worlds. I've really been getting into it, and I expect the technology to only improve as time goes on. ■

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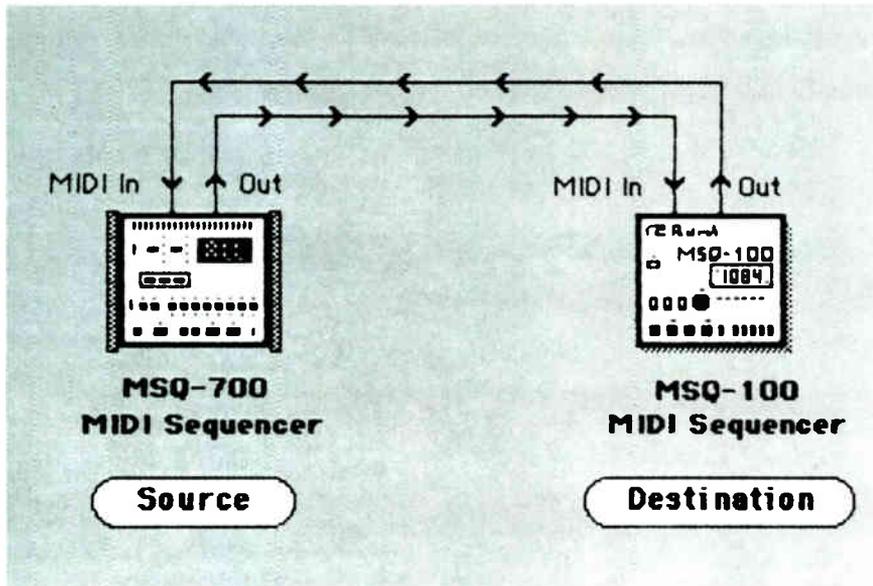
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**FIGURE 1—Basic MIDI Interconnection**  
*The MIDI clock from the destination sequencer will control the source sequencer's playback speed.*

## New Tricks For Old Sequencers

by Bruce Nazarian

Sometimes, it pays to backtrack and refresh a few ideas. Some of these may be taken for granted by most of us, but could shed some new light for some of you who are new to MIDI programming. Using MIDI sequencers every day in the studio has enabled me to find lots of tricks—tricks that use the power of MIDI to make sequencing a bit easier. I would like to pass a few of these along.

### Two is Better Than One

Using two MIDI sequencers is always more fun than using just one, because it opens up new possibilities for automating the production of your final sequences. In particular, sequencers like the Roland MSQ700 and MSQ100 can be nicely matched to enhance each other's functions. In addition, by using a disk-based sequencer like the Roland MC-500 or QX-1, you can transfer all of the sequences you have created to the more

convenient floppy disk storage format, as well as gain incredible editing features for your sequences. By now, I am sure that all of you know the particular method of operation for your own sequencer, so I won't concentrate on specifics; instead, let's look at the overall concept of MIDI sequences and how to transfer them from unit to unit.

### Dumping MIDI Sequences

A MIDI sequence is nothing more than a continuous stream of MIDI messages, clocked by the sequencer's internal clock or by some form of external synchronization, be it MIDI clock, Sync-24, SMPTE or some other sync-to-tape code. In any of these methods, the results are identical: the sequence is played back under a form of tempo control. We can use this feature to synchronize the transfer of MIDI sequences from one sequencer to another. By connecting the clock input of the source sequencer (the one sending the data) to the clock output

of the destination sequencer (the one receiving the data), the sequencers look to each other in perfect sync. (For that matter, you could also connect both sequencer's clock inputs to some other unit's clock output, and the end result would still be the same: a perfectly locked data transfer. It really works!)

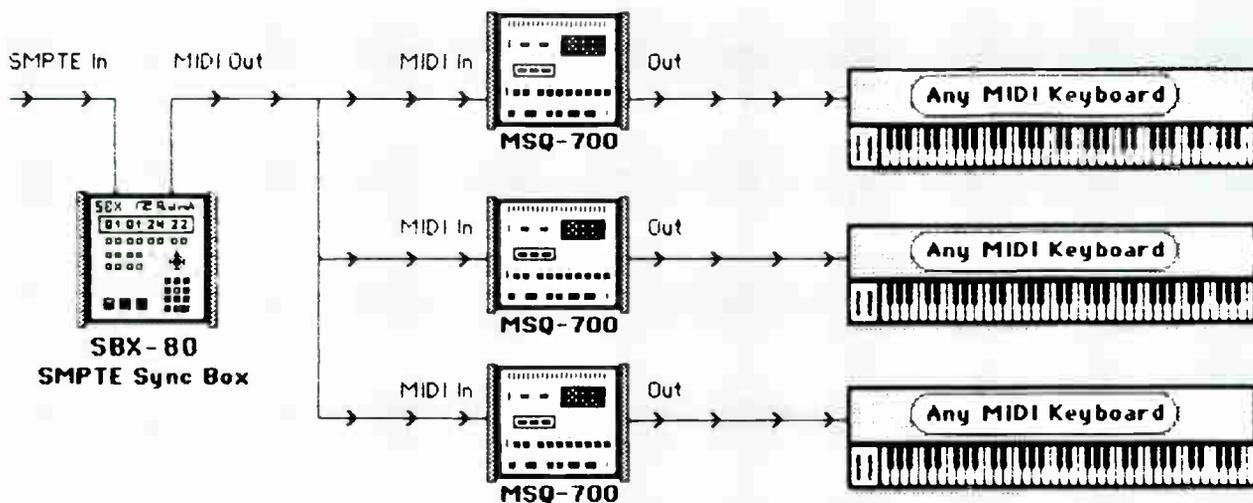
### Using MIDI Clock

One way to accomplish this in a neat manner is to use MIDI's built-in clock. Not only will it start and stop the sequencers for you, but it eliminates unnecessary wiring between the two units. Simply using MIDI cables between both units takes care of data transfer and clock synchronization. Here's how it works:

In Fig. 1, we see two sequencers tied together via MIDI cables in and out. The output of sequencer A goes to the input of sequencer B and vice versa. To synchronize the sequencers for the data transfer, select MIDI SYNC on sequencer A (the source) and INTERNAL on sequencer B (the destination). You may want to turn off the MIDI MIX function on the source sequencer to prevent any MIDI feedback. What we are doing here is using the MIDI clock output from sequencer B to drive the playback of sequencer A. Notice that activating PLAY on sequencer B also starts sequencer A's playback, and the clock LEDs on both will be flashing in perfect sync. To transfer your sequence, activate the real time LOAD function on sequencer B. This will cause sequencer A to play out its programmed track (or chain, depending on which mode it is in) while sequencer B records it. This technique can be used to bounce single MIDI tracks, like the keyboard "comp" of a song's chorus, into another sequencer, or even to copy an entire song (chain).

### Transferring Drum Sequences Via MIDI

I recently used this same technique to upload some sequences that I had created on the Linn 9000 to a Synclavier system that I was using for a recording project. In this case, though, I wanted to use the Synclavier as a sophisticated 16-bit drum machine, so the sequences we transferred were actually the Linn's drum sequences. How? Using MIDI, it was easy. The Linn 9000 has (as do most current



**FIGURE 2—Mixing Two Sequencers Together**

The MIDI "Sequencer Start" message from the MSQ-100 will also start the MSQ-700, while the MIDI clock will keep them playing together. MIDI data from the MSQ-100 will be passed through the MSQ-700 effectively merging the sequences.

drum machines), a MIDI DRUMS mode which allows you to output the drum sequences as MIDI events, on the channel of your choice. Most other drum machines, (RX21, SP-12, Oberheim DX-MIDI) have similar features. With MIDI DRUMS mode engaged, I matched the Linn's MIDI output channel, set the Synclavier to read the incoming MIDI clock, and let them go to town. In just a few minutes, the Synclavier's computer had recorded the Linn's MIDI drum messages, and was set to continue. The only other

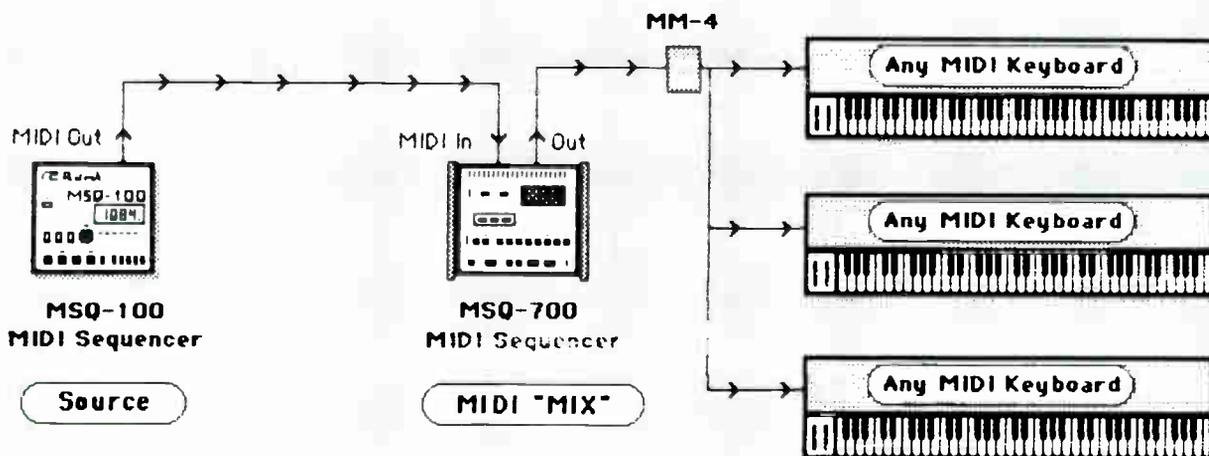
step I had to accomplish was to be certain to "map" the Synclavier's excellent digital sounds to the appropriate MIDI notes, so that a drum note from the Linn would trigger the Synclavier's corresponding drum sample. In much less time than would have taken to re-program the sequence or re-trigger new drum samples, we had the drum sequences transferred, quantized, and running on the Synclavier.

One interesting snag in these proceedings is worth mentioning, however: the Linn 9000's hi-hat programming allows the internal hi-hat to have

any one of eight dynamic levels, as well as any of eight degrees of "openness" (from fully closed to fully open). The dynamic levels transferred well via MIDI, but the MIDI DRUM note map does not allow for sending all eight "openness" variations; only CLOSED, OPEN, and IN BETWEEN. This may not pose a problem with a relatively simple part, but a complicated hi-hat rhythm could be a bit tricky to transfer in this manner. Beware! Similar drum machines may have their own idiosyncrasies in this regard.

**FIGURE 3—Distributed Sequencing**

Each MIDI sequencer is clocked by the same MIDI clock, but is dedicated to only one synthesizer. This clean connection helps prevent overload of the MIDI bus, and consequently helps prevent delays.



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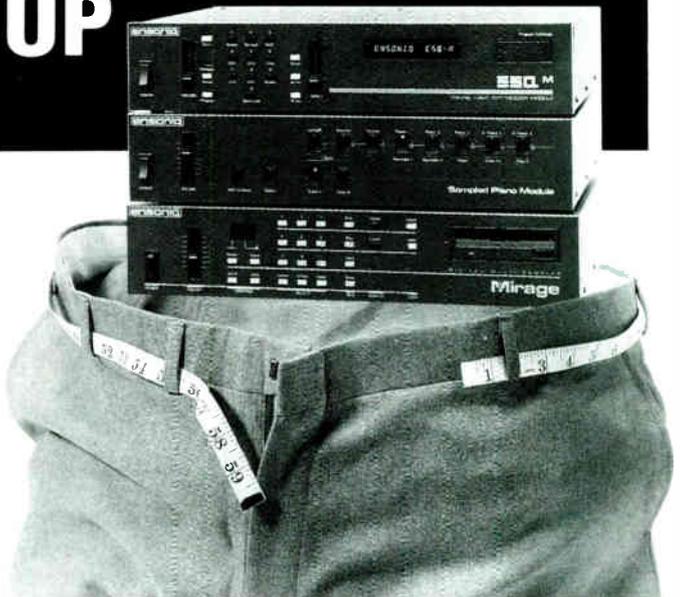
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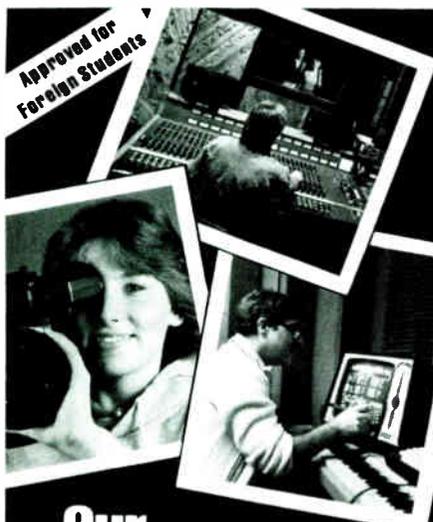
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### Data Extraction (Un-Merging)

By using one of the other features of the MSQ700, we can even extract a single channel's MIDI data from tracks that have previously been merged together (as long as the original data was on different MIDI channels.) For example, to extract a brass section on MIDI channel 3 from a merge that includes a keyboard part on channel 2 and a bass line on channel 1. The connections are the same as for the basic MIDI transfer, above, using the MSQ700 as the destination sequencer. Set the MIDI receive channel on the MSQ700 to the channel that corresponds to the MIDI information you wish to extract from the merge. Since the MSQ700 will then be set to "hear" only data on the selected MIDI channel, it will record only that channel's data from the merged MIDI data being played into it. If you have programmed your real time MIDI effects on yet another channel, you may wish to extract that data as well, and then MERGE it in with the appropriate track.

### Archiving Your Old Sequences

If you are like me, sequences seem to almost create themselves. One day you have a few tapes lying around and a month later it seems that your sequence cassettes have multiplied like rabbits. If this sounds familiar, then you are a prime candidate for archiving your sequences on disk. A sequencer like the Roland MC-500 is perfect for this job. Not only does the disk make organizing your sequences much easier, but you can store more sequence data in less space, and load it back in much faster than with cassettes. Plus, the micro-floppy disks used in the MC-500 are less vulnerable than the fragile tape in most cassettes. Now that you have seen how to transfer your MIDI sequences, the technique for archiving is the same; just transfer the sequences into a disk-based sequencer. When you are finished transferring, just save the sequences onto the disk. So connect up those MIDI cables and let the bytes fly!

### Mixing Multiple MIDI

Sometimes, no matter how many tracks are on your sequencer, you need just one more track. (This still happens, even with my Linn 9000!) Fortunately, there is a way to get around this. Using MIDI clock or Sync-24, you can cascade a number of small sequencers to form a super-sequencer. Fig. 2 shows two MIDI sequencers in line. The MIDI output of sequencer A feeds the MIDI input of sequencer B. B's output, in turn, feeds the multiple keyboard setup through an MM-4 MIDI Mult box to avoid chaining delays. If you set the

MIX function of sequencer B to "ON," any data sent by sequencer A will be passed thru B and sent to the keyboards. If you set sequencer A to INTERNAL CLOCK, and B to MIDI SYNC, starting sequencer A will activate B's playback automatically, while A adds its data to the MIDI sequence being played by B. The uses for this configuration are endless, and you should feel free to experiment more on your own.

### Distributed Sequencing

People always ask me: "My sequences are so complicated, how do I get around MIDI delay?" What they are referring to is the delay inherent in the MIDI system if you overload the bus with lots of real time controller information, or stepped rhythm sequence information (lots of 1/8 note chords, or a very busy bass line). Using multiple sequencers with a common clock source, you can have the best of both worlds. Fig. 3 shows a typical setup. Each sequencer is driving its own keyboard, providing a single, uncluttered MIDI link between one track of MIDI data and the instrument that is playing it. This may be the way for you to go if you need to create note-intensive rhythm tracks. This style of sequencing, by the way, is exactly what Yamaha QX-1 owners have built into their sequencers. The QX-1's eight MIDI outputs allow for distributed sequencing within one box. This feature is also found on the Synclavier and Fairlight III.

### Speaking About Linn 9000's...

As all Linn 9000 owners probably know by now, Forat Electronics (11514 Ventura Blvd., Ste. #1, Studio City, CA 91604) are still supplying and repairing Linn 9000 and Linn Sequencer units. What you may *not* know is that there is a good possibility of a new software revision for Linn 9000's. While designed primarily to correct the few known bugs in Version 5.17, this is a prime opportunity to include any new enhancements that Linn 9000 owners (or potential Linn 9000 owners) may desire (including SMPTE chase-lock!). If you have any features or suggestions you would like to see implemented in a future software revision, address your comments to Forat Electronics at the address above, or call (818) 763-3007. Now's your chance to make a difference.

### Coming Up...

In the next few months we'll take a look at film and video scoring using SMPTE-driven sequencers, and have a look at how new developments like MIDI Time Code are helping to make this an easy task. Stay tuned... ■

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# AFTER · MIX

**C**assette duplication has never been thought of as the glamorous end of the recording industry. As a manufacturing process, duplication brings to mind an industrial atmosphere far removed from the creative ambience of a recording studio. But as more and more studio owners have sought a piece of the expanding pre-recorded cassette market, one increasingly finds the disparate worlds of duping and recording housed within the same walls.

Studio owners and engineers have much to offer in the field of duplication. Critical listening skills honed in the recording studio can contribute to raised fidelity consciousness in the dupe plant. At the same time, duping has much to offer to a studio, potentially increasing both the number of clients, which contributes to greater overall business stability, and the amount of work billed per client. In the following remarks, representatives of five studios with varying levels of commitment to duplication share their thoughts on the studio/duping combination and what it has meant to their businesses.

**Mix:** How was your recording facility equipped when you decided to get into duplication, and what types of work were you doing?

**Theresa Stoops, manager, Apex Tape Duplication, Santa Rosa, California:** We were a 24-track studio [Banquet Sound] doing a lot of local bands here in the Sonoma and Marin counties area [of Northern California]. We also do advertising jingles, and voice-over work for radio stations. We're involved in just about all areas of the studio business.

**Warren Wilson, president, Forge Recording Studios, Malvern, Pennsylvania:** We started out with syndicated radio programming production and duplication. So they started together. That was reel-to-reel duplication, long before cassette duplication became popular.

**Don Enns: owner, Master Track Pro-**

**ductions, Hayward, California:** We were 16-track in the studio at that time.

**David Porter, president, Music Annex, Menlo Park, California:** Before we started duplication we had two 24-track music studios, one 8-track broadcast production studio and one dry video soundstage with lights, but no cameras or VTRs.

**Bill Gutherie, president, Producers Tape Service, Royal Oak, Michigan:**

listen to in their homes. The cassette is for the consumer while the reel-to-reel is for the broadcaster. But we are gradually converting all the stations over to cassette because of the cost of duplication and the cost of the postage.

**Enns:** We really were looking to fill time because of the nature of the studio business—really busy at some points, and nothing to do at other points. We were trying to build a broader base, to supplement the recording business and smooth out the ups and downs. Cassette seemed like a likely way to go. Our first moves were really small.

Our move into high-speed duplication was a fluke in that one of our good studio clients had mistakenly got into the duplication business to duplicate their own product. But without having the proper support staff, they essentially had a duplicator that would not function. We made an arrangement with them to get their duplicator back into good condition and to operate it.

**Porter:** I had a client, Apple Computer, with whom I was working in the studio. They asked me to broker their cassette duplication. I had been a manager in the cassette duplication business before I built the studios, and I saw that the job was big enough, by itself, to justify owning the equipment. So we did it. Even though we were only a one-client duplicator, that contract gave us time to get in the business and be financially solid from the start.

**Gutherie:** People were calling us all the time and asking if we would do it.

**Mix:** What equipment has been purchased for the duplication operations, and how was it selected?

**Stoops:** We decided on real time, to keep the quality up. It certainly narrowed the market share, but the clients that we get are really focused on their product being the best it can be.

We now have 103 Nakamichi MR 2s, which gives us the world's largest Nakamichi real time system. It was quite a process coming to that conclusion. We went through another sys-

## DUPLICATION FORUM:

# Looking for Stability in a Changing Field

by Philip De Lancie

We are a 16-track studio. We just added a few items to do some duplication.

**Mix:** What were the factors that led to the decision to get into duplication?

**Stoops:** Many of our clients were non-signed independents distributing and doing their own record publishing. We basically didn't like the quality of the results we were hearing when we got clients' materials back. So that's how the idea got started for us as far as the tape duplication. It was basically the quality factor.

**Wilson:** In radio production and syndication you've got to be able to copy your material to get it to the stations. A lot of our programming is religious, so copies of the "messages" were made available on cassette through spoken word-type duplication for people to

tem, real time and two-times, that did not meet our needs as far as the fidelity that we had anticipated. So through a lot of searching and talking to people and listening to machines, we came to the Nakamichi decision. Nakamichi has been great about providing us with service, help and promotion. **Wilson:** Our very first machine was a unique gadget that went from pancakes into a loaded cassette. That enabled us to customize the cassettes, but it was terribly slow. From that we went to a Magnefax with Superscope loaders. Then we went to bin duplication with an MTI and King automatic loaders.

**Enns:** We followed all the basic considerations. We wanted the best possible quality we could get, while still being able to function economically. We have two duplication systems. One is our original 16:1 Audio/Tek system, which we have thoroughly modified. We also have a system by MTI, which we use 32:1. That has three slaves. Then we use an ElectroSound 1860 automatic cassette loader. It's really good. It's very automated, it's intelligent, and it functions with a minimum of operator help.

**Porter:** The primary item is the Otari DP-80. The reason it was purchased is that we felt that running a 7½ ips master was the only way to get the quality that we were looking for. We don't believe that 3¾ ips masters are good enough to do audiophile duplication. All the slaves have HX-Pro, and the master recorder, which is a 4-track MTR-12, also has HX-Pro to take advantage of the HX technology when making that 7½ ips master.

**Gutherie:** We selected the equipment by word of mouth. For our duplication we have a Wollensak workhorse. That is strictly mono. The larger jobs we sub out to another company.

**Mix:** What might you do differently if you had the opportunity to re-live your entry into the duplication field?

**Stoops:** We would definitely have done more research in the beginning. The first year was trial and error for us. It all moved very quickly once the tape duplication idea came up. We would have taken more time with our machine selection, so we wouldn't have had to change. Also, we would have taken a good look at other facilities. We had never looked into all the aspects of tape duplication that you get yourself into.

**Wilson:** I think I would have considered further ahead and skipped the Superscope loader stage altogether. Other people in the industry had the wis-

dom to go into bin duplication sooner. But where we're at now is where I still would have ended up.

**Enns:** There is quite a difference between high speed recording as opposed to real time recording. Learning how to do the high speed alignment procedures and take care of something that you can't hear while it's being done requires some different techniques. The sooner those things can be learned, the better. There isn't any quick, easy schooling available for that. It just takes a lot of hard work to research, study and talk to the right people to get a feel for what works and what doesn't. In our case, where

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*Duping has  
much to offer a  
studio, potentially  
increasing both  
the number of  
clients and the  
amount of work  
billed per client.*

---

we were, trying to make a really good quality product, was the important thing. The more quickly that could be accomplished, the better.

**Porter:** I would have automated the packaging line sooner. One thing that inhibited us from getting big was our ability to package. In the first year, I struggled with L-frames, manually putting a plastic bag around the product and shrinking it through a shrink tunnel. It was incredibly labor intensive, and the labor cost was staggering. If I had been smart I would have bought a wrapping machine from the beginning.

The same thing would be true about printing directly on the shell. I would have bought that equipment sooner. We were in a paper label mode, and there are certain clients you just can-

not get if you're using paper labels. You cannot do major label work. It's not economically feasible or acceptable to a major label to use paper. So we finally got an Apex printer.

As a studio getting into duplication, our original intent was to do some spoken word duplication as a sideline. What we have now ended up with is being in a whole other business, with a dupe plant that is the biggest in Northern California.

**Gutherie:** We would go for video duplication which is what we are working towards right now. There is a real nice market for it, especially in Detroit. We subcontract all our video duplication, but we have enough video work right now that we'd be busy 40 hours a week if we set up to do that here.

**Mix:** Do you plan any further major investment in duplication equipment, or are your needs taken care of with your current setup?

**Stoops:** We'd like to expand to be able to offer a lower-priced voice quality system. What we do now is high music quality. For those people who don't have that need, there is no reason for them to go to that extra length for the quality. So that would be our next step, to be able to meet both of those needs.

**Wilson:** Our needs are fairly well taken care of. Looking at the way the industry is going, the need for music duplication has probably peaked. The spoken word duplication will continue to grow with the advertising and educational uses of the cassette. But what that will do to our need for new equipment is kind of hazy. Some manufacturers have pulled back from R&D. So I think many of us are not going to put another \$100,000 or \$150,000 into another duplicator at this point.

**Enns:** Our current setup is satisfactory for some growth to come. We've expanded into the areas of on-cassette printing and wrapping and packaging kinds of things, and we have good suppliers for the printing work. We offer the full service now, so our next focus is on getting the word out and letting more people know that we're here.

**Porter:** We will selectively buy more equipment. We will increase our loading capacity, our dupe capacity and we will probably buy what will be the final stage of automation for us, a boxer. We still hand insert the cassette into the box with the printed insert card for two reasons: one, we felt it gave us a final step of quality control; secondly, we were doing so much bulk pack, where the cassette was not packaged completely in a Norelco

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*David Porter: "The studios are a feeder mechanism into the dupe business. I don't believe we've gained studio clients because of dupe, but we've taken our existing studio clients and given them another service."*

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box, that I didn't feel it was necessary to own that machine. But, like the Apex printer and the Scandia overwrap machine, I'm finding it necessary to get into automated packaging equipment sooner rather than later.

**Gutherie:** We're all set with audio duplication for right now. We're covering our demand, and for anything over that we have many friends who can be subcontracted to take care of us.

**Mix:** What do you know about developments in the area of tapeless bin loop masters, and how valuable might such a system be for your business?

**Stoops:** I don't think that tapeless masters will affect our business in the near future. We don't see ourselves going into high speed duplication. In real time, we already have the ability to duplicate directly from digital masters, FI Beta or VHS.

**Wilson:** I don't see it being valuable at all. The time that it takes to get the program into the memory in real time makes changing masters a real hassle. I don't see it as a giant step forward, I see it as a step sideways.

**Enns:** In theory, of course, it's a great idea. It would be wonderful if that were available cheaply.

**Porter:** There are a number of intriguing technologies out there, but I don't know of anybody who is running it daily and is successful. Maybe they are and they're not telling anybody, but I don't think that technology is quite here yet.

I personally feel it's a great idea, but it may be cost prohibitive. The numbers that people were throwing around to me indicated that a bin might be \$400,000 to \$500,000. I work in five-

year cycles of equipment and financing, and I don't think that cost can be amortized. I think we have to realize that we're in a sub 80-cent market for finished music product on chrome tape. If I have to sell my cassettes for \$1.50 apiece, then I can't compete. So, to me, a bin has to be something that costs about \$40,000.

**Gutherie:** Since we don't do bin loop duplication, it doesn't really apply to us.

**Mix:** What types of duplication clients are you primarily oriented toward serving?

**Stoops:** Independent releases or small record labels that want strictly high fidelity. Mainly instrumental, and probably 90% new age.

**Wilson:** Everything from the very low end to the very high end. The low end would be where the master I'm given to work with is a cassette duplicated on a Wollensak copier from an original taken off a P.A. system. The other extreme is digital music masters for high speed duplication of Dolby C encoded cassettes.

**Enns:** A great majority of our work is in music, album-related projects and demos. We also are involved in speakers and seminar types of things. But at this point we are predominately in the high quality music area.

**Porter:** I'm about split between industrial, meaning corporate communications and spoken word, and high quality high end audiophile music clients—record companies.

**Gutherie:** Our clients are about 50% bands and musical, and 50% industrial, such as magazine programs, sports programs, advertising agencies and churches.

**Mix:** How have the duplication and studio businesses affected each other?

**Stoops:** Aapex has been good for the studio, as well as the studio being good for Aapex. We're able to kind of capture potential clients and point them in either direction. That helps us get the full benefit of our advertising dollars. Overall, the major benefit has been from the studio to Aapex, because so many of our studio clients do their duplication with us.

**Wilson:** The recording studio is a plus because for stuff that's produced there we can do all the manufacturing and production. It can stay in-house, with a quicker turnaround time for our clients. We try to keep both sides self-sustaining, though there have been times where production has kept up the studio and vice versa. It comes and goes.

**Enns:** Each one plays off the other. It's a valuable combination. Each lends credibility to the other. And, though cassettes were brought on originally as a supplement, they have really become a more dominant provider for us in terms of our economic base. We see the cassette as being extremely valuable to our future.

**Porter:** The studio impacts duplication in that the studios are a feeder mechanism into the dupe business. I don't believe we've gained studio clients because of dupe, but we have taken our existing studio clients and given them another service. In one case, one of our clients got a major label deal. He specified in his contract that he wanted Music Annex to manufacture his product. So I shipped a quarter-million pieces to PolyGram, even though they have their own duplication. So, I think the studio business in many ways has aided the dupe business.

**Gutherie:** The duplication has helped the studio, because when people ask if we can do the duplication for them we can now say yes. Usually when people are looking for a studio they shop around for a one-stop, where they can get all the work done, rather than getting recording in one place and duplication in another.

**Mix:** What do you hope to see your company doing a few years into the future, and how are you planning now to realize your goals?

**Stoops:** What we'd like to do in the future is become kind of a mastering tape duplication facility, where people can come and have hands-on in the duplication process. Studios are still going to need demos, good representatives of products they are trying to shop to record or production companies. We want people to come up

here to spend one-and-a-half or two hours working with our engineers, and go out knowing that their cassette is sounding the very best it can.

**Wilson:** We have plans for a new 17,000-square-foot building which will house one large multi-track digital studio and another smaller production room, plus greater warehouse and production facilities. In that new facility might be a Sony high speed R-DAT duplicator or real time R-DAT duplicator along with all our packaging and printing equipment.

**Enns:** It seems like cassettes still have a good healthy future in front of them. All of us, I think, wonder exactly how long that will be, but for the next ten years or so it looks like cassettes still have a good strong place in the market. We see ourselves expanding more and more in that area.

In the studio, we have a good group of clients that provide us with a lot of steady business, and we'd like to do some more building on that base. We have plans to upgrade our studio facility, primarily to increase size and convenience in the control room for synthesizer work.

**Porter:** What we think will happen is that the studio business will include more satellite operations around the San Francisco Bay Area, perhaps as many as three or four locations. They will become feeder mechanisms to the dupe plant, which will house the central management and accounting.

We realize that music recording is a diluted market. There may be too many players in the high-end studio market to make any money. But we will definitely proceed in the media recording market. Our commitment at Green Street in San Francisco to the corporate and advertising market is very intense. We're not going to spend millions of dollars buying music-oriented recording equipment, but we will continue to grow in the area of media and audio-for-video post-production. We also find that we get a lot of dupe clients out of that area, a lot of corporate-type clients coming out of the media/corporate communications side of our studio business.

**Gutherie:** Video duplication is probably where we'll end up, although we probably won't get out of audio. And the studio will get more oriented toward video as well, with audio for video sweetening and things of that sort.

**Mix:** What effect do you expect the introduction of DAT to have on your business?

**Stoops:** Since we are a real time duplicator, I don't think it will greatly affect our business in the next three to

five years. We're not going to be competing with the marketplace so much. The way we're heading is really towards the smaller quantity custom market. So we don't feel greatly threatened by it. Perhaps down the road it will be something that we will get into. **Wilson:** I would like to see R-DAT fail and see CD be the major music carrier. Once we get into the copying of CDs and sharing with friends in the digital format, it's going to do the same thing that the cassette did to the vinyl record industry. It's going to cause a decline, and the healthy sales will decrease. But I see that R-DAT will be a difficult thing to keep portable. It will be a very difficult format to keep in good operating order in bad environments: on the beach or in a moving automobile with rapidly changing temperature and humidity. And for manufacturers, it's just another thing in which we would have to invest our capital, and another whole method of manufacturing.

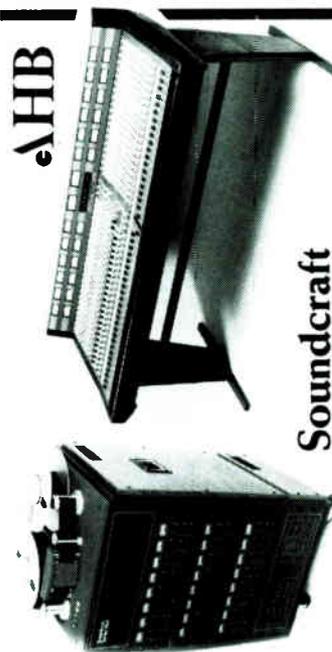
**Enns:** A lot depends on how the major companies are going to respond to DAT. At this point it doesn't look like it will gain national credence. Even if it does, the cost of manufacturing and the cost of the playback equipment will have to go through a dramatic reduction if it is going to be successful and have a really broad-based effect. It looks like a good specialty device, but it seems like it has a lot of evolution to get through to become a viable consumer format. I would like to see that happen, but I wonder if some of the market forces are going to allow it.

**Porter:** None. The major labels will squash DAT with a vengeance, because they don't want four formats simultaneously. It's too expensive to have them all in the marketplace. So I don't think it will be the big rush that people are predicting. There will be some individual labels that deliver software in the R-DAT format, but I don't believe that it will be as big a deal as the CD was. In the '90s R-DAT may start to really impact the music cassette business. I don't see it happening real soon. People are predicting this whirlwind thing that by the '90s there will be no more black vinyl discs and no more audiocassettes. I think they're out of their minds. R-DAT will be very slow to come on because the record manufacturers don't want it. **Gutherie:** We want to be first in line to supply materials for duplicating of DAT. But I don't foresee us getting involved in the actual duplicating. ■

*Philip De Lancie is a mastering engineer at Fantasy Studios in Berkeley, California.*

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## THE BEATLES ON CD

AN INTERVIEW WITH GEORGE MARTIN

by Iain Blair

**O**n June 6, 1962, The Beatles left their hometown of Liverpool and arrived for an audition at EMI Studios, Abbey Road, London. Already turned down by most other companies — "Groups with guitars are on the way out, Mr. Epstein," Decca had told their manager—the four scruffy musicians with strange mop-head haircuts were nervously shown into the demo session by producer George Martin.

"Let me know if there's anything you don't like," said the young, clean-cut producer. "For a start," said George Harrison, "I don't like your tie."

At first sight, Martin and The Bea-

*"I want to hear everything I've ever recorded on CD, if possible. Really, it's the ultimate sound."*

ties couldn't have appeared to have less in common, or be less likely to work successfully together on one record, let alone a series of chart-topping singles and albums and films that quickly made the group the biggest and most popular the world has ever seen.

The well-spoken, conservatively dressed Martin was a highly respected classical musician and arranger who had studied oboe at the Guildhall School of Music, specialized in the baroque period, and played professionally before being appointed head of EMI's Parlophone label in 1955.

By contrast, John, Paul, George and Ringo were irreverent, colorful, work-

*Photo: George Martin working out a tune with a few familiar-looking faces during the Help! sessions.*

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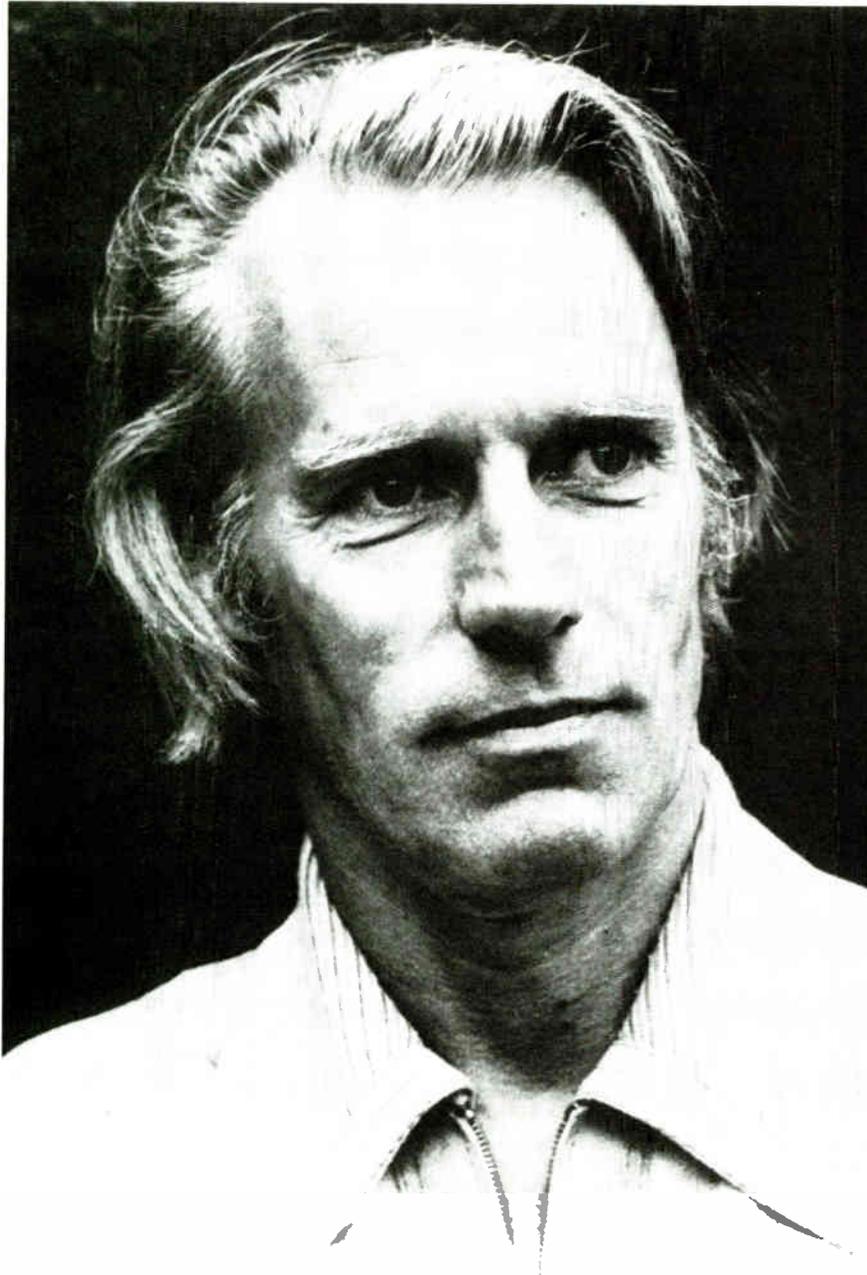
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George Martin

ing-class street urchins from the provinces who had taught themselves how to sing and play, mainly by patiently copying American imports and then playing endless gigs in smoky clubs such as The Cavern at home in Liverpool, and The Star Club in a seedy area of Hamburg—clubs they later made world-famous by association.

Unlikely as it seems, Martin and The Beatles not only hit it off—"I fell in love with them," recalls the producer—but went on to make history together. From the first session for "Love Me Do" on September 11, 1962 ("I used a session player on drums instead of Ringo to save time," says Martin), through the triumphs of *A Hard Day's Night*, *Sgt.*

*Pepper's Lonely Hearts Club Band* and the double *White Album*, through to the last, sad chords of *Let It Be*, the band's final release in May, 1970, producer George Martin guided, oversaw and occasionally played on all The Beatles' releases.

And now, a quarter of a century after that first session, Martin is still overseeing the group's recorded output, as The Beatles finally enter the CD age. February 26th saw the release of the band's first four albums—*Please Please Me*, *With The Beatles*, *A Hard Day's Night* and *Beatles For Sale*—in their original British formats on compact disc. This represents the first installment in the comprehensive reissue

sue of The Beatles' entire catalog on compact disc, as Martin and EMI Music work chronologically through every album and track ever recorded by the Fab Four. And by the end of the year, it is expected that all 13 of the original albums will be available to old and new fans alike.

"It's exciting for all of us, because no matter how big a fan of The Beatles you've been since the very beginning, this will probably be the very first time you'll hear their music sounding as fresh and vital as it did when I recorded it," Martin says. "CDs will introduce The Beatles to whole new generations of music lovers."

*How involved have you been in The Beatles' CDs?*

Well, at the beginning, not at all. It was only when Rupert Perry, managing director at EMI Records, asked me to listen to what had been done last December regarding the issue of stereo versions of The Beatles' records on CD, that I became involved.

*What happened?*

Basically, I just didn't like what I heard, and I told him so. It was then that he and Bhaskar Menon, chairman of EMI, asked me to help.

*What didn't you like?*

The main objection I had was that they were going to release those awful, so-called "stereo" mixes which have been the bane of my life for the past 20 years and more, and which have perpetuated this kind of myth that I recorded all their early records in stereo. The truth is that all those first recordings were done in mono. They were *not* stereo, and were never intended to be stereo mixes.

*How did you make those early records?*

Back then, the only machines available were either mono or very basic stereo recorders which were used for the classical recordings. So for those first albums, *Please Please Me* and *With The Beatles*, I recorded all the tracks in mono and then used one of the stereo machines as a twin-track, separating it so that all the instrumental rhythm tracks were on one side, and all the vocals were on the other. Now I did this only in order to keep them separate, not to try and create a "stereo" sound. And the reason was that later when I had a bit more time, because we recorded very quickly in those days—the whole of *Please Please Me* was done in a single day—I could sit down and merge the two with some compression and get really clear vocal sounds at the same time as getting

a really hard-hitting rock sound. So it was a working method that both saved time and gave me a better sounding record.

*So how did the myth of stereo arise?*

Some time later, some idiot got hold of these twin-tracks and said, "Aha! Stereo!" and then proceeded to issue them with all the instrumental tracks on one side, all the vocals on the other, and then all the dirt in between. And that was something I had *nothing* to do with, nor did any of The Beatles themselves. And for years people have thought that's what I really did and I've had to live with that. So when EMI were going to go ahead and put out the first two albums on CD with admittedly cleaned-up versions of those early mock-stereo mixes, I protested.

*You obviously feel very strongly about the original mono productions.*

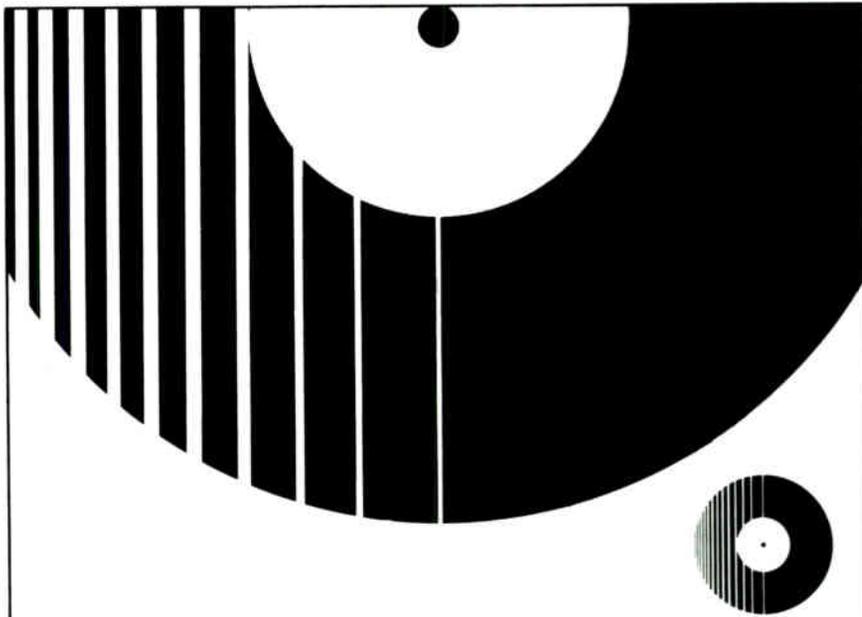
Yes, because those mono recordings were the authentic productions of those days, and they should be kept authentic. That's why when Rupert Perry and Bhaskar Menon listened to what I had to say about the CDs, I was pleased they agreed and said, "Okay. We'll issue the first four Beatles albums in the original mono form. Now this may not excite a lot of people who think all CDs should automatically be in state-of-the-art stereo, but my answer to that is, "Do you expect to hear Fats Waller or Billie Holiday in glowing stereo?" Of course not.

*What about subsequent albums, such as Help, Rubber Soul, Revolver and of course Sgt. Pepper's?*

Well, in fact *A Hard Day's Night* and *Beatles For Sale* did have an elementary form of stereo, which naturally got better and better as we went on. And I've become more and more involved in the project as we've moved on to the later albums. For the first four, it was really a matter of advice—I didn't have anything to do with remixing the tracks or EQing them. But having done that, Rupert Perry asked me to help out with the rest of them, and when I heard the transfers for *Help*, *Revolver* and *Rubber Soul*, I just didn't think they were very good and could have been cleaned up a lot. *Help* in particular sounded pretty terrible in stereo I thought. So I sat down with the original 4-tracks and found there were things that could be transferred to CD much more effectively.

It's always surprising how you suddenly start hearing so much more on CD—stuff like distortion and all sorts of imperfections you didn't hear on the original tracks. Anyway, I ended

—CONTINUED ON PAGE 192



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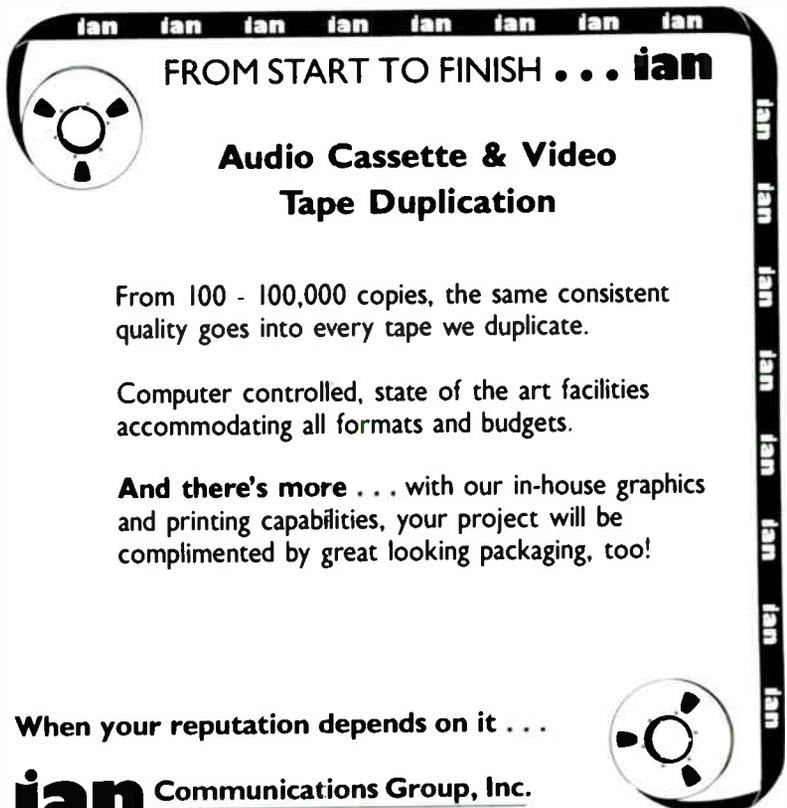
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# DIVERSIFICATION

## NORTHEAST STUDIOS ADD SPICE TO THE RECORDING LIFE



(Photo above) Sonic Images; Washington, D.C.

(Right) Cove City (Studio C); Long Island, New York

by Linda Jacobson

Mix recently discussed the topic of diversification with several studios—some new, some established—in the Northeast U.S. It seems that everyone has diversified successfully (or plans to) in one way or another—either in focus, such as going from album recording to commercial scoring, or in service, such as adding mastering or duping. Yet some studios admit to trying changes that didn't work out. Others say they're better off leaving some things up to the other guy. Why make your accountant complain that the studio is a bottomless pit?

Though it's evident that changing economics and technology most often force studios to widen their horizons,

"If you're going to stay in the business, you have to change with it. Especially when you get hit in the face with the fact that over half of your music is being done electronically in programming rooms. It doesn't require a lot of wisdom to judge whether you want to stay with that half or ignore it. But if you ignore it, your recording business is going to shrink."

—Lou Vetter, Blank Tapes, New York City



PHOTO: JIM CASSIDY

sometimes diversification is simply the result of a little luck, and lots of hard work.

### Serendipity Strikes

Kajem Studios was the first in the Philadelphia area to own a 48-track, SSL facility. Sam Moses, one of Kajem's four co-owners, says that they started out ten years ago specializing in rock/soul album recording. "At this point, we've predominantly done independent and major label work. The facility is a large ambient space that attracts the rockers. We recently expanded the control room to fit in drum

machines and keyboards, and also purchased a Yamaha 7-foot 4-inch grand piano to record classical music, big band, as well as pop, rock and soul.

"We're doing other things now. The thing is, all four of us have different strengths and interests, from engineering to producing, writing and playing. Because of that, we moved into different areas. What it comes down to is necessity: all four of us couldn't be in the studio engineering at the same time. What occurred to us was opening a commercial division; one or two of us could get a production together off-line, then go in and use the facility.

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ard distribution amplifier, as six separate amplifiers, or any combination of both. And the suggested list price is just \$349.

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For the past six years, we've had an in-house production company, Adio Productions, doing jingles and A/V soundtracks.

"We used to be able to write and produce jingles in the morning, then do album work all night," continues Moses. "But we've been steadily busy, and we can't get into our own studio anymore to do commercial stuff, we can only work with industrial music accounts in the evening. So what we're doing now is taking on another partner whose background is in commercial work, Wally Hayman. We're opening another recording facility around May, a new 24-track, all ready for on-line video, in the city proper. There we'll be doing broadcast audio, audio-for-video, geared just towards servicing the advertising agency and independent musical account. I guess that's kind of anti-diversification!"

When Ed Eastridge and his partner John Sprung, musicians and music store co-owners, began work on Big Mo in 1982, they did it mostly for their own projects, "and in the back of our minds thought we might make money with it." They built Big Mo's console and much of its gear from scratch to suit remote recording applications. Two years ago, Eastridge and Sprung started offering their dual 24-track rolling facility for concert recording of album projects throughout the Washington area. "We recorded the Kennedy Center show of the Seldom Scene for an album which will be out this summer," says Eastridge. "We do quite a bit of gospel recording, because when you have a 150-voice choir the only way you can record it is in a church or auditorium.

"We're set up to handle audio-for-video, which was part of our plan. But we didn't start until a local video company called us for 24-track sound that they could mix later on. They sent us time code over an audio line, we striped it onto tape, mixed it in the truck, then sent them a 2-track. When we're not on location, we park the truck next to a building where we own a small MIDI studio, and run snakes from the truck into the room. Because of this setup, six months ago we got into in-house music productions for jingles and films. John Griffith, who has a music production company, worked at a studio that went out of business. He asked if he could use the MIDI room and the truck to do jingles. John composes in the room with his Emulator, then we bring the Emulator to the truck, lay down drum tracks and time code, then sync it to sequencers and synths and record the whole orchestration.

"I didn't renew the lease on the

building," continues Eastridge, "so I've set up Big Mo as a MIDI and sampling studio, and rented parking space next to a rehearsal studio. I'm building cabinets in the truck for the computers, keyboard controllers and sampling gear, and I'm also getting the Hybrid Arts ADAP Soundrack and an Atari 1040ST. I'm also working on something else—talking to some people who are planning to build a 32-track digital studio nearby about a limited partnership. They'd have access to Big Mo and Big Mo would have access to their multi-tracks."

In business for 12 years, Normandy Sound of Warren, RI is a recording retreat two blocks from scenic Narragansett Bay, and 45 minutes from downtown Boston. According to co-owner/manager Ogden Fell, Normandy records "the upper echelon of Boston/New England/regional music artists, as well as major label business from all over." Last year, due to client demand, and being the right place at the right time, the studio moved from 24-track recording to a 48-track, SSL 4000E setup.

Thanks to their quality work, Scotti Brothers Records—the label of long-time Normandy client John Cafferty & the Beaver Brown Band—and some successful, speculative local band recording, Normandy has branched from its early album/demo focus into live radio broadcasts and cutting music for several movie soundtracks. "When we opened," says Fell, "it was to record local music. We had an 8-track facility, which wasn't a problem in 1975. We started with a reputation for being a studio that recorded top drummers, such as Billy Cobham and Steve Smith. Moving into radio came as kind of a surprise, only because we weren't doing it as a regular course of business. For instance, Is, Inc. flew in from California to do a live, nationally broadcast radio interview with John Cafferty. For the *King Biscuit Radio Hour*, we cleaned up tapes recorded at his concerts, and made a half-hour program. Scotti Brothers does a lot of films; about 18 months ago, Normandy produced a local band, and provided tapes to Scotti Brothers, who used them on the *Transformers* movie.

"Now we want to expand on what we have a foothold in. We're going to build a second room, an overdub/mixing room for records, radio, film scores. Because of our location, we have a lower overhead than a Manhattan or Hollywood studio, and we can put up the band at no extra charge because we have a full-efficiency apartment that sleeps eight."

When 39th Street Recording opened in Manhattan seven years ago, the



owners had every intention of serving both record and commercial music clients. A year ago their 24-track facility underwent complete acoustic and equipment renovation, which, reports studio manager Roxanne Schramm, "has really done wonders for business." The new room contains a 48-input

SSL 4000E and a synth station, complete with sequencers, Macintosh, and IBM computers.

Schramm explains, "we do a good blend of album recording, TV jingles, and film scoring. We'd love to do album projects at night and jingles in the day time. Ashford & Simpson do

all their basic tracking and some mixing here. We've also recently worked with Stacy Lattisaw, Natalie Cole—we got to be known largely as an R&B room before the renovation, and people still remember that, so we want to get the word out that we can really expand our range.

"Our next plan is to set up a separate MIDI pre-production room, hopefully this year. It will open up another area of business for us. That's just the way people are working these days. In the next few years, we'll probably develop the video area, but the recording end has really taken off, so we want to hone what we have now, and maximize the potential of our equipment."

Rawlston Charles, who owns and manages Rawlston Recording in downtown Brooklyn (close to the Brooklyn Bridge and downtown Manhattan), takes a relaxed approach to diversification. Business is fine, in part because it was the first "state-of-the-art" studio in the borough. It helps that they own the building they're in. Rawlston can afford to concentrate solely on albums, and in just three years of existence has handled projects by The Fat Boys, Kurtis Blow, Whodini, and many oth-

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ers. Since a good portion of his equipment equity lies in MIDI gear, Charles says, "I'm looking into setting up a MIDI room, possibly this year. There's a great demand for it. I'll put in a Macintosh computer and build a whole new room. If the business comes in the way it has been, then we'll do it.

"The thing is," Charles comments, "Manhattan is the mainstream of the industry, and it takes a little while for people to decide yes, let's go into Brooklyn. A lot of people who've come, though, I actually didn't expect to come this fast. We have the right price because of where we are, and we're very flexible with it, so it's all coming off pretty fine."

### Planned Non-Obsolescence

The 48-track Quad Recording complex in Manhattan opened in 1983, to focus on dance and pop music recording. Today, with three SSL boards and video playback/lock-up, Quad is also into film scoring and audio-for-video music. Studio owner Lou Gonzales says, "In February, we opened a new audio-for-video room, which has an SSL 6000 interfaced with an Adams-Smith synchronization system, two 24-track machines and mixdown for film or stereo video.

"It used to be the artist would do the music first, then get a record deal, then shoot the video, which meant we'd never see the post-production

because they'd shoot video to a song we had already mixed, and go someplace else to sync up the sound. Now they can do it here. Also, it's becoming important to have good audio for musical film scores, so we're getting 3/4-inch video cassette copies of films and doing audio laybacks."

Adds Gonzales, "I'm going to put in a MIDI facility; I finally succumbed to this MIDI craze. Because people who can play real instruments are fast fading from the scene. I still have one of the few rooms in town where you can do a session with 22 musicians, real live people playing. And I'm looking for a 64-input SSL, with 32-track digital recording. *That's what's happening.*"

In 1975 brothers Lou and Richie Vetter opened Blank Tapes in downtown Manhattan. They intended to produce and record their own projects, but almost immediately began renting the facility, "after we found out how easy it was to run a recording studio," says Lou Vetter. "Then we got into music publishing, song demos, some records, but we became too busy running the studio and our own work took a back seat." Last year, their commercial projects ranged from "cars, beer, soap" to movie soundtracks. Music clients included Ronnie Spector, Ashford & Simpson and Cher. Using Blank Tapes as home base, the Vetters' East Coast Productions shot and produced the music video for the Broadway show *Mystery of Edwin Drood* and recorded the *Cats* video soundtrack.

Blank's newly redesigned Studio A opened in November with a dual 24-track digital setup and 56-input SSL 6000E, "the preferred console these days with my clients—I don't prefer to buy all these expensive things, that's for sure," says Lou Vetter. "We sell hot dogs and hamburgers; we've diversified completely. You no longer can sit as just a recording studio. If you stay active, you become involved with the business today, which is sight and sound. If anyone were opening a studio today, I'm sure they would open up as a major audio-for-video and film studio, and then diversify into records on the weekends."

Last summer, Blank Tapes changed Studio B, their 24-track mixing room, to a programming room, having bought a Synclavier, TX racks, drum machines, and a Roland Jupiter, among other MIDI gear, and integrated it with the other rooms. "Putting in a control room 12 years ago cost about \$30,000, now it costs half a million to a million dollars," Vetter says. "With the studio rates and record budgets out there, and records being done electronically in the home, the only way to survive is

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to get into jingles, commercial video, broadcast and video work, film scoring, where the rates can at least hold up to all the studio costs."

Dynamic Recording of Rochester, NY, celebrates a decade in business this year. In 1977, the owner was a member of a successful local rock band and started a small basement studio. That soon developed into a separate 8-track, then 16-track, facility, devoted to album and demo recording. Dynamic just moved up to 24-track recording, built an isolated drum booth, bought a Roland digital piano and Simmons drum kit, and installed a new Trident console. And in February, they added a "Do-It-Yourself Studio" with 4-, 8-, and direct-to-digital 2-track, where you can record and engineer for ten to 20 bucks an hour.

Phyllis Bishop, studio manager, says "we're all musicians and songwriters working here, and we want to do mostly music. It's a struggle in this area, and that's one reason why we opened the Do-It-Yourself studio. We had competition from the little 4-trackers, the basement and garage studios, so we thought we could compete with them by offering a good price and more sophisticated equipment than most people have at home. We've installed a 20-input Ramsa board that's really easy to use, and are purchasing a 16-track Otari for that room. It also has a Passport MIDI music system and a Commodore computer, MIDI'd to a Juno 106."

Dynamic records all kinds of music, from an internationally famous Turkish band to local rock, jazz, classical, and country music. Bishop says, "We want to attract clients from outside of Rochester, and feel we can because of our facility and rates. We're also exploring doing commercial accounts. But we really want to do music. As idealistic as it may sound, we're dedicated to getting a hit song. We have a small publishing outfit here, and we've started a series of free seminars for songwriters and musicians. The seminars include a live 24-track recording session with studio musicians, and a do-it-yourself demo. We plan to hold seminars on every phase of the industry, and invite in guest speakers. We want to help educate the public about the recording business."

Power Play Studios was an 8-track place when it opened six years ago, located in Long Island City right near the 59th Street ("Feeling Groovy") Bridge. This year the studio opened a studio annex down the block, and installed 48 tracks, an SSL 4000E, digital mixdown, and SMPTE lock-up, along with a new MIDI room. Says owner Gary Salzman, "I've been here



*Rawlston Recording; Brooklyn, NY*

3½ years now, and the thing then was to get the place happening. We were starting fresh." Instead of moving laterally into other services or commercial clients, Power Play has moved from small local album/demo jobs up to bigger budget music clients. "We first set up a 24-track studio and got into the rap industry, and went for the dance market in the next room, where we had a Number One dance record. Then R&B and pop came in and we picked up Skip Worth & Turner, Stanley Turrentine and lots of dance remixes. We got people we didn't expect, because of our location, prices

and talented in-house people. You can park here, and we have a big MIDI room with *everything* in it.

"We like making records; it's a business of passion," observes Salzman. "I have no yearning to do jingles. I'd like to do music for film and video, and we'll be able to do that in the new SSL facility. But the major concern for us will be doing big pop records."

In answer to the suggestion that top-flight studios can't survive on album projects alone, Salzman responds: "Untrue, that's all we do, and we built a whole new 48-track complex off of what we've been doing in just three rooms." However, Power Play did recently establish an in-house production company and independent label

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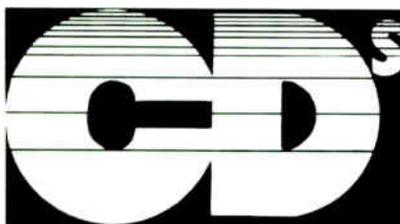
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this year, 30th Street Records, and released its first rap record. Next, the studio plans to install a mastering lab, and are looking into the overseas market, helping acts to shop for record licenses.

Sonic Images Productions opened in Washington DC six years ago, hoping to concentrate on music scoring for film. However, they've branched into complete media production, including music composition and production, audio-for-video and film, radio broadcasts and straight-ahead video direction and production of commercials and PR pieces. So the owners sold their facility and built a new one, a 24-track live-end, dead-end, audio-for-video room. Sonic Images can take a client from score composition (using their Kurzweil/MIDI facility) to mixing and off-line, digital video editing complete with character generation.

According to owner/manager John Ramo, "Washington is a media town, so there's a lot of scoring for media. There's a lot of institutional work, too—we just finished a Smithsonian production, where we wrote the music, produced all audio, and handled the scoring and audio mixing. About 30% of our work now is creating and mixing audio for video. That's becoming a boom industry, as people get hip to stereo television. Essentially, though, the mid-Atlantic market is public relations, advertising and documentary work, and we're getting into some feature film projects.

"Diversification is very important. We've set up Sonic Images for that in terms of different profit centers: the video edit suite, 'creative video' or 'creative music,' radio production and music scoring/audio-for-video. Our next plan to diversify is in the area of interactive compact discs. We're negotiating an agreement with American Interactive Media to become a title developer—creating and producing CD-I programming—and distributor. We're exploring market share to see if it will justify the tremendous capital expense, but we hope to be on-line in 12 to 18 months. It depends how fast the workstations come along."

Washington DC's Soundwave, Inc., is a seven-year-old, 24-track audio production facility that recently experienced major remodeling and the addition of their fifth studio, a Chips Davis/LEDE design. Jim Harmon, the facility's founder and president, feels the expansion will open new markets and opportunities for them. "From Day One we wanted to attract and cater to industrial/corporate/commercial clients, and that's where we are. But we have diversified by quadrupling our services in response to client needs. This isn't Nashville or NY. You can't

make much, if any, money in the music recording studio business. You've got to have music libraries, sound effects, high-speed cassette dubbing, automated mixing, you have to do audio-for-video and transfers. We do all that.

"We're committed to the audio and post-production business, so nine months ago we opened a subsidiary, Wave Works. There's been a big increase in business for that; it's our music company/design side, and we do many scores for video, slide shows and multi-media. Our in-house composer uses all digital gear and produces from scratch."

While now handling the audio portion of video projects, Harmon is exploring the viability of installing an off-line video edit suite. He says, "We have a terrific client base here. Our audio-for-video rates are about half of what New York charges, and that's a function of this market. So I hope to see new markets now, from outside the Washington area."

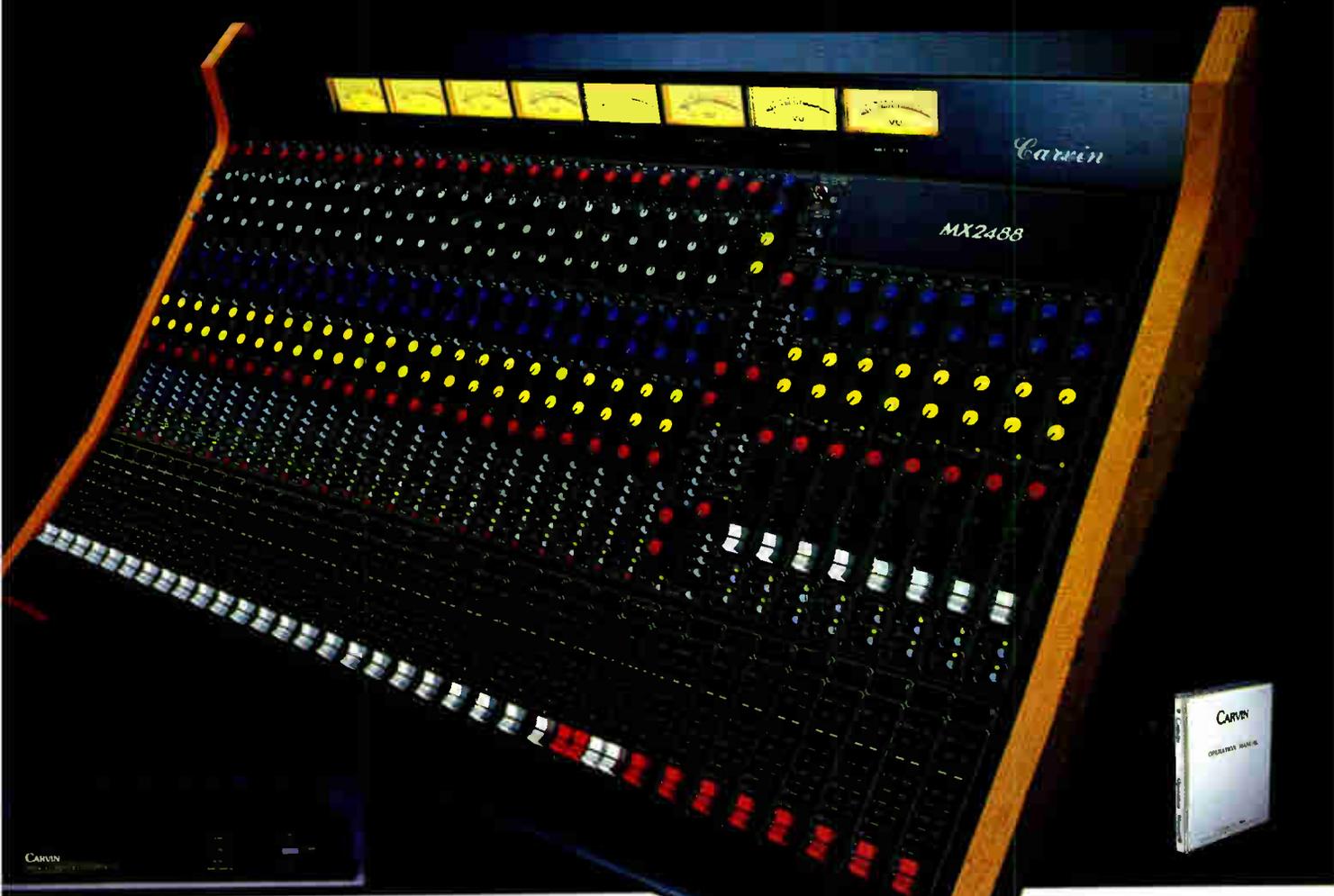
Omega Studio moved a couple of years ago, from 3,500 square feet of studio into a 12,000-square-foot, dual 24-track complex in Rockville, MD. Next year is their 20th anniversary. Omega owner Bob Yesbek used to have dreams of having a multi-studio complex: "We're getting there. We opened up to do albums and jingles and local recording, whoever wanted to use us. Then regular clients started to call and say 'we did a film and have a workprint on 3/4-inch video and we need to lock!' So when we moved, the ability to score to picture was the biggest priority. That's the sort of thing I really hadn't thought of, but then 20 years ago nobody thought we'd be marrying audio to video.

"We tried mass duplication once," he continues. "We had the high-speed cassette and reel-to-reel duplicators, and it was a terrible waste because there was enough work for us to use the machines, but not enough to hire a couple of employees to operate them. We wound up with engineers, who had been recording for 12 hours, running duplicators and going crazy. So we got rid of all that stuff and just give our clients metal cassette copies to take home. We tried mastering, too, and we cut a whole lot of record acetates, very few masters. Those things have got to be running all the time. We finally said, 'This is a *pain*.' We did maybe 20 grand a year on it, but you've got to pay somebody to do it, that doesn't include parts and maintenance."

Now in the process of setting up a MIDI/pre-production room, Yesbek says, "Ten years ago I made changes due to to my own vision, but now it's client demand. I didn't buy the darn

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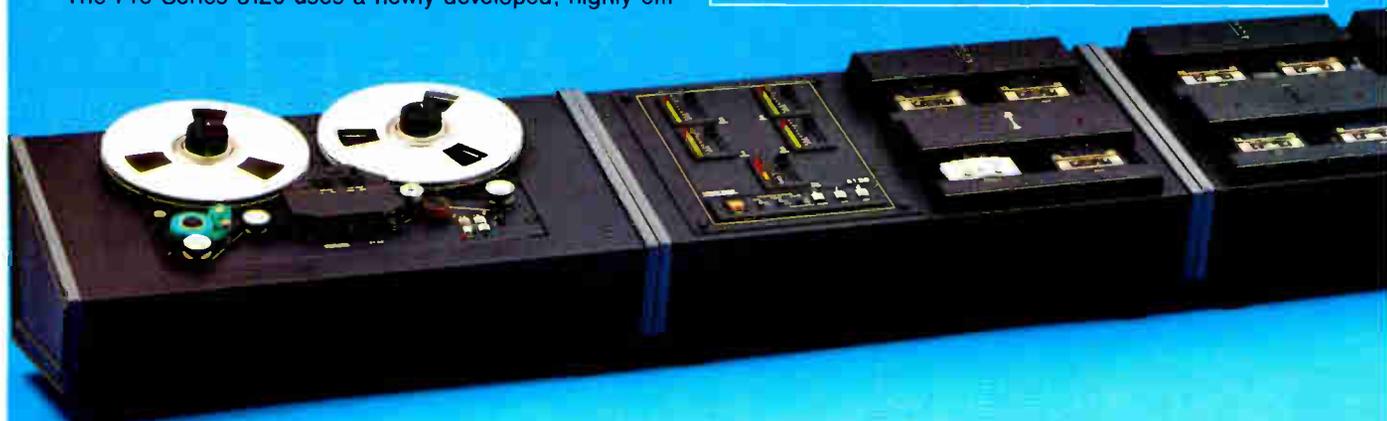
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duplicators because of client demand, I bought them because I wanted to supply everything and I got greedy and ended up having to sell the things. Everything else I bought were things the clients wanted, like the synthesizers and the Audio Kinetics Eclipse System.

"I would love to go into laser mastering for CD. I don't see that happening for four to five years. Here I am projecting when I might be dead in four to five years. If the mastering doesn't kill me, the recording will. But we have to think ahead, try to stay ahead of everybody else, so we can justify our size and being in Washington."

Diversification is the name of the game for Warren Wilson, president and chief engineer of Forge Recording near Philadelphia. He says, "We started out in 1971 in radio program production and syndication, which is our bread and butter. Then we moved into reel-to-reel duplication for radio programs, and over the years we kept adding: we did some commercials and jingles, then went into location recording and sound reinforcement, music recording and audio production for A/Vs. Then we got into cassette duplication, followed by blank cassette loading, then custom cassette label printing, then video duplication. We also got involved in sales and service of audio gear for our clients, who are mostly schools, churches and institutions. Then we upgraded the studio, from 8-track to the first digital 24-track studio in a five-state area.

"Watching the market, and client demand, led to every new thing we took on," Wilson notes. "For instance, in our early days, cassettes were starting to become popular among our radio programs, to carry a message. We didn't want our clients going somewhere to have cassettes made with our masters. It was the same thing with the digital multi-track recording. R-DAT is probably next. If a customer has to go somewhere else for R-DAT duplication, he'll go there and that place will be able to do the whole job for him. So if I want to keep that customer, I better service his needs.

"Over the years, diversification has been life-line support for us. Just when things got bad in one area, other areas were doing all right and kept food on the table. If it weren't for diversifying, we'd have had some hard times and maybe wouldn't have survived."

### New Studios Prepare for the Future

Platinum Island grew from 8- to 24-track in 1986 (its first year of operation), with a little help from a corporate friend. Located in downtown Manhat-

tan, the facility opened its Studio 1 last June, and by 1988 will open Studio 2, an SSL room with AMS sampling, delay and reverb. Owner Richie Kessler believes that to succeed in the '80s, a studio "must offer an increasingly higher level of technology for a lower price than people paid for it last year. We need to be a very good deal for what we're charging, which means making smart equipment choices. For example, it used to be with SSL studios, if you had to ask the price, you couldn't afford it. We got our console used and paid less, so I can live with a rate that's lower than the other guys can live with.

"These days, all the projects in town are very cost-conscious and they spread the work out," notes Kessler. "So we're doing OK, recording pop, rock and dance albums for all the

major labels. The space we fill for them is basic tracking, overdubs, and mixing. They're checking us out for lock-out time on the SSL room. Now we're considering turning one office into a MIDI/programming room, and we might bring in a Synclavier this year.

"With the cost of all gear coming down, and high-end gear showing up in consumer form, people can put together a pretty decent home studio. That's affected the demo market, and created low-end and high-end markets. For me to be successful on the high end, I have to give value for dollars that beats what others are offering. Not work on an actual, rigid price structure. I'm taking long- and short-term views on a return, and I'm looking for volume, not for higher return on a lesser volume."

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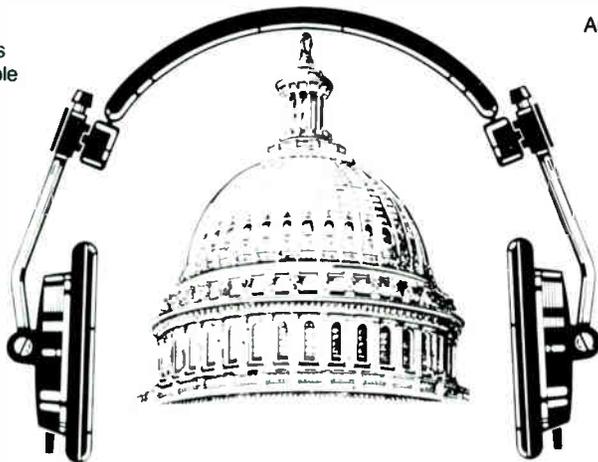
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Cove, Long Island, belongs to veteran studio owner Clay (Kingdom Sound) Hutchinson and musician/producer Richie Cannata (Billy Joel, Elton John). Says Hutchinson, who's recorded such chart toppers as Joan Jett and Blue Oyster Cult, "The very fact that people see diversification in the business means that the market is wide open for anybody who does it well. Because of all the new technology, there's plenty of room to be successful in any direction you take, whether it's commercial or linking to video or MIDI or recording, even doing many different things in the same studio."

Nevertheless, instead of keeping their arms wide open to whoever wants Cove City time, Hutchinson and Cannata have specifically dedicated their studio to recording what they call "the meat and potatoes"—from rhythm tracks to overdubs. "We make suggestions to our clients as to where they can mix," Hutchinson says. "About 15% of our work is corporate, usually local, low-budget situations, but mostly it's rock, pop and heavy metal recording. We've taken two groups from demos up to the signed stage, and we just began recording basic tracks on the new Twisted Sister record. We produce, also, and just established Covert Records, a dance record label with independent distribution.

"Six months ago, we also opened Studio B, which is set up as a MIDI pre-production room with a Macintosh, Yamaha QX1, samplers, all the MIDI stuff and tape machines. What we're working on now is putting in a mix room, with a Neve V Series or SSL board. Our overhead is low here, we got our equipment at a good rate, and we own everything outright. So we're doing fine."

Recording Arts is NY's newest 48-track studio, located in West Hempstead, Long Island. The 5,000-square-foot main room contains lighting for video/film, an 18-foot ceiling, and an iso drum room with a chrome ceiling. Studio manager Joseph Estades says, "We have a natural live chamber, and emphasize using natural reverb. We have SMPTE lock-up, and the MCI board from Criteria, customized by Jeep Harned.

"We didn't open in Manhattan," continues Estades, "because we could have so much space out here. We opened with the intention of going in any direction with the facility, but the owner's forte is rock and roll. Then I came in, and my forte is video, so we're offering the studio for long-term video productions, as well as music. We even offer 35mm still photography.

—CONTINUED ON PAGE 191

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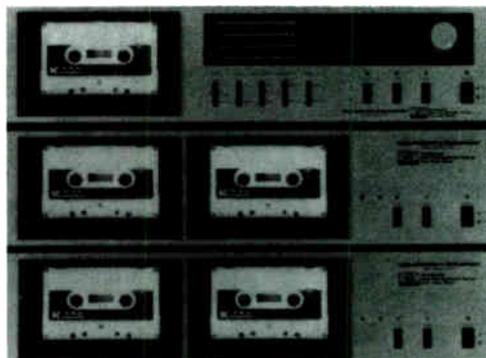


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Automated Sound Studios, New York, NY	(212) 869-8520	Rawlston Recording, New York, NY	(718) 622-0010
Bearsville Studios, Bearsville, NY	(914) 679-7303	RCA Recording Studios, New York, NY	(212) 930-4000
Betelgeuse Productions, New York, NY	(212) 213-1333	Record Plant Studios, New York, NY	(212) 581-6505
The Big Apple, New York, NY	(212) 226-4278	Reeves Teletape, New York, NY	(212) 573-8888
Blue Rock Studios, New York, NY	(212) 925-2155	RPM Sound, New York, NY	(212) 242-2100
Michael Bona Studios, Garden City, NY	(516) 489-6177	Sabella Sound, Roslyn Heights, NY	(516) 484-0862
Boogie Hotel, Port Jefferson, NY	(516) 473-6655	Sound Ideas, New York, NY	(212) 869-2666
Caesar Video, New York, NY	(212) 684-7673	Sound One, New York, NY	(212) 765-4757
Charlex, Inc., New York, NY	(212) 719-4600	Sterling Sound, New York, NY	(212) 757-8519
Cinemix, New York, NY	(212) 869-0100	Super Dupe Productions, New York, NY	(212) 683-6854
Chung King Recording, New York, NY	(212) 219-0405	Teletronics, New York, NY	(212) 355-1600
Clinton Recording, New York, NY	(212) 246-2444	Telstar Editing, New York, NY	(212) 246-6238
db Sound Studios, New York, NY	(212) 575-5082	Tulchin Productions, New York, NY	(212) 986-8270
East Side Film & Video, New York, NY	(212) 867-0730	TVC Video, New York, NY	(212) 599-1616
Eastman Kodak Company, Rochester, NY	(716) 325-2000	Unique Recording, New York, NY	(212) 921-1711
Electric Lady Studios, New York, NY	(212) 677-4700	Windsor Total Video, New York, NY	(212) 725-8080
Gateway Productions, New York, NY	(212) 286-0770		
Glen Cove Recording, Glen Cove, NY	(516) 759-9110	<b>New Jersey</b>	
GRP Records, New York, NY	(212) 245-7033	Grand Slam Studios, West Orange, NJ	(201) 753-3087
Home Box Office, New York, NY	(212) 484-1000	SRP Studios, Inc., South Plainfield, NJ	(201) 753-0444
The Hit Factory, New York, NY	(212) 664-1000	RCA, Camden, NJ	(609) 963-8000
Image Mix, New York, NY	(212) 752-3462	Van Gelder Recording, Englewood Cliffs, NJ	(201) 567-4145
Intergalactic Studios, New York, NY	(212) 757-9073		
JPC Video, New York, NY	(212) 223-0555	<b>Connecticut</b>	
Magno Sound, New York, NY	(212) 757-8855	Connecticut Recording, Bridgeport, CT	(203) 366-9168
Masterdisk, New York, NY	(212) 541-5022	The New Music Group, Stamford, CT	(203) 322-6992
Matrix Video, New York, NY	(212) 265-8500	The Sandbox, Fairfield County, CT	(212) 757-0110
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Messina Music, New York, NY	(212) 541-6677		
Mix Place, New York, NY	(212) 759-8311	<b>Additional Areas</b>	
MPCS Video, New York, NY	(212) 586-3690	White Crow Audio, Burlington, VT	(802) 658-6475
Multivideo, New York, NY	(212) 986-1577	Cinema Sound, West Roxbury, MA	(617) 327-6500
New York Sound, New York, NY	(212) 688-3167	Soundtrack Recording, Boston, MA	(617) 367-6500
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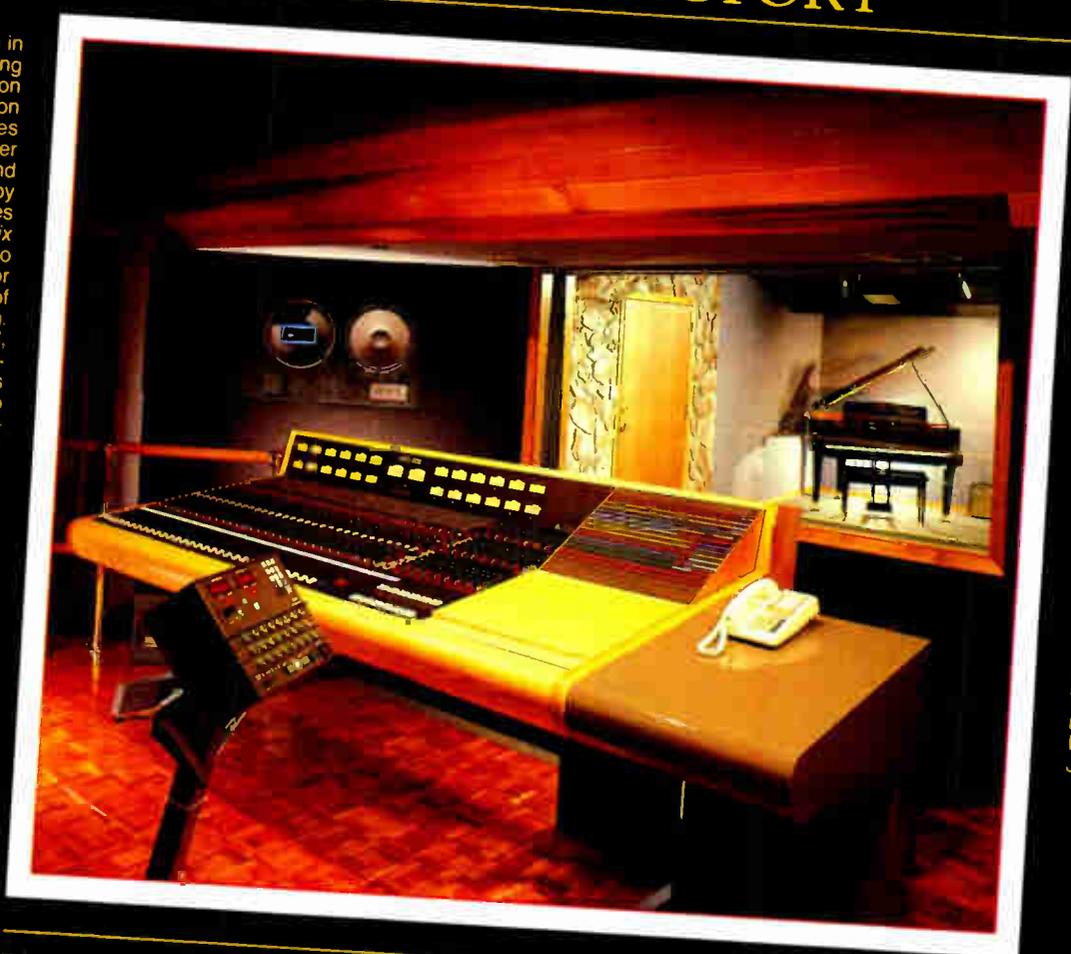
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# NORTHEAST

## STUDIO DIRECTORY

Information in the following directory section is based on questionnaires mailed earlier this year and was supplied by those facilities listed. *Mix* claims no responsibility for the accuracy of this information. Personnel, equipment, locations and rates may change, so please verify critical information with the companies directly.



Starmix Recording Studios, Ltd., Long Island's newest master quality 24-track recording facility. Located in the Coventry Professional Plaza, the studio was designed in consultation with Vin Gizzi, of Benchmark Assoc., and Gene Perry of Audio Techniques. At the heart of the control room is a Trident Series 80 B console complemented by a Sony/MCI JH-24 24-track recorder and UREI 813-C "Time Aligned" monitors. Photo by Jim Lennon

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*Mix* listings procedure: Every month, *Mix* mails questionnaires to recording studios and/or other vital facilities and services for the recording, sound and video production industries. Basic listings (name, address, contact) are provided free of charge. Extended listings (equipment, credits, specialization), and photographs or company logos may be included at a nominal charge. If you would like to be listed in a *Mix* Directory, write or call the *Mix* Directories Department, 2608 Ninth Street, Berkeley, CA 94710, (415) 843-7901.

#### Upcoming Directory Deadlines:

- Studio Designers and Suppliers: **May 1, 1987**
- Southern California/Hawaiian Studios: **June 3, 1987**
- AES/New Products: **July 2, 1987**
- North Central Studios: **August 3, 1987**

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(315) 255-1743  
Owner: Cayuga County  
Studio Manager: Coordinator Telecommunications Dept

[8] CEDARBROOK RECORDING  
21 Central Ave.  
Sicklerville, NJ 08081  
(609) 728-3843  
Owner: Brian McMahon  
Studio Manager: Patricia McMahon

[8] CELERON PRODUCTIONS, MUSIC FOR MEDIA  
also REMOTE RECORDING  
550 Celeron St.  
Pittsburgh, PA 15221  
(412) 242-5258  
Owner: Steven Sciuilli  
Studio Manager: Karen Fullerton

[8] CHANNELL ONE VIDEO  
also REMOTE RECORDING  
PO Box 1437  
Seabrook, NH 03874  
(603) 474-5046  
Owner: Bill Channell

[8] THE CHARM CITY WORKSHOP INC.  
also REMOTE RECORDING  
3710 W. Garrison Ave.  
Baltimore, MD 21215  
(301) 644-9160  
(301) 466-5648  
Owner: Rayner L. Chance  
Studio Manager: Lawrence T. James

[8] CHELONIAN MUSIC  
51 W. 81st St.  
New York, NY  
(212) 362-3386  
Owner: Gregory L. Neu  
Studio Manager: Gregory L. Neu

[4] CHEMEL MUSIC STUDIO  
44 Chadwick Rd.  
White Plains, NY 10604  
(914) 948-5811  
Owner: Chet Soares  
Studio Manager: Chet Soares

[8] CHERRY SOUND STUDIO, INC.  
also REMOTE RECORDING  
132 N. 3rd St.  
Philadelphia, PA 19106  
(215) 922-3975  
Owner: Bob Cohen  
Studio Manager: Bob Cohen

[8] CHRYSTALLINE ACOUSTICS  
also REMOTE RECORDING  
128 E. State St.  
Media, PA 19063  
(215) 566-8532  
Owner: Glenn Short  
Studio Manager: Glenn Short

[8] CINEMA SOUND LTD.  
also REMOTE RECORDING  
311 W. 75th St.  
New York, NY 10023  
(212) 799-4800  
Owner: Joan S. Franklin  
Studio Manager: Joan S. Franklin

[4] CITY POINT RECORDINGS  
also REMOTE RECORDING  
(203) 787-3938  
Owner: Brent Evans  
Studio Manager: Brent Evans

[8] CITY SOUND PRODUCTIONS  
39 E. 7th St., #2  
New York, NY 10003  
(212) 228-9494  
Owner: Bob Kirschner  
Studio Manager: Bob Kirschner

[4] CHARLES W. CLARK, JR.; AUDIO SERVICES  
only REMOTE RECORDING  
20 Ritchie Dr.  
Bear, DE 19701  
(302) 322-0767  
Owner: Charles Clark  
Studio Manager: Charles Clark

[4] CMM ADVERTISING and AUDIO SERVICES  
2175 Allen St.  
Rahway, NJ 07065  
(201) 574-8984  
Owner: Russ Painter

[8] THE COMMERCIAL REFINERY, INC.  
also REMOTE RECORDING  
2105 Maryland Ave.  
Baltimore, MD 21218  
(301) 685-8500  
Owner: John Contino, Wayne Gruehn, Michael Collins  
Studio Manager: Pat Contino

**[4] COMPLEX ONE RECORDING STUDIOS**  
*also REMOTE RECORDING*  
 960 Klondike Ave.  
 Indiana, PA 15701  
 (412) 465-6832  
 Owner: Jim Haydon  
 Studio Manager: Doug Varner

**[4] CRAIG RECORDING STUDIOS**  
*also REMOTE RECORDING*  
 Ste. 101, Benjamin Fox Pavilion  
 Jenkintown, PA 19046  
 (215) 885-8600  
 Owner: James (Stu) Craig  
 Studio Manager: Michael G. Gallagher

**[2] CREATIVE SOUND IDEAS**  
*only REMOTE RECORDING*  
 363 King St.  
 Northumberland, PA 17857  
 (717) 473-7077  
 Owner: David E. Ranck  
 Studio Manager: Scott W. Berger

**[8] CREATIVE SOUND STUDIOS**  
*also REMOTE RECORDING*  
 601 N. Sixth St.  
 Allentown, PA 18102  
 (215) 439-8004  
 Owner: Hal Schwoyer  
 Studio Manager: Andrea Czarnecki

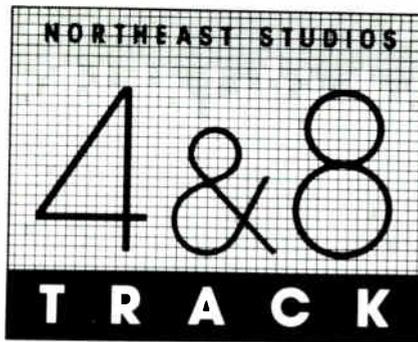
**[8] THE CRYING LOON SOUND STUDIO**  
 RR 1, Box 480 B  
 Raymond, ME 04071  
 (207) 655-3993  
 Owner: Dave Potts  
 Studio Manager: Dave Potts

**[8] CUE RECORDINGS, INC.**  
*also REMOTE RECORDING*  
 1156 Avenue of the Americas  
 New York, NY 10036  
 (212) 921-9221  
 Owner: Mel Kaiser  
 Studio Manager: Bruce Kaiser

**[8] CUMBERLAND HILL RECORDING STUDIO**  
*also REMOTE RECORDING*  
 150 Cumberland St.  
 Manchester, NH 03102  
 (603) 624-0417  
 Owner: Roger Pratte and Sons  
 Studio Manager: Bob Pratte  
 Engineers: Bob Pratte, Rich Cox, John Pratte, Steve Pratte  
 Dimensions: Room 1 studio 14 x 26, control room 14 x 20  
 Room 2 studio 6 x 9  
 Mixing Consoles: Soundtracs 16-8 16 16 x 8  
 Audio Recorders: Tascam 38 8-track, TEAC X-1000 2-track  
 Cassette Recorders/Duplicators: Nakamichi MR1  
 Echo, Reverb, and Delay Systems: Lexicon PCM60, Ya  
 maha SPX90, Ibanez DMD 2000, Echoplex  
 Other Outboard Equipment: Rocktron 300 compressor,  
 (2) Rocktron 310 compressors, Rocktron KDC guitar pre-  
 amp, Rocktron RX2H exciter/imaginer/hush  
 Microphones: (2) Beyer M-500, (2) AKG 330 BT, (4) AKG  
 320 BT, AKG D 112, (5) Shure SMS8, (4) Shure SM57  
 Monitor Speakers: (2) Toa 265ME, (2) Toa 22ME, (4) AKG  
 K240 headphones  
 Musical Instruments: Yamaha DX7 II D, Fender Chroma  
 Polaris, Yamaha FB01, Yamaha DX21, Fender Stratocasters,  
 Squier Telecaster, Squier Stratocaster, Fender Concert 1-12  
 w/ EV, Music Man 2.10, TAMA drum set, Fender Jazz Bass,  
 Ovation acoustic, Takamine acoustic  
 Other Equipment: Commodore 64 complete  
 Rates: \$20/hr studio, \$15/hr mixdown

**[8] THE CUTTING CORPORATION**  
*also REMOTE RECORDING*  
 4200 Wisconsin Ave NW, Ste. 523  
 Washington, DC  
 (202) 363-3566  
 Owner: James and Mary Cutting  
 Studio Manager: Kevin Rank

**[8] CYPRESS QUEEN RECORDING ENTERPRISES**  
 1019 New Market St.  
 Philadelphia, PA 19123  
 (215) 627-1041  
 Owner: Larry, Bart, Paul, Tim Ponzek  
 Studio Manager: Timothy R. Ponzek



**[4] CYRUS SOUND**  
*also REMOTE RECORDING*  
 3545 S. Park Rd.  
 Bethel Park, PA 15102  
 (412) 854-2076  
 Owner: Cyrus V. Anderson  
 Studio Manager: Jean M. Anderson

**[2] D & G MASTERING**  
 PO Box 370  
 Englishtown, NJ 07726  
 (201) 446-2411  
 Owner: Don Van Gorden

**[2] JACK DANIELS PRODUCTIONS**  
 8056 Tuckerman Ln.  
 Potomac, MD 20854  
 (301) 983-9595  
 Owner: Jack Daniels  
 Studio Manager: Jack Daniels

**[8] DARK STAR**  
*also REMOTE RECORDING*  
 PO Box 430  
 New Boston, NH 03070  
 Owner: Jaime Saunders  
 Studio Manager: Jaime Saunders

**[8] DATA MUSIC SERVICES**  
 c/o B-4 Irongate Apts.  
 Beverly, NJ 08010  
 (609) 877-3207  
 Owner: A. David Villani  
 Studio Manager: A. David Villani

**[8] DBF A MEDIA COMPANY**  
*also REMOTE RECORDING*  
 PO Box 900  
 Waldorf, MD 20601  
 (301) 843-7110  
 Owner: Dan Mattingly  
 Studio Manager: Randy Runyon

**[8] DEEP SPACE RECORDS**  
 400 Mill Rd.  
 Hewlett, NY 11557  
 (516) 791-6755  
 Owner: Kenn Fink  
 Engineers: Kenn Fink  
 Mixing Consoles: Studiomaster 16 x 8  
 Audio Recorders: Fostex A-8 8-track, Otan MX-5050  
 MKIII 2.2-track  
 Cassette Recorders/Duplicators: Yamaha K1000  
 Noise Reduction Equipment: Dolby Con 8-track Fostex  
 only  
 Synchronization Systems: Nano-DOC by Garfield  
 Echo, Reverb, & Delay Systems: Yamaha REV7, custom  
 built stereo spring tanks, Korg SDD-2000, (2) MXR 1500.  
 Other Outboard Equipment: (2) Symetnx 501 compres-  
 sors, (2) Symetrix 522 gate/compressor, Fostex 2050 8 x 2  
 line mixer, (2) PA1A 4 x 2 mixers, Electro Harmonix vocoder.  
 Microphones: Beyer M88N(C), (2) AKG D1000E.  
 Monitor Amplifiers: Sony STR VX-33  
 Monitor Speakers: Yamaha NS-10M.  
 Musical Instruments: Roland 5-50 sampling keyboard,  
 Oberheim Xpander, Roland GR-700 w/G-707 controller,  
 Roland JX-3P, Oberheim DX w/stretch drum machine,  
 guitars.  
 Other MIDI Equipment: Roland MPU-401 MIDI interface,  
 Yamaha YM-E8 MIDI expander, Roland MPU-104 MIDI in-  
 put selector  
 Other Equipment: IBM PC, Texture 2 24-track sequencer  
 software, Prolib patch librarian software, Gallien-Krueger  
 250 ML  
 Rates: \$100/8-hr day.

**[8] DELONG STUDIO**  
 PO Box 279  
 Morris, NY 13808  
 (607) 263-2176  
 Owner: Dwayne DeLong  
 Studio Manager: Joshua Wheeler

**[8] DEMO-VOX®**  
 1038 Bay Ridge Ave.  
 Brooklyn, NY 11219  
 (718) 680-7234  
 Owner: Demo-Vox Sound Studio, Inc.  
 Studio Manager: Laura B. Grassi

**[8] DEMO WORKSHOP**  
 2 Sherbrooke Dr.  
 Smithtown, NY 11787  
 (516) 265-9697  
 Owner: Richard G. L'Hommedieu Jr.  
 Studio Manager: Gilda L'Hommedieu

**[8] DESTINY RECORDING STUDIO**  
*also REMOTE RECORDING*  
 31 Nassau Ave.  
 Wilmington, MA 01887  
 (617) 658-8391  
 Owner: Larry Feeney  
 Studio Manager: Larry Feeney

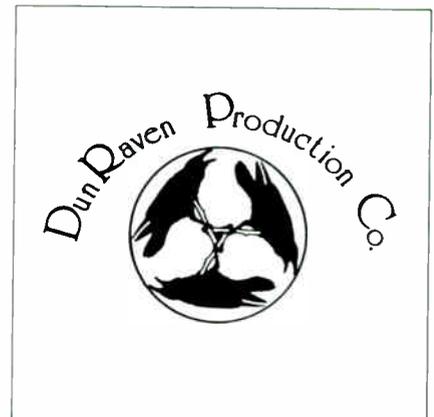
**[8] DIDIK TV PRODUCTIONS, INC.**  
*also REMOTE RECORDING*  
 Box 133  
 Rego Park, NY 11374  
 (718) 843-6839  
 Owner: F. Didik

**[4] DOC-R.C.N.Y. MUST ROCK PRODUCTIONS**  
 167 W. 81st St., Ste. 9  
 New York, NY 10024  
 (212) DOC-0310  
 Owner: Ivan A. Rodriguez  
 Studio Manager: Doc-R.C.N.Y.

**[8] BOB DOELKS ELEMENT**  
 Calhoun Hill Farm  
 Andes, NY 13731  
 (914) 676-4617  
 Owner: Bob Doelks Element  
 Studio Manager: Bob Doelks Element

**[8] THE DOGHOUSE**  
 68 E. 1st St.  
 New York, NY 10003  
 (212) 598-4791  
 Owner: Eddie Ciletti  
 Studio Manager: Susan Kurta

**[8] DORAN SOUND RECORDING**  
 PO Box 951  
 Camden, ME  
 (207) 236-2906  
 Owner: Elwood Doran  
 Studio Manager: Elwood Doran



DUN RAVEN PRODUCTION CO.  
 Wakefield, RI

**[8] DUN RAVEN PRODUCTION CO.**

also *REMOTE RECORDING*

334 Ministerial Rd.  
Wakefield, RI 02879  
(401) 783-6370

Owner: Dun Raven Production Co.

Studio Manager: David Stewart

Engineers: David Stewart-Smith, Linda M. Jones

Dimensions: Room 1; Studio 20 x 15, Control 15 x 12. Room 2; Studio 20 x 15.

Mixing Consoles: Allen & Heath System 8 24 x 8, Ramsa 8210 10 x 4 remote console.

Audio Recorders: MCI JH-110B 8-track 1", 30ips w/ auto locate, Otari MKIII-4 4-track, Otari 50-50 B 2-track, Kodak 2-track PCM digital.

Cassette Recorders/Duplicators: Sony CCP 13 A duplicator, Akai GX R88.

Noise Reduction Equipment: Dynaflex NR.

Echo, Reverb, & Delay Systems: Master Room 2-channel, Yamaha SPX90, MXR digital delay.

Microphones: (3) Sennheiser 441, (5) Sennheiser 421, (4) E-V RE20, (2) Crown PZM, RCA 77-DX, RCA BK-5B.

Monitor Speakers: (2) Clarke Mini, (2) JHB 4313, (2) Audio Design stage columns, (4) Koss headphones.

Musical Instruments: Steinway 9' concert grand

Rates: On request.

Extras & Direction: We specialize in acoustic music. With that in mind we have specialized in audio reproduction that does not rely heavily on electronic enhancement or noise reduction. We believe in the purity, clarity and transparency of audio reproduction. Credits include Pendragon (two LPs), South County Rounders, Northern Lights, Wickford Express, Campbell and Houltram, Jeff Kaufman, Michael Walsh. Remotes for Touchstone, Joe and Antoinette Mekanna, St. Georges Choir and the Episcopal Diocese of Rhode Island.

**[8] DUTCHMAN SOUND LABS**

only *REMOTE RECORDING*

52 Frederic St.  
Springfield, MA 01119  
(413) 783-3765

Owner: Marcel Bissonnette

Studio Manager: Marcel Bissonnette

**[8] DVA STUDIOS**

4274 Trailing Dr.  
Williamsville, NY 14221

(716) 632-8340

Owner: Don Andrews

Studio Manager: Don Andrews

**[4] DWIGHT FRY STUDIOS**

also *REMOTE RECORDING*

227 W. Main St.  
Middletown, NY 10940  
(914) 342-2034

Owner: Keith S. Sumner

Studio Manager: Keith S. Sumner

**[8] EAR-RELEVANT SOUNDS**

One Nutting Ln.  
Westford, MA 01886  
(617) 692-1810

Owner: Bob Wey

Studio Manager: Bob Wey

**[8] 8 PLUS MIDI**

RD 6

Brewster, NY

(914) 878-2037

Owner: Nick Mangini

Studio Manager: Nick Mangini

**[8] 8 "TO GO"**

only *REMOTE RECORDING*

3613 Spring Garden St.  
Philadelphia, PA 19104  
(215) 222-7212

Owner: Larry Kay

Studio Manager: Larry Kay

**[8] E.J. PRODUCTIONS**

also *REMOTE RECORDING*

PO Box 507, Industrial Rd.  
Brownstown, PA 17508  
(717) 627-4633  
(717) 859-2091

Owner: Eric W. Johnson

Studio Manager: Eric W. Johnson

**[2] ELECTRIC FILM**

also *REMOTE RECORDING*

87 Lafayette St.  
New York, NY 10013  
(212) 925-3429

Studio Manager: Willie Crawford

**[8] ELECTRO-ARTS**

only *REMOTE RECORDING*

PO Box 40, 176 Broadway  
Providence, RI 02901  
(401) 273-8473

Owner: William Counts

Studio Manager: Stewart Counts

**[8] CHARLES ELLER STUDIOS**

also *REMOTE RECORDING*

335 S. Union St.  
Burlington, VT 05401  
(802) 862-2605

Owner: Charles Eller

Studio Manager: Charles Eller

**[4] ESOTERICA RECORDINGS**

also *REMOTE RECORDING*

229 White St.  
Belmont, MA 02178  
(617) 484-1446

Owner: John L. Harper

Studio Manager: John L. Harper

**[8] ESTUARY MUSIC PRODUCTIONS**

also *REMOTE RECORDING*

185 Orchard Rd.  
E. Patchogue, NY 11772  
(516) 475-8983

Owner: Douglas M. Brown

Studio Manager: Douglas M. Brown

**[8] FAITH RECORDING STUDIO**

also *REMOTE RECORDING*

3940 Pratt Ave.  
Bronx, NY 10466

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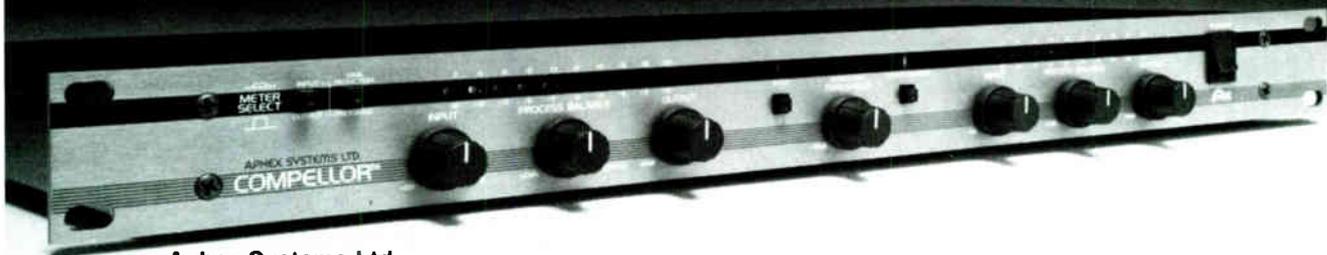
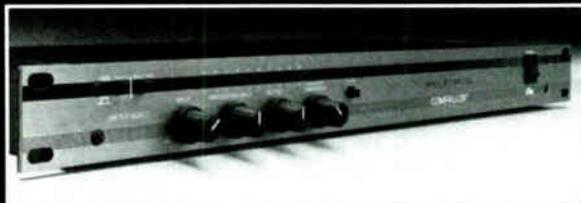
# The Aphex Compellor.™

## Invisible Compression in Stereo or Mono.

The Aphex Compellor is the most acclaimed compressor/leveler/peak limiter ever made. With good reason... you simply can't hear it work. It doesn't add *any* color or other sonic effects. Best of all, the Compellor is easy to use. Set it once and it goes to work automatically... inaudibly controlling your dynamics.

Ask your professional sound dealer for a demonstration of the remarkable Aphex Compellor. Available in monaural and

stereo versions. Or write us for the name of your nearest dealer and more information on the full line of innovative Aphex products.



**Aphex Systems Ltd.**

13340 Saticoy St., N. Hollywood, California 91605  
(818) 765-2212 TWX: 910-321-5762

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—LISTING CONTINUED FROM PAGE 119  
(212) 325-6615  
Owner: Rev. Manny Alvarez  
Studio Manager: Rev. Manny Alvarez

**[8] FANTASY FACTORY**  
Box 31, Kings Hwy.  
Sugar Loaf, NY 10981  
(914) 499-9272  
Owner: Bob Fugett  
Mixing Consoles: Studiomaster modified 16 x 8 x 2, Studiomaster 8 x 4, Tascam 106 6 x 4.  
Audio Recorders: Tascam 80/8 8-track, Otari 5050 2-track HB Series II.  
Cassette Recorders/Duplicators: Tascam 122, Aiwa 3600.  
Noise Reduction Equipment: dbx 180 Type I, dbx Teac DX-8, dbx Teac RX-8.  
Echo, Reverb, & Delay Systems: Yamaha REV7 digital reverb, Master-Room XL-305 spring reverb, Lexicon PCM41 digital delay, Roland RE-301 tape delay.  
Other Outboard Equipment: (2) Valley People Gain Brains, Aphex Aural Exciter Type B, Valley People Dyna-Mite limiter/multiprocessor, (2) ADC patch bays, (2) AKG 241 headphones, (2) AKG 141 headphones, Edcor HA100 headphone amp, Countryman DI, (2) MXR 1/3 octave graphic equalizers, Biamp stereo 10 band EQ.  
Microphones: Neumann U87, AKG 452, Crown PZM 31s, (2) Beyer M500, (2) Beyer M400, (2) Shure SM57, Shure PE50SP, Shure 545SD.  
Monitor Amplifiers: Crown DC-300.  
Monitor Speakers: Voiced Altec 604Es w/Mastennng Lab crossovers, Auratone 5Cs.  
Musical Instruments: Yamaha U3 piano, Yamaha KX88 MIDI keyboard controller, Voyetra 8 Poly Synth, Oberheim DMX drum computer (MIDI), Ensoniq multi-sampler, Korg DW6000 synth, 360 Systems MIDI bass, Mesa/Boogie Mark II amp, Paul Reed Smith electric guitar, Alembic bass guitar, Ovation Adams guitar, Roland TR-808 drum synth, Gibson ES-347 electric guitar, Gibson J-50 acoustic guitar.  
Other MIDI Equipment: Zenith Z-151 640K computer w/hard disk, full MIDI software, Voyetra (Octave Plateau), Jim Miller, etc. MPU-401 MIDI interface, Garfield Electronics FSK converter, MPU-104 MIDI input selector.

**[4] FAST LANE SOUNDS**  
only REMOTE RECORDING  
88 Laconia Rd.  
Cranston, RI 02920  
(401) 942-9349  
Owner: Mike Calin  
Studio Manager: Mike Calin

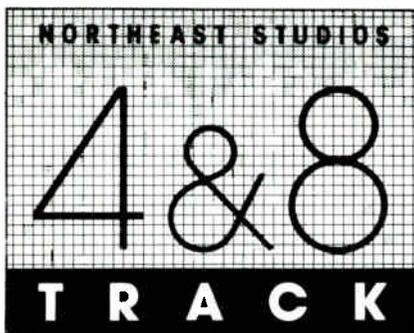
**[4] FELLMAN PRODUCTIONS**  
also REMOTE RECORDING  
55 Grace St.  
Malden, MA 02148  
(617) 322-4571  
Owner: Henry C. Fellman

**[8] FILIPPONE SOUND & VIDEO**  
also REMOTE RECORDING  
176 Garner Ave.  
Buffalo, NY 14213  
(716) 881-4483  
Owner: Randy Filippone  
Studio Manager: Karen Filippone

**[4] FLIP SIDE PRODUCTIONS**  
Box 1057, 150 Mass Ave.  
Boston, MA 02215  
(617) 266-5042  
Owner: Jason M. Vogel

**[8] FM RECORDING STUDIO**  
1351 Brook Ave.  
Bay Shore, NY 11706  
(516) 666-4560  
Owner: Johnny Maestro  
Studio Manager: John Farina

**[8] FORT APACHE RECORDING**  
169 Norfolk Ave.  
Roxbury, MA 02119  
(617) 442-4026  
Owner: Joe Harvard  
Studio Manager: Gary P. Smith  
Engineers: Sean Slade, Jim Fitting, Paul Q. Kolderie, Mike Costello  
Dimensions: studio 16 x 38, control room 27 x 16  
Mixing Consoles: NEOTEK I 16 x 8.  
Audio Recorders: Otari MK III 5050 8-track, Otari MK II 5050 2-track, Fostex A-2 2-track.  
Cassette Recorders/Duplicators: Nakamichi MR-1, TEAC 240 dubbing deck, TEAC 260 dubbing deck.



**FORT APACHE RECORDING**  
Roxbury, MA

Synchronization Systems: Roland SBX-80 sync box, updated SMPL system.  
Echo, Reverb, & Delay Systems: Lexicon PCM70 effects processor, (2) Roland SRV-2000 digital reverb, Yamaha R1000 digital reverb, Fostex 3180 stereo spring reverb, Premier spring reverb, Roland SDE-3000 digital delay, (2) Effectron 1024 digital delays, Leslie rotating speaker system.  
Other Outboard Equipment: (3) Ashly SC-33 6-channel stereo noise gates, (3) Symetrix 501 comp/limiters, dbx 165 comp., Brooke-Siren system stereo lim/compressor, Ashly SC-50 compressor, Ashly SC-40 pre-amp, Symetrix 400 stereo parametric EQ, Rocktron RX2H stereo exciter, Scholz Rockman w/Rockbox mount, ART stereo graphic EQ.  
Microphones: (2) AKG 412, (4) Shure SM57s, (4) Sennheiser 421s, (2) Beyer M400s, Sony electret, AKG C451E electret condenser, (2) PZMs, (2) Sennheiser 441s, (3) Shure 55s.  
Monitor Amplifiers: Ashly MOS-FET 500, Crown D75, Crown D60.  
Monitor Speakers: JEL 1112, Yamaha NS-10, Auratone.  
Musical Instruments: LinnDrum (original), (2) Fender 1965 and 1966 precision basses, (2) Fender 1965 and 1966 12-string guitars, Vincent Bell coral sitar, Nick Hoffman Brian Jones model guitar, Gretsch Chet Atkins Country Gentleman guitar, Fender 6-string bass, Guild acoustic bass, Guild 12-string acoustic guitar, Gibson J160E acoustic guitar, Vincent Bell, Benzouki, Tckai stratoceaster, Marshall Stack, (2) Mellotrons, Gretsch drum kit-jazz (13-inch bass) size, (4) Ampeg Vintage amplifiers, (3) various VOX amplifiers, (3) Supro amplifiers.  
Other MIDI Equipment: Prophet 2000 digital sampler (available upon request), TS Electronics 2290 sampling dynamic digital delay and effects processor.  
Rates: 20/hr. Lock-out rate available, album discounts.  
Extras & Direction: Amid the quaint industrial rubble of Roxbury's New Market Square area lies Fort Apache. Boston's answer to Chess Studios. Relax in our spacious control room which even includes a couch! Rock out in a real live room for a change, complete with cement walls and adorned with festive trash art. Stifle between-track boredom with our massive collection of underground comics, featuring the complete Judge Dredd. The Fort is musician-run with the bands' needs placed first and the rulebook second. We try to combine modern recording techniques (sampling, bells and whistles, etc.) with an atmosphere suitable for wild rocking. Our emphasis is on purpose-oriented stuff, i.e. record production, radio/airplay or A&R presentation. We invite out-of-town bands at a special rate and can provide musicians and additional tracks at extra charge (plus, Boston is a rockin' town to play in, see?)

**[8] FOUNDATION STUDIOS**  
121 Bloomfield St.  
Seekonk, MA 02771  
(617) 399-7653  
Owner: Foundations Group  
Studio Manager: James Clare

**[8] 4 BITS RECORDING**  
also REMOTE RECORDING  
512 Main St., #9  
E. Orange, NJ 07018  
(201) 672-7109  
(201) 672-7107  
Owner: Meekaa'eel Muhammad  
Studio Manager: Meekaa'eel Muhammad

**[8] FROG POND STUDIO**  
41 Cedar Ln.  
Pleasantville, NY 10570  
(914) 747-3437  
Owner: John Vito  
Studio Manager: Mic Fava

**[8] GARAGELAND STUDIOS**  
322 Fourth St., Box 3  
Jersey City, NJ 07302  
(201) 795-1509  
Owner: Michael Van Duser  
Studio Manager: Julie Schmittinger

**[8] GARDEN PRODUCTIONS**  
808 West End Ave., Ste. 103  
New York, NY 10025  
(212) 222-5417  
Owner: James H. Madison  
Studio Manager: James H. Madison

**[4] GARRETT FILM INTERNATIONAL**  
also REMOTE RECORDING  
Box 253, Rte. 3  
Bernville, PA 19506  
(215) 488-7552  
Owner: Rodney Garrett

**[4] GEORGETOWN UNIVERSITY TELEVISION**  
also REMOTE RECORDING  
LM-14 Basic Science Bldg.  
3900 Reservoir Rd. NW  
Washington, DC 20007  
(202) 625-2351  
Owner: Georgetown University  
Studio Manager: Herbert Pearson

**[4] GIEBLER ENTERPRISE RECORDING STUDIO**  
also REMOTE RECORDING  
Morgan Rd.  
Liverpool, NY 13090  
(315) 652-5741  
Owner: Gary Giebler  
Studio Manager: Gary Giebler

**[8] GOD'S MT. RECORDING**  
PO Box 98  
Rehobersburg, PA 19550  
(717) 933-4181, ext. 252  
Owner: Teen Challenge Training Center  
Studio Manager: Rick Sellers

**[8] GOIN' MOBILE**  
only REMOTE RECORDING  
304 Newbury St., #110  
Boston, MA 02115  
(617) 236-1944  
Owner: Lonnie Bedell

**[8] GOLDEN WOOD MUSIC**  
1378 Schenectady Ave.  
Brooklyn, NY 11203  
(718) 282-3771  
Owner: James J. Ward  
Studio Manager: Robert A. Flaherty

**[8] GOODTIME SOUND RECORDING**  
also REMOTE RECORDING  
101 Westchester Ave.  
Port Chester, NY 10573  
(914) 939-1066  
Owner: The A/V Connection, Inc.  
Studio Manager: Judy Novy

[8] G.P. RECORDING  
83-75 116th St.  
Richmond Hill, NY 11418  
(718) 441-6747  
Owner: Gene Polito  
Studio Manager: Gene Polito

[4] GRM STUDIOS  
16 Dean Rd.  
New Milford, CT 06776  
(203) 354-9380  
Owner: Gene R. Minasi  
Studio Manager: Gene R. Minasi

[8] GROUP TWO  
also REMOTE RECORDING  
One E. 24th St.  
Baltimore, MD 21218  
(301) 467-9000  
Owner: Dan O'Toole  
Studio Manager: Robert Bragg

[4] HANSEN RECORDING  
only REMOTE RECORDING  
Capt. Foster Ln.  
Norwell, MA 02061  
(617) 826-8637  
Owner: Torben Hansen

[4] RANDY HARRIS STUDIO  
also REMOTE RECORDING  
1514 Hampden Blvd.  
Reading, PA 19604  
(215) 373-8719  
Owner: Randy Harris  
Studio Manager: Randy Harris

[2] HARRISON DIGITAL AUDIO SERVICES  
only REMOTE RECORDING  
9 Birch Hill Rd.  
South Hadley, MA 01075  
(413) 536-3830  
Owner: Jeff Harrison  
Studio Manager: Jeff Harrison

[4] HBFC MUSIC COMPANY  
PO Box 11323  
Hauppauge, NY 11788  
(516) 361-8890  
Owner: Douglas M. Russell  
Studio Manager: Claire Russell

[8] HEADLINE SOUND  
also REMOTE RECORDING  
PO Box 2071  
Larchmont, NY 10538  
(914) 633-5740  
Owner: Joseph DiGiorgi  
Studio Manager: Joseph DiGiorgi  
Extras & Direction: Headline Sound is a small, growing 8-track recording studio dedicated to professional, high-quality sound. The comfortable environment provides a creative atmosphere necessary for our specialty, the recording of music. The engineering is intelligent, friendly, and sensitive to the needs of the client. We offer a variety of services including full demo recording and production, remote recording, jingle writing/arranging, and small scale sound reinforcement. Although 8-track recording is normally associated with demo recording, the equipment and personnel here are fully capable of producing master quality tapes. If you are not able to afford the rates of larger studios, but do not want to sacrifice the quality of your work, Headline Sound offers very economical rates. Whether yours is a commercial project, an artistic project, or any combination of the two—check us out.

[8] HELIOTROPE STUDIOS LTD.  
also REMOTE RECORDING  
21 Erie St.  
Cambridge, MA 02139  
(617) 868-0171  
Owner: Boyd Estus, James Griesbsch  
Studio Manager: Boyd Estus

[4] HELM PRODUCTIONS  
also REMOTE RECORDING  
435 W. 119th St., #6-C  
New York, NY 10027  
(212) 749-2581  
Owner: Nan Helm  
Studio Manager: Michael Pollack

[4] HILL RECORDING  
also REMOTE RECORDING  
3546 Flatiron Rd.  
Holcomb, NY 14469  
(716) 657-7341  
Owner: Frank G. Hill  
Studio Manager: Frank G. Hill

[8] HONEYBEAR RECORDING STUDIO  
2510 Raspberry St.  
Erie, PA 16502  
(814) 459-2327  
Owner: Walter Slivinski  
Studio Manager: Walter Slivinski

[8] IN SYNC RECORDING  
211 W. 79th St.  
New York, NY 10024  
(212) 496-2636  
(718) 998-4648  
Owner: In Sync Productions  
Studio Manager: Joe Manzella

[2] INDEPENDENT CLASSICAL RECORDING  
only REMOTE RECORDING  
170 W. 73rd St., #3C  
New York, NY 10023  
(212) 799-0690  
Owner: Dongsok Shin  
Studio Manager: Dongsok Shin

[4] INNOVATIVE MUSIC STUDIO  
only REMOTE RECORDING  
147 DeForest Rd.  
Dix Hills, NY 11746  
(516) 499-7681  
Owner: Greg Dib  
Studio Manager: Greg Dib

[8] INSATIABLE RECORDING  
Star Rte., Box 86, Creek Locks Rd.  
Rosendale, NY 12472  
(914) 338-5271  
Owner: Albin Zak  
Studio Manager: Albin Zak

[8] INSPIRATION, HARMONY AND RHYTHM  
1248 White Plains Rd.  
Bronx, NY 10472  
(212) 823-4894  
Owner: Isaac Hernandez Jr.

[8] THE INSYNC ASYLUM  
PO Box 62  
Burtonsville, MD 20866  
(301) 384-8480  
Owner: Paul Kitchen  
Studio Manager: Paul Kitchen

[8] INTER-MEDIA ART CENTER, INC.  
370 New York Ave.  
Huntington, NY 11743  
(516) 549-9666  
Studio Manager: Michael Rothbard

[8] ISLAND SOUND RECORDING STUDIOS  
168 Railroad St.  
Huntington Stn., NY 11746  
(516) 423-3246  
Owner: John H. Hochuli III  
Studio Manager: Bob Spencer

[4] JAB SOUND  
also REMOTE RECORDING  
177 Casterline Rd.  
Denville, NJ 07834  
(201) 366-6629  
Owner: Alan Belcher  
Studio Manager: Alan Belcher

[8] ILJ STUDIOS  
also REMOTE RECORDING  
2903 S. Deerfield Ave.  
Yorktown Hts., NY 10598  
(914) 245-2101  
Owner: ILJ Productions  
Studio Manager: Lawrence Stock

Ad  
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## TWELVE IMPECCABLE EXCUSES FOR NOT GIVING BLOOD.

1. I think I have lumbago.
2. I'm type Z negative.
3. I'm on the grapefruit diet.
4. I gave six months ago.
5. I just got back from Monaco.
6. The lines are thirteen blocks long.
7. My mother won't let me.
8. I didn't sign up.
9. I'm going out of town.
10. Asthma runs in my family.
11. I forgot to eat this morning.
12. I'm allergic to flowering magnolia.



Each one's a doozy,  
but we're hoping you  
won't use any of them.  
Give blood through the  
American Red Cross.  
Please, don't chicken out.

**EXCUSES DON'T SAVE LIVES.  
BLOOD DOES.**

American  
Red Cross 

[8] J.M. STUDIO  
149 Grand St.  
Newburgh, NY 12550  
(914) 562-8084  
Owner: John Mulligan  
Studio Manager: Debbie E.

[8] JOSTEN AUDIO  
19 Cinque Dr.  
Farmingdale, NY 11735  
(516) 752-9873  
Owner: Enc Josten  
Studio Manager: Lon Ruggiero

[8] JOYFUL NOISE  
47 E. Walnut St.  
Metuchen, NJ 08840  
(201) 549-7928  
Owner: Ted Coleman  
Studio Manager: Ted Coleman

[8] K STUDIO'S  
also REMOTE RECORDING  
49 Woodland Rd.  
Auburn, MA 01501  
(617) 752-3073  
Owner: Joe & Donna Kenneally  
Studio Manager: Donna Kenneally

[8] KING "B" RECORDING  
224 Ave. B, #9  
New York, NY 10009  
(212) 228-5956  
Owner: Greg Shirley  
Studio Manager: Greg Shirley

[8] KITCHEN SYNC  
23 Orchard Ave.  
Holmdel, NJ  
(201) 264-0536  
Owner: Jeff Schwartz

[8] KOLLAR SOUND & RECORDING  
also REMOTE RECORDING  
116 Chestnut Ln.  
Horsham, PA 19454  
(215) 643-6427  
Owner: Greg Kollar

[4] KT RECORDING STUDIO  
35 Spruce Ct., Unit 114  
Clifton, NJ 07014  
(201) 777-3546  
Owner: Michael DiLorenzo  
Studio Manager: Michael DiLorenzo

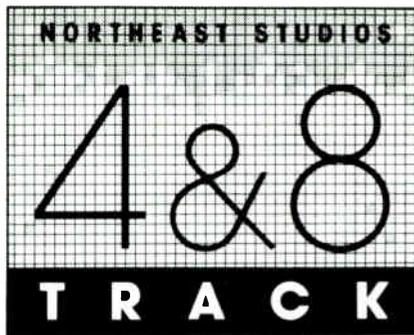
[4] ED LACINSKI PRODUCTIONS  
only REMOTE RECORDING  
21 Country Club Dr.  
Coram, NY 11727  
(516) 732-5954  
Owner: E. Lacinski  
Studio Manager: J. Lacinski

[4] LANCO PRODUCTIONS  
also REMOTE RECORDING  
613 Ridge Rd.  
Lewisberry, PA 17339  
(717) 938-1351  
Owner: Robin R. Lane  
Studio Manager: Robin R. Lane

[8] LANEY PRODUCTIONS  
8 Brooktree Cir.  
Macedon, NY 14502  
(315) 986-2231  
Owner: Elaine & Sam Smith  
Studio Manager: Lee Elliott

[8] COLLINS LANG AND CONNOLLY  
also REMOTE RECORDING  
156 Battery St.  
Burlington, VT 05401  
(802) 863-2076  
Owner: Collins Lang & Connolly  
Studio Manager: Douglas Lang

[8] LEDGE VU MULTI-MEDIA SERVICES  
PO Box 34



Marlborough, CT 06447  
(203) 295-9718  
Owner: Mark & Donna Zampino  
Studio Manager: Donna Lee Zampino



LEGEND RECORDING STUDIOS  
Belleville, NJ

[8] LEGEND RECORDING STUDIOS  
also REMOTE RECORDING  
42 Belmont Ave.  
Belleville, NJ 07109  
(201) 751-9528  
Owner: Anthony Pomponio  
Engineers: Tony Pomponio  
Dimensions: studio 17 x 12.5, control 10 x 18, iso booth 8 x 7, drum booth 9 x 7  
Mixing Consoles: Hill Series 3 16 x 8, (2) Shure SE30 3 x 2.  
Audio Recorders: Otari Mark III 8-track, Otari 5050B II 2-track, Tascam Series 32 2-track, Tascam A-3300SX 1/4-track.  
Cassette Recorders/Duplicators: Akai GX-F71.  
Noise Reduction Equipment: dbx Type I  
Echo, Reverb, & Delay Systems: Ecoplate 3 x 6 foot plate, Lexicon PCM42 w/ 4.8 second option.  
Other Outboard Equipment: (2) dbx 160X compressors, (2) Rene GE-27 1/3 octave EQ, Tapco C-201 graphic EQ, Tapco 2200 graphic EQ, UREI 546 dual parametric EQ, Drawmer DS-201 dual noise gate, Sansui SR-929 turntable.  
Microphones: AKG 414s, Sennheiser 421s, E-V RE20, E-V 635A, Shure SM58s, Shure SM57s, Sony.  
Monitor Amplifiers: Crown, Symetrx, Marantz.  
Monitor Speakers: Atec Lansing, Auratone.  
Musical Instruments: LinnDrum, Yamaha DX7s, Yamaha acoustic guitar, Epiphone acoustic 12-strng, Peavey amplifiers.  
Video Equipment: Involved in all aspects of music production for commercial and corporate video.  
Rates: Block rates available.

[8] LIFE OF RILEY (WITH KURZWEIL 250)  
33 Edgewood Pl.  
Locust Valley, NY 11560  
(516) 671-4612  
Owner: Peter Engisch, Perry Gartner  
Studio Manager: Peter Engisch

[2] LIGHTSCAPE PRODUCTIONS INC.  
420 W. 45th St.  
New York, NY  
(212) 757-0491  
Owner: Jeffrey Poretzky  
Studio Manager: Tim Cereste

[4] LINO SOUND  
108 N. 6th St.  
Brooklyn, NY 11211  
(718) 388-3314  
Owner: Louis Lino

[8] LION & LAMB STUDIO  
also REMOTE RECORDING  
107 N. East St., #1  
Carlisle, PA  
(717) 245-0824  
Owner: Rob Murtoff  
Studio Manager: Rob Murtoff

[8] LIP SYNC MUSIC INC.  
43 William St.  
Smithtown, NY 11787  
(516) 724-3055  
Owner: Lip Sync Corp.  
Studio Manager: William Littlefield

[8] LITTLE RED HEN  
261 W. 19th St.  
New York, NY 10011  
(212) 989-3954  
Owner: Robert Raines  
Studio Manager: Kathleen McCutcheon

[8] LITTLE STUDIO  
also REMOTE RECORDING  
Box 416  
Rockland, ME 04841  
(207) 594-2497  
Owner: Helmut Vles

[8] LITTLE WORLD STUDIO  
also REMOTE RECORDING  
214 Houston Rd.  
Pittsburgh, PA 15237  
(412) 364-4314  
Owner: Brian S. Kirsch  
Studio Manager: Brian S. Kirsch

[8] LIVE SOUND PRODUCTIONS  
RECORDING STUDIOS  
414 Walnut Dr.  
Annapolis, MD 21403  
(301) 268-3938  
Owner: Leslie Lentz  
Studio Manager: William Cole  
Engineers: Scott D. Deakyn, Les Lentz, William Cole, Bud Corse  
Dimensions: studio 20 x 18, control room 24 x 6, isolation room 17 x 10  
Mixing Consoles: Peavey Mark III 8 x 8  
Audio Recorders: Tascam 388-track 1/2" w/variable speed, TEAC 80-8 8-track 1/2" w/variable speed, TEAC A-3300SX 2-track 7.5 and 15 ips. All with full transport remote.  
Cassette Recorders/Duplicators: Technics RS-933W w/dbx Type II, (4) Technics RS-B105.  
Noise Reduction Equipment: TEAC DX-8 8-channel dbx module Type I, (2) Tascam DX-4D 4-channel dbx modules Type I, (2) Audiologic 4-channel quad noise gates.  
Echo, Reverb, & Delay Systems: DeltaLab Electron 1 digital delay, DOD RS-1900 digital delay w/sampler, Alesis XT digital reverb w/reverse.  
Other Outboard Equipment: DODR-825 compressor/limiter, Ashly SC-55 stereo peak compressor/limiter, Thompson VE-1 vocal eliminator, Technics SL-B101 turntable, JVC L-AX3 turntable, Boss TU-12H digital tuner.  
Microphones: Sennheiser, Shure, Audio-Technica, Akai.  
Monitor Amplifiers: Carvin DCA 300, Technics SA-103.  
Monitor Speakers: (2) JBL 62, (2) Technics SB-K105, (2) Auratone, (2) Cerwin-Vega.  
Musical Instruments: Ludwig 7-piece vialite kit w/Zildjians and Paistes, Remo Roto Tom's 6-inch, 8-inch, 10-inch, 12-inch, 14-inch set, various auxiliary percussion instruments, Lester acoustic upright piano, Juno 106, Boss DR-110, various guitars, basses, and amplifiers.  
Video Equipment: Sony SuperBeta VCR, Toshiba 19-inch color monitor.  
Other Equipment: Real nice couches!  
Rates: Direct to 2-track and solo projects \$10/hr., full 8-track \$15/hr., free set-up, fully monitored rehearsal space \$15/hr., all includes engineer.

[8] LIVEWIRE RECORDING  
Long Branch, NJ  
(201) 229-2309  
Owner: G. Laugelli  
Studio Manager: Mick Seeley

[4] LOCATION RECORDING, INC.  
only REMOTE RECORDING  
122 E. Rocks Rd.  
Norwalk, CT 06851  
(203) 371-4757  
Owner: A M Scalisi

[8] LOFT RECORDING STUDIO  
405 Taft Ave.  
Endicott, NY 13760  
(607) 748-1752  
Owner: Michael S. Tomik  
Studio Manager: Joan Wilder

[8] L U V. SOUND STUDIO  
also REMOTE RECORDING  
102 Cornwall St  
Hartford, CT 06112  
(203) 522-2371  
(203) 724-9814  
Owner: Harold Sargent, Tim Williams, Silver Sargent  
Studio Manager: T. Williams, S. Sargent, H. Sargent

[8] M-CUT STUDIOS  
328 Shore Dr.  
New Windsor, NY 12550  
(914) 496-4429  
Owner: John Cal  
Studio Manager: B.C.

[8] MAGNETIK PRODUCTIONS  
also REMOTE RECORDING  
8200 Ridge Ave.  
Philadelphia, PA 19128  
(215) 482-7780  
Owner: Franklin Broadcasting  
Studio Manager: Robert Wakeley

[2] MAN FROM MARS PRODUCTIONS  
also REMOTE RECORDING  
159 Orange St.  
Manchester, NH 03104  
(603) 668-0652  
Owner: Ed Brouder

[8] MANHATTAN CENTER STUDIOS INC.  
311 W. 34th St.  
New York, NY 10001  
(212) 279-7740  
Owner: Atlantic Video Inc.  
Studio Manager: Steve Honey  
Extras & Direction: Our huge studio (94 x 98) with a 40-foot curved ceiling and a 60 x 95 stage is one of the best sounding rooms in the nation. The room is dead quiet 24 hours a day. Our convenient midtown location is one block from Penn Station and major subway lines. Studio seats 1200 people with live sound/lights for concerts, recordings, dances, etc. Large isolated control area has a Helios 28 x 24 board, Fostex 8-track, Otari MTR-10 2-track, Otari 5050, Revox, JBLs, EMTs, many outboards, tube, condenser, and dynamic mics, 80 music stands, a Steinway etc. Most equipment in the control room can be quickly disconnected and moved out for rental boards, digital recorders, etc. Clients and performers have included Leonard Bernstein, Zubin Mehta, NY Philharmonic, Marc Aubort, Nonesuch, Polygram, Deutsche, Grammophone, EMI, Philips, Angel, CBS, RCA, Pavarotti, Perlman, Ashkenazi, Jessye Norman, Broadway Cast albums, MTV, Joan Jett, Hooters, Starship, Weird Al, Dave Edmunds, etc.

[8] MARION RECORDING STUDIOS  
7 Burdett Pl.  
Fairview, NJ 07022  
(201) 945-1517  
Owner: David Bellochio  
Studio Manager: Frank Fagnano

[2] MARTIN RECORDING STUDIOS  
(FORMERLY MARTIN ENGINEERING)  
also REMOTE RECORDING  
8710 Patton Rd.  
Wyndmoor, PA 19118  
(215) 233-1606  
Owner: Niles Martin, Jr.

[4] MASQUE RECORDING  
also REMOTE RECORDING  
331 W. 51 St.  
New York, NY 10019  
(212) 245-4623  
Owner: Masque Sound & Recording Corp.  
Studio Manager: John Kilgore

Extras & Direction: Masque Recording, "New York's premier sound effects house" (*Mix* magazine) has been in business since 1936, when it began providing stock and custom recorded sound effects for Broadway shows. Since then, our business has expanded to include industrial, advertising, radio, TV, music industry, film and video clients. In fact, you name it—we've probably done production work on it. We have a huge library of commercial and custom sound effects and some of the best engineering talent in the business headed up by John Kilgore, award-winning recording engineer and sound designer. We specialize in creative solutions to your sound effects and production problems. Call for our competitive rates.

[2] MASTER AUDIO PRODUCTIONS, INC.  
also REMOTE RECORDING  
514 Fairmount Ave.  
Catham, NJ 07928  
(201) 635-0140  
Owner: Glenn R. Morgan  
Studio Manager: Glenn R. Morgan

[4] MASTERDISK CORP.  
16 W. 61st St.  
New York, NY 10023  
(212) 541-5022  
Owner: Doug Levine, Bob Ludwig  
Studio Manager: Jill Dix

[4] MASTERS BY JOHNSON  
832 Montgomery Ave.  
Narberth, PA 19072  
(215) 664-1188  
Owner: Stephen Johnson  
Studio Manager: Tommy Sandell

[8] MEDIA ARTS, INC.  
also REMOTE RECORDING  
186 Lincoln St.  
Boston, MA 02111  
(617) 426-5998  
Owner: Guy F. Baughns  
Studio Manager: David Smith

[8] MEDIAPHONIC STUDIO  
3114 Westview Dr.  
Reading, PA 19605  
(215) 929-0257  
Owner: Henry Gass  
Studio Manager: Henry Gass

[2] MELANGE PRODUCTION STUDIOS  
312 W. 91 St.  
New York, NY  
(212) 769-4350  
Owner: A. Chris Seeger

[8] MELODY STUDIO  
2005 Benson Ave.  
Brooklyn, NY 11223  
(718) 372-9546  
Owner: Joe Cardinale  
Studio Manager: Lou. Valdes

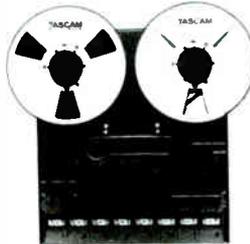
[8] MELVILLE PARK STUDIO  
also REMOTE RECORDING  
115 Central Ave.  
Boston, MA 02136  
(617) 745-3200  
Owner: Steven Friedman  
Studio Manager: Steven Friedman

[8] METRO MUSIC  
10 Fairbanks Ave.  
Wellesley, MA 02181  
(617) 237-7972  
Owner: Ernie Mavrides

[8] MEZZANINE SOUND STUDIO  
Alta Vista Dr.  
Yonkers, NY  
(914) 779-3310  
Owner: Anthony Marcello  
Studio Manager: Anthony Marcello

## RECORDING EQUIPMENT

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- Reel to Reel Decks (2-4-8-16 Track)
- Cassette Decks • Mixing Boards
- Mikes • Studio Monitor Speakers
- Special Effects Units Accessories

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**[8] MHS RECORDING STUDIO**  
*also REMOTE RECORDING*  
 Broad St.  
 Manasquan, NJ 08736  
 (201) 528-8825  
 Owner: Manasquan Bd. of Ed.  
 Studio Manager: Lee N. Weisert

**[8] MOEFOUX INC.**  
*also REMOTE RECORDING*  
 79 Brook St.  
 Brookline, MA 02146  
 (617) 566-3081  
 Owner: Bert Syms  
 Studio Manager: Moe Foux

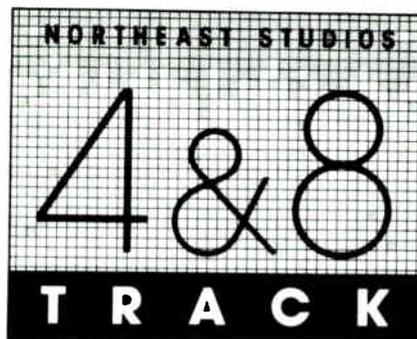
**[8] MR. FREEZE STUDIOS**  
*also REMOTE RECORDING*  
 31-38-29 St.  
 Long Island City, NY 11106  
 (718) 932-0894  
 Owner: J. Allgeier  
 Studio Manager: J. Allgeier

**[8] MUNSON'S OF MASCOMA**  
*also REMOTE RECORDING*  
 Box 105  
 Enfield, NH 03748  
 (603) 632-7545  
 Owner: Robert C. Neale  
 Studio Manager: Jennette M.A. Neale

**[8] MUSIC & SOUND DESIGN STUDIO (MILBRODT COMMUNICATIONS, INC.)**  
 1425 Frontier Rd.  
 Bridgewater, NJ 08807  
 (201) 560-8444  
 Owner: Bill Milbrodt  
 Studio Manager: Bill Milbrodt

**[8] MUSICWORKS (FORMERLY: THE WORKS)**  
 Techniplex Mall, 300 Main St.  
 East Rochester, NY 14445  
 (716) 385-6020  
 Owner: Greg Gilmore, Andrew Ryckaert  
 Studio Manager: Greg Gilmore, Andrew Ryckaert  
 Engineers: Andrew Ryckaert, Greg Gilmore  
 Dimensions: Room 1: control room 12 x 14. Room 2: studio 40 x 50. Room 3: isolation booth 10 x 4.  
 Mixing Consoles: Ramsa WR-8210 A 10 x 4  
 Audio Recorders: Tascam 38 8-track, Tascam 32 2-track, Technics SU-100 digital 2-track, Sony SL-HF 300 2-track Beta Hi-Fi, Akai 4000 DS 2-track 1/4-track.  
 Cassette Recorders/Duplicators: NAD 6155 2-track cassette deck, Technics RS-B18 2-track w/dbx.  
 Noise Reduction Equipment: dbx I 8-channel for 38, dbx I 2-channel for 32.  
 Echo, Reverb, & Delay Systems: Yamaha REV7, Yamaha SPX90, Roland DCP-5.  
 Other Outboard Equipment: Valley People rack including: 4QL2 mike preamps, Gain Brain, Maxi-Q, Yamaha GC2020 stereo comp/lim/gate, Soundcraft stereo graphic EQ, Tascam headphone amplifier, Sharp DX-110 CD player, Rockman Rackmount guitar EFX.  
 Microphones: Neumann U47, (2) Sony ECM-23F, (2) Shure SM57, (2) Shure SM58, Shure 545, Shure PE54.  
 Monitor Amplifiers: Haller 225  
 Monitor Speakers: Tannoy NFM-8.  
 Musical Instruments: Yamaha QX-1 midi-sequencer, Yamaha TX7 (over 700 sounds on disks), (2) Korg DW-8000, Juno 106, Juno 60, Minimoog, Moog Prodigy, Roland DDR-30 digital drums (w/pads), Yamaha RX11 drum computer, MXR drum computer, Yamaha RX216 Latin percussion computer, TAMA drums, Les Paul and Siret electric guitars, Kramer and (Peavey fretless) basses, Guild 12-string and Applause elec/acoustic 6-string.  
 Other Equipment: Emulator II, Simmons, Pearl electronic drums available upon request.  
 Rates: Please call for rates.  
 Extras & Direction: Musicworks offers complete creative services including custom music, mix to pick, and custom sound effects. Soon to expand track capabilities and offer full SMPTE/MIDI interlock. Credits: Buffalo Sabres, Citibank, Club 747, Corning Glass, Eastman Kodak Co., Fisher Price, General Electric, Hoeselron Chevrolet, Ingram Software, Great Atlantic Picture Co., John LaBarbera, J. Walter Thompson, OnBank, Omnicad Corporation, Liberty Weekend, Pratt & Whitney, Funky Records, to name a few. Please call or write for demo package.

**[4] MUTTLEY MUSIC MACHINE**  
*also REMOTE RECORDING*  
 RD #1, Box 129, Old Route 100  
 Barto, PA 19504  
 (215) 845-3133



Owner: Vincent J. Indelicato  
 Studio Manager: Vincent J. Indelicato

**[8] NERAN STUDIO**  
*also REMOTE RECORDING*  
 55 Old Field Rd.  
 Huntington, NY 11743  
 (516) 673-7297  
 Owner: Neran Productions  
 Studio Manager: Ann Carpenter

**[8] NEVADA SOUND**  
 345 Union St.  
 Holbrook, MA  
 (617) 767-1592  
 Owner: Jon Finn  
 Studio Manager: Jon Finn



**NEW CLEAR PRODUCTIONS**  
 Endicott, NY

**[8] NEW CLEAR PRODUCTIONS**  
 129 W. Wendell St.  
 Endicott, NY 13760  
 (607) 754-8517  
 (607) 785-2850  
 Owner: Jeff Stahara  
 Studio Manager: Gerry Sherwood  
 Engineers: Jeff Stahara, Mike Murphey  
 Dimensions: studio 10 x 12, control room 8 x 20  
 Mixing Consoles: Ramsa WR-T820 20 x 8 w/meter bridge, Yamaha RM804 8 x 4, Fostex 2050 8 x 2  
 Audio Recorders: Fostex Model 808-track w/remote, Fostex A-2 2-track w/remote.  
 Cassette Recorders/Duplicators: Sony TCFX-1010, Sony TCFX-310.  
 Echo, Reverb, & Delay Systems: Yamaha REV7, ART DR1 w/Performance MIDI, Alesis XT-c, Custom Plate reverb, Lexicon PCM41, DeltaLab ADM512 programmable, DeltaLab CE1700 CompuEffectron.  
 Other Outboard Equipment: (4) Aphex Type B Aural Exciter, (2) Fostex 3070 dual comp/lim/gate, (2) Yamaha 2020 dual comp/lim/gate, (2) Ibanez 31-band graphic EQs, (2) Soundcraft 21-band graphic EQs, MXR pitch transposer w/display, Orban 245F stereo synthesizer, Garfield MIDI adaptor, SRD Ultralight Rockman.  
 Microphones: (3) AKG D12E, (2) Crown PZM, (2) E-V PL77B, E-V PL20, E-V PLS, Sennheiser MD 441-U, (3) Shure SM57, (3) Countryman FET direct boxes.  
 Monitor Amplifiers: Crown DC150, Dynaco 120  
 Monitor Speakers: E-V Sentry 500, Fostex 6301, Minimus II.  
 Musical Instruments: Alvarez acoustic guitar w/Martin

thinline pick-up, Fender 1976 Custom Telecaster, Fender 1972 Telecaster, Fender 1966 Vibrolux, Korg Poly 800, Kramer bass w/EMG P-J pick-ups, LinnDrum LM-2, Slingerland six-piece drum set (double, bass and three roto toms, antique snare), Simmons SDS-8 (plus Simmons Clap Trap), Yamaha DX100, Yamaha FB01, Zildjian Paiste cymbals.  
 Other MIDI Equipment: Commodore C-64 w/Syntech MIDI interface, Syntech Studio One software package, (8-track seq.)  
 Video Equipment: Complete Panasonic 1/2" editing system, 3/4" deck, full line of cameras, recorders (Beta-VHS) and lighting.  
 Rates: \$25/hr. for audio. Video rates on request.

**[8] THE NEW FRONTIER SYNTHESIZER STUDIO**  
 RD #1, Box 406A  
 Stockton, NJ 08559  
 (609) 397-2716  
 Owner: Robert Sands  
 Studio Manager: Robert Sands

**[8] NONCHALANT**  
*also REMOTE RECORDING*  
 PO Box 64  
 Ardmore, PA 19003  
 (215) 649-0365  
 Owner: Bob McNamara  
 Studio Manager: Frank Kurz

**[8] JERRY NORELL PRODUCTIONS**  
 231 Cedar St.  
 Hempstead Long Island, NY 11550  
 (516) 483-7800  
 Owner: Jerry Norell

**[8] NORTH COUNTRY SOUNDS**  
*also REMOTE RECORDING*  
 175 Bunker Hill Rd.  
 Auburn, NH 03032  
 (603) 483-2662  
 Owner: Tom Bartlett  
 Studio Manager: Tom Bartlett

**[8] NORTH STAR RECORDING STUDIO**  
 54 Lake St.  
 Belleville, NJ 07109  
 (201) 751-9636  
 Owner: G. Vecchione, J. Robinson  
 Studio Manager: G. Vecchione

**[8] NORTHEAST SOUND STUDIO**  
*also REMOTE RECORDING*  
 PO Box 208  
 West Newton, MA 02165  
 (617) 894-2973  
 Owner: Pamela Manske  
 Studio Manager: Gary Smith

**[8] NORTHERN LITES AND SOUND STUDIOS**  
*also REMOTE RECORDING*  
 36 Cedarwood Terr.  
 Georgia, VT 05468  
 (802) 893-1220  
 Owner: Tracy L. Lord, P.R. Appleget  
 Studio Manager: Tracy L. Lord, P.R. Appleget

**[4] NOVA SOUNDS**  
*also REMOTE RECORDING*  
 878 Broadway  
 Somerville, MA 02144  
 (617) 623-9532  
 Owner: D. Dinjian  
 Studio Manager: Deine Schon

**[8] NU TRAX RECORDING STUDIO**  
 141 W. Ruscomb St.  
 Philadelphia, PA 19120  
 (215) 456-9141  
 Owner: Paul M. Helfrich  
 Studio Manager: Paul M. Helfrich

**[8] NYETIMBER STUDIOS**  
 PO Box 818  
 Severn, MD 21144  
 (301) 551-4655  
 Owner: Paul A. Weager  
 Studio Manager: Paul Weager

**[8] OCASONIC RECORDING STUDIO**  
 714 Almond St.

Vineland, NJ 08360  
(609) 794-2377  
Owner: Peter Ocasio III  
Studio Manager: Peter Ocasio III

[8] OMNI AUDIO  
also *REMOTE RECORDING*  
580 8th Ave., 21st floor  
New York, NY  
(212) 869-3990  
Owner: Pat Jaques  
Studio Manager: Pat Jaques

[4] ON THE RIGHT TRAK  
also *REMOTE RECORDING*  
78 Annafan St.  
Rosindale, MA 02131  
(617) 327-4843  
Owner: Maylo Keller  
Studio Manager: Maylo Keller

[8] ONE-SHOT PRODUCTIONS  
also *REMOTE RECORDING*  
1863 Delabole Rd.  
Pen Argyl, PA 18072  
(215) 863-7706  
Owner: Dusty McCollum  
Studio Manager: Dusty McCollum

[8] OPEN EAR RECORDERS  
also *REMOTE RECORDING*  
373 Trapelo Rd.  
Belmont, MA 02178  
(617) 484-6938  
Owner: Paul F. Terrasi  
Studio Manager: Paul F. Terrasi

[4] P&D RECORDING  
433 Ruby Dr.  
Aberdeen, MD 21001  
(301) 272-1806  
Owner: Paul Costanzi, Dave DeMarco  
Studio Manager: Paul Costanzi

[8] PA DA  
also *REMOTE RECORDING*  
27 Washington Sq. N., Room 4D  
New York, NY 10011  
(212) 228-1808  
Owner: R.A. Miller  
Studio Manager: Eddy R. Davis

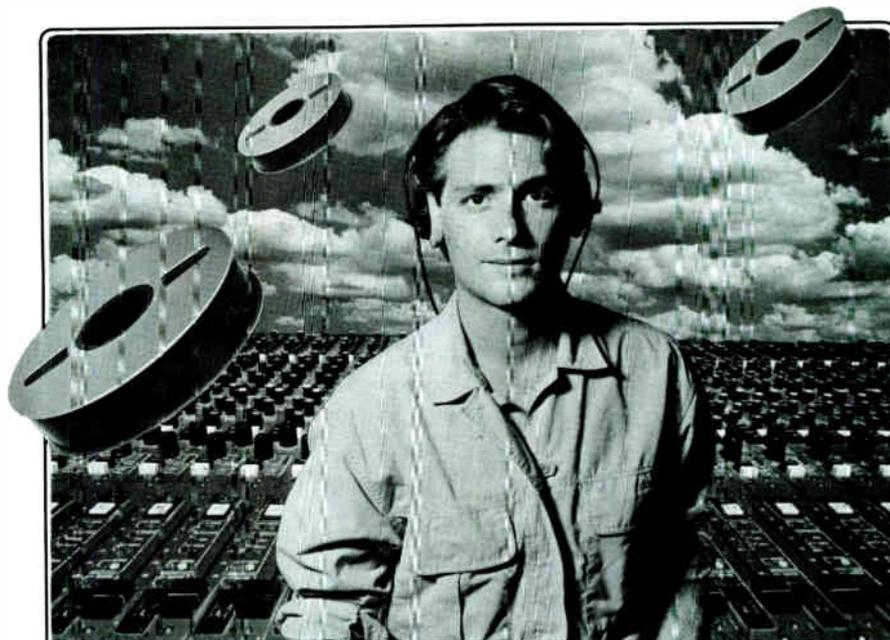
[8] PALMBAR PRODUCTIONS  
also *REMOTE RECORDING*  
135 Sixth Ave., Ste. 7  
Brooklyn, NY 11217  
(718) 783-3886  
Owner: Paul Barboza  
Studio Manager: Paul Barboza

[8] PAMARK PRODUCTIONS  
Wharton, NJ  
(201) 361-0970  
Owner: Mark Stephens  
Studio Manager: Mark Stephens

[8] PANORAMA MUSIC WORKS  
PO Box 2515  
Stamford, CT 06906  
(203) 323-7022  
Owner: Richard A. Musk  
Studio Manager: Felicite Woods

[8] PHILADELPHIA MUSIC WORKS  
PO Box 947  
Bryn Mawr, PA 19010  
(215) 825-5656  
Owner: Andy Mark

[8] PINEAPPLE SEVEN  
PO Box 121  
York, PA 17405  
(717) 846-0541  
Owner: Ed Debes  
Studio Manager: Ed Debes



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**(8) PLAYTIME MUSIC COMPANY**  
*also REMOTE RECORDING*  
 PO Box 444, Back Bay Annex  
 Boston, MA 02117  
 (617) 266-1460  
 Owner: Playtime Conglomerate, Inc  
 Studio Manager: Tom Dube  
 Engineers: Tom Dube, Ips DeKatt  
 Dimensions: studio 14 x 18, control room 14 x 18  
 Mixing Consoles: Soundcraft 400B 24 x 4, Tascam M30 8 x 4  
 Audio Recorders: Tascam 38 8-track, Tascam 32 2-track.  
 Cassette Recorders/Duplicators: TEAC V-380C, Sony TC-FX320  
 Noise Reduction Equipment: (2) dbx 150  
 Echo, Reverb, & Delay Systems: Lexicon PCM70, Yamaha SPX90, Yamaha D1500, (2) live chambers.  
 Other Outboard Equipment: Loft 400 quad gate, Loft 410 dual comp/expander, (2) Loft 401 parametric EQ, dbx 263X de-esser, Aphex Type C aural exciter, (2) Yamaha Q1031 1/3 octave EQ, Ashly SC-63 parametric EQ, Yamaha 6C-2020 dual comp/gate, Carver C-9 sonic hologram generator.  
 Microphones: AKG C 414EB P48, Beyer M88, (2) AKG C 451EB, (2) Shure SM58, (2) AKG D310, (2) E-V RE15, E-V Cardax  
 Monitor Amplifiers: QSC 1400, Nikko Alpha II, Yamaha CAB00  
 Monitor Speakers: Boston Acoustics A-400, ADS 500  
 Musical Instruments: Sequential Circuits Drumtraks, Kurbicki Telecaster, Fender Telecaster, Yamaha F6420EC, Kurzweil, Emulator, Linn, et. al upon request.  
 Other MIDI Equipment: Roland MC-500, Roland MSQ-100  
 Rates: Vary; determined by nature of project.

**(4) POLATY MEDIA ARTS**  
*also REMOTE RECORDING*  
 4309 Wendy Ct.  
 Monrovia, MD 21770  
 (301) 865-5728  
 Owner: Bo Polatty  
 Studio Manager: Kathleen Polatty

**(4) THE POLYGON**  
 6305 Walton Ave.  
 Pennsauken, NJ 08109  
 (609) 662-7619  
 Owner: Robert Fedenci, Michael Fortuna  
 Studio Manager: Michael Fortuna, Robert Fedenci

**(8) POLYGRAM RECORDS TAPE FACILITY**  
 10 Distribution Blvd.  
 Edison, NJ 08817  
 (201) 287-1222  
 Owner: Polygram Records Inc.  
 Studio Manager: Dennis M. Drake

**(2) POMEROY DIGITAL AUDIO**  
*also REMOTE RECORDING*  
 193 Baltic St.  
 Brooklyn, NY 11201  
 (718) 852-8505  
 Owner: Doug Pomeroy

**(8) POSITIVE SOUND**  
 224 W. 21st St., Ste 8  
 New York, NY  
 (212) 255-9227  
 Owner: Patricia Edick

**(4) POWER-OUT**  
*also REMOTE RECORDING*  
 100 Red Lion Rd.  
 Philadelphia, PA 19115  
 (215) 671-8256  
 (215) 671-8989  
 Owner: Barry Hark  
 Studio Manager: Barry Hark

**(8) P.P.I. RECORDING**  
 147 W 33rd St., #308  
 New York, NY 10001  
 (212) 279-1631  
 Owner: Chip M. Fabnzi  
 Studio Manager: Chip M. Fabnzi

**(8) PRIVATE SESSIONS STUDIOS**  
 PO Box 2476  
 Ventnor, NJ 08406  
 (609) 822-1577  
 Owner: Rolfi Venzie  
 Studio Manager: Ernie Fedenci



**(8) PRODIGITAL, INC.**  
*also REMOTE RECORDING*  
 3400 Pendleton Dr.  
 Wheaton, MD 20902  
 (202) 635-5588  
 Owner: William Burns  
 Studio Manager: Alan Wonneberger

**(8) QEC RECORDING**  
 65 Stirling Ct.  
 Metuchen, NJ 08840  
 (201) 549-0023  
 (201) 494-7237  
 Owner: R. Quinto, M. Walsh  
 Studio Manager: Paul Alleman  
 Engineers: Bobby Quinto, Aaron Ceoni, Mike Walsh  
 Dimensions: studio 13 x 31, control room 10 x 18  
 Mixing Consoles: Tascam M312 12 x 8 x 2, Yamaha MM30 4 x 4 x 2  
 Audio Recorders: Tascam T38 8-track, Yamaha MT44 4-track, Tascam T32 2-track, TEAC 2300S 2-track.  
 Cassette Recorders/Duplicators: JVC KDA-8 (real time), Yamaha MT44 (real time).  
 Echo, Reverb, & Delay Systems: Yamaha REV7 digital reverb, (2) Yamaha SPX90 digital reverb, Ibanez HD-1000 digital delay/harmonizer, Ibanez SDR-1000 digital reverb.  
 Other Outboard Equipment: (2) Valley People 440 comp/exp/lim/de-essers, Valley People dynamite, (2) Valley People gate's  
 Microphones: (2) AKG C414, Neumann U87, E V RE20, (2) Shure SM81, (4) Sennheiser MD-421, (2) Audio-Technica AT-801.  
 Monitor Amplifiers: (2) Carver PM-200  
 Monitor Speakers: JBL 4425 w/Bi-radial horns.  
 Musical Instruments: Ensoniq Mirage (digital sampling keyboard), Oberheim Matrix 12, (2) Yamaha DX7, Moog Memorymoog, Yamaha RX11 drum machine.  
 Video Equipment: Basic VHS duplication services are available.  
 Other Equipment: (2) Rane HC-6 headphone amplifiers, (8) AKG K141 headphones, all Whirlwind input bays, cables, and direct boxes, JVC 2-track digital mastering available upon request. A full line of rental equipment can be made available at additional charge upon request.  
 Rates: Hourly and production rates are available upon request.

**(2) QUEANS STUDIO OF JOE SIEGEL**  
*also REMOTE RECORDING*  
 45-27 215 Pl.  
 Bayside, NY 11361  
 (718) 224-8789  
 Owner: Joe Siegel  
 Studio Manager: Joe Siegel

**(8) RABBIT RECORDING & DUPLICATING**  
 18 E. 16 St., 3rd floor  
 New York, NY 10003  
 (212) 645-9290  
 Owner: Tom Desisto  
 Studio Manager: Terry Blaine

**(8) RADIO TODAY**  
 1756 Broadway  
 New York, NY 10019  
 (212) 581-3962

Owner: Dan Formento  
 Studio Manager: Ben Manilla

**(8) RAG TRACK SOUND & SUPPLIES**  
*also REMOTE RECORDING*  
 PO Box 30604  
 Washington, DC 20030  
 (202) 584-9207  
 Owner: Robert Alton Grady  
 Studio Manager: Pausena M. Grady

**(8) RAMA DAMA RECORDS**  
*also REMOTE RECORDING*  
 219 State Rd.  
 Eliot, ME 03903  
 (207) 439-5541  
 Owner: Lonnie Londin  
 Studio Manager: Lonnie Londin

**(8) RAPID TRANSIT PRODUCTIONS**  
*also REMOTE RECORDING*  
 25-40 31st Ave.  
 Astoria, NY 11106  
 (718) 721-6077  
 Owner: Matt Melnick  
 Studio Manager: Matt Melnick

**(8) REAL TO REEL**  
 1119 W 7th  
 Erie, PA 16502  
 (814) 456-1527  
 Owner: Bruce Bennet  
 Studio Manager: Karen Bennet

**(8) RECORDED PUBLICATIONS LABORATORIES**  
*also REMOTE RECORDING*  
 1100 State St.  
 Camden, NJ 08105  
 (609) 963-3000  
 Owner: Recorded Publications Laboratories, Inc.  
 Studio Manager: Ernest W. Merker

**(8) THE RECORDING UNIT**  
 18 Hickory Dr.  
 Princeton, MA 01541  
 (617) 464-5808  
 Owner: C.A. Calaman  
 Studio Manager: C.A. Calaman

**(8) RECORDINGS**  
*also REMOTE RECORDING*  
 336 Belmont St.  
 Watertown, MA 02172  
 (617) 926-0546  
 Owner: Sam Negn  
 Studio Manager: S. Negn, D. Cappello

**(2) REEL PRODUCTIONS**  
*only REMOTE RECORDING*  
 PO Box 427  
 Allston, MA 02134  
 (617) 576-2872  
 Owner: Ted Evans  
 Studio Manager: Kathy Evans

**(8) DAVID RENZZ PRODUCTIONS**  
*also REMOTE RECORDING*  
 30 Union City Rd.  
 Prospect, CT 06712  
 (203) 758-3168  
 Owner: David Renzz  
 Studio Manager: David Renzz

**(8) RES-STUDIO**  
 69 Park Dr., #21  
 Boston, MA 02215  
 (617) 437-0747  
 Owner: Richard Schumacher  
 Studio Manager: Richard Schumacher

**(2) REVONAH RECORDS**  
*also REMOTE RECORDING*  
 Box 217  
 Ferndale, NY 12734  
 (914) 292-5965  
 Owner: Paul Gerry  
 Studio Manager: Patricia Gerry

[4] RIEDEL AUDIO SERVICES  
also REMOTE RECORDING  
109 Commack Rd.  
Islip, NY 11751  
(516) 277-9418  
Owner: Rich Riedel  
Studio Manager: Rich Riedel

[8] RK 1 PRODUCTIONS AND RECORDING STUDIO  
also REMOTE RECORDING  
1757 Scribner Pl.  
Crofton, MD 21114  
(301) 858-0098  
Owner: Robert Kellner  
Studio Manager: Enc Copeland

[8] ROANE RECORDING STUDIOS  
also REMOTE RECORDING  
7 N. Cottenet St.  
Irvington-on-Hudson, NY 10533  
(914) 591-9187  
Owner: Stephen Roane  
Studio Manager: Stephen Roane

[8] ROARK ASSOCIATES STUDIO  
22 Brookview Ave.  
Delmar, NY 12054  
(518) 439-8205  
Owner: Michael J. Roark  
Studio Manager: Michael J. Roark

[4] THE ROCKIN' DOCTORS RECORDING CO.  
also REMOTE RECORDING  
124 Watchung Ave.  
West Orange, NJ 07052  
(201) 676-9224  
Owner: Michael Frank  
Studio Manager: Arlene Lamee

[8] ROCKS VILLAGE RECORDING  
also REMOTE RECORDING  
77 Old Amesbury Line Rd.  
Haverhill, MA 01830  
(617) 372-8866  
Owner: Tom Daley, Meg Daley  
Studio Manager: Meg Daley

[4] BILL RODITSKI MUSIC SERVICES  
also REMOTE RECORDING  
404 Park Ave.  
Clarks Green, PA 18411  
(717) 586-2605  
Owner: Bill Roditski  
Studio Manager: Bill Roditski

[8] ROSEWOOD PRODUCTIONS  
also REMOTE RECORDING  
Box 364  
New Castle, PA 16103  
(412) 654-3023  
Owner: Wes Homner

[8] ROSS-AT-HOME STUDIOS  
6505 Pine Lane Dr.  
Suitland, MD 20746  
(301) 736-2448  
Owner: Dante A. Ross Jr.  
Studio Manager: Dante A. Ross Jr.

[4] ROSS CREATIVE MUSIC  
51 Barton Pl.  
Port Chester, NY 10573  
(914) 939-0317  
Owner: Mark A. Ross  
Studio Manager: Mark A. Ross

[8] ROSS-GAFFNEY INC.  
also REMOTE RECORDING  
21 W. 46th St.  
New York, NY 10036  
(212) 719-2744  
Owner: James Gaffney  
Studio Manager: Richard Weigle

[8] ROYAL STAR STUDIOS  
200 Pixley Rd.  
Rochester, NY 14624  
(716) 247-8107  
Owner: Rudi Valentino  
Studio Manager: Kevin Hart

[8] RUBBER BALL PRODUCTIONS  
also REMOTE RECORDING  
696 Edgewood Pl.  
N. Brunswick, NJ 08902  
(201) 249-9241  
Owner: Terry Hughes  
Studio Manager: TH

[8] RUFF CUT C/O FLIPSIDE STUDIOS  
Village Green Shopping Cntr.  
Center Ln.  
Levittown, NY 11756  
(516) 735-4426  
Owner: Bill Ray  
Studio Manager: Bill Heyman

[8] SADLER RECORDING STUDIO, INC.  
also REMOTE RECORDING  
118 E. 28th St.  
New York, NY 10016  
(212) 684-0960  
Owner: John H. Sadler  
Studio Manager: Rick Klejmont  
Engineers: John Sadler, Rick Klejmont, Ernest Ucko, Ken Doveil  
Mixing Consoles: Trident Series 65 20 x 16.  
Audio Recorders: Scully 280-8 8-track, (2) Ampex 440 2-/4-track, (2) Ampex AG-350 2-track, Ampex 350 1-track w/Auto-Tec C-5 Elec & Saki heads, Tascam 25-2 2-track, Fostex E-2 2-track w/center-track time code.  
Cassette Recorders/Duplicators: (2) Nakamichi BX300, (1) Otan DP-4050 high speed duplicator w/reel and cassette masters.  
Noise Reduction Equipment: dbx Compatible 8-channel LT sound, Dolby A 2-channel, (2) Kepex noise gates.  
Synchronization Systems: SMPTE audio and video sync Echo, Reverb, & Delay Systems: LT Sound REV2 micro-plate stereo reverb, Yamaha SPX90 digital processor, Lexicon 92 digital delay.  
Other Outboard Equipment: (2) UREI LA-4 compressor/limiters, Aphex Type B stereo Aural Exciter, LT sound VE2 plus Thompson Vocal Eliminator, Orban 526A de-esser, Soundcraft graphic equalizer stereo, (2) Pultec filters.  
Microphones: (2) E-V RE20, (2) E-V RE16, (2) AKG D202E1, (2) AKG D224E, (2) AKG C451C, (2) Sony ECM-50, (5) E-V 647A, (2) Astatic 1070.  
Monitor Amplifiers: Crown, Southwest Technical.  
Monitor Speakers: JBL 4312, Auratone 5C.  
Musical Instruments: Sohmer baby grand piano, Casio 401 keyboard, Yamaha RX21 drums, Yamaha DX7 synth.  
Video Equipment: VO-5850/Abner controller, A/B roll video editing system, KM CG7000 character generator, Fortel DHP-525 TBCs, Crosspoint latch switcher, Shuntron time code.  
Rates: On request.

[4] SAUNA STUDIO  
Jackson Heights, NY 11372  
(718) 779-2312  
Owner: Mike Rosenman  
Studio Manager: Mike Rosenman

[8] SAXON RECORDING  
also REMOTE RECORDING  
26 Sidney St.  
Rochester, NY 14609  
(716) 288-3150  
Owner: Dave Anderson  
Studio Manager: Dave Anderson

[8] SEA SHARP STUDIO  
1 Hines Ct.  
Lavallette, NJ 08735  
(201) 830-3244  
Owner: Kessmann Sound Productions  
Studio Manager: James E. Kessock

[8] SECRET SOUND  
804 Bengies Rd.  
Baltimore, MD 21220  
(301) 391-1568  
Owner: John Grant  
Studio Manager: John Grant

[8] SELCER SOUND  
also REMOTE RECORDING  
731 Harrison Ave.  
Boston, MA 02118  
(617) 267-9358  
Owner: Ken Selcer  
Studio Manager: Ken Selcer

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[2] SELTZER SOUND  
also REMOTE RECORDING  
185 E. Broadway  
New York, NY 10002

Owner: Carl Seltzer  
Studio Manager: Carl Seltzer  
Extra & Direction: Seltzer Sound specializes in recording "acoustic" music in a salon environment. State-of-the-art facilities include a world class 1909 Steinway 7' 4" and Dolby SR, the new analog recording process for master tapes. Our recordings achieve the creative energy and excitement of the original musical performance by capturing it in real time with natural accuracy. We also do remotes. The original cast album of the Off Broadway hit *One Mo' Time* recorded live at The Village Gate in 1980 by Seltzer Sound received a Grammy Award nomination. A partial list of artist and label credits include: Eubie Blake, Art Hodes, Dick Hyman, Billy Taylor, Dick Wellstood, Folkways, Herwin, Inner City, Jazzology, Rosetta Records, Stash, Sunnyside, Warner Bros. Remastering 78-rpm records is a sideline for which Seltzer Sound has over 35 albums to its credit.

[2] SHANGRILA SOUND  
also REMOTE RECORDING  
625 Berdan Ave  
Wayne, NJ 07470  
(201) 694-7867

Owner: Jeff D. Windwer  
Studio Manager: J.D. Windwer

[4] SIDE TRACK PRODUCTIONS  
also REMOTE RECORDING  
409 Sunrise Terr.  
Springfield, MA 01129  
(413) 782-5471

Owner: David L. Isabelle  
Studio Manager: Sandra J. Isabelle

[4] PEDRO SILVA STUDIO  
165 Clermont Ave.  
Brooklyn, NY 11205  
(718) 852-6143

Owner: Pedro-Pablo Silva  
Studio Manager: Pedro Silva

[8] 6/8 STUDIOS  
611 Broadway  
New York, NY 10012  
(212) 254-5044

Owner: Perkin Barnes, Ihsan Rashada  
Studio Manager: Perkin Barnes  
Engineers: Perkin Barnes  
Dimensions: Room 1: studio 20 x 15 x 8 x 15 x 3, control room 12 x 15. Room 2: studio 12 x 18.  
Mixing Consoles: Soundcraft Series 200 8 x 4, Sunn (auxiliary) 8 x 2.

Audio Recorders: Otari MX5050 8-track, Otari MX5050 BII 2-track.

Cassette Recorders/Duplicators: Onkyo Integra.

Noise Reduction Equipment: dbx 180 Type I.  
Echo, Reverb, & Delay Systems: Yamaha SPX90 multi-effects, Yamaha R1000 digital reverb, Ibanez DM 2000 digital delay, AKG BX 5 stereo reverb, Biamp spring reverb.  
Other Outboard Equipment: (2) dbx 166 compressor/gates, Audio Logic MT44 quad gate, Audioarts Model 1200 comp/limiter, Ibanez GE1502 graphic EQ.

Microphones: AKG 414EB condenser, (4) Sennheiser 421, (3) Beyr M500 ribbon, Shure SM57, (4) Shure SM58, (2) AKG D190ES, (3) AKG Capsule, E-V DO54, E-V 635A.

Monitor Amplifiers: Yamaha P2200.  
Monitor Speakers: JBL 4311, JBL 4401, ROR cube.  
Musical Instruments: Yamaha DX7, Yamaha CP70 piano, Oberheim DX drum machine, Pearl five-piece walnut drum set, assorted percussion.

Other Equipment: Countryman and Minicube direct boxes, Fender Twin reverb guitar amp, Fender Super reverb guitar amp, Music Man 100-watt guitar amp, Galien-Kruger bass amp.  
Rates: \$22/hr.

[8] JACK SKY PRODUCTIONS INC.  
218 N. Church St.  
Moorestown, NJ 08057  
(609) 234-6095

Owner: John M. Govsky  
Studio Manager: John M. Govsky

[8] SKYTOP RECORDING STUDIO  
RD #1, Box 378  
Port Matilda, PA 16870  
(814) 237-0644

Owner: Wendell L. Williams  
Studio Manager: Wendell L. Williams



[8] SMALL WORLD PRODUCTIONS  
440 W. 34 St., 5B  
New York, NY 10001  
(212) 947-4677

Owner: Nete Ouder Kirk  
Studio Manager: Nete Ouder Kirk

[4] SMILING EARS SOUND  
only REMOTE RECORDING  
8770-C Town & Country  
Ellicott City, MD 21043  
(301) 465-0856

Owner: Gary Zeichner  
Studio Manager: Wendy Zeichner

[8] SOJ MUSIC STUDIOS  
also REMOTE RECORDING  
146 W. 46th St.  
New York, NY 10036  
(212) 869-0226

Owner: John Castellano  
Studio Manager: Liz Irons

[8] SONG WORKS RECORDING STUDIOS  
also REMOTE RECORDING  
76 Linwood Ave.  
Emerson, NJ 07630  
(201) 599-0468

Owner: Michael Guttilla  
Studio Manager: Michael Guttilla

[4] THE SONGWRITERS ADVOCATE  
47 Maplehurst Rd.  
Rochester, NY 14617  
(716) 266-0679

Owner: Jerry Englerth  
Studio Manager: Jerry Englerth

[8] SOUND ARTS CO. INC.  
only REMOTE RECORDING  
5 Cindy Ln.  
Oakhurst, NJ 07712  
(201) 493-8666

Studio Manager: Frank Gspann

[8] SOUND CONCEPTS  
80 Great Hill Rd.  
Seymour, CT 06483  
(203) 888-6712

Owner: Sound Concepts Inc.  
Studio Manager: David A. Greaves

[8] THE SOUND FOUNDRY  
also REMOTE RECORDING  
Box 527  
Cohasset, MA 02025  
(617) 545-9273

Owner: William E. Barton  
Studio Manager: William E. Barton

[4] SOUND OF GLASS  
127 Central St.  
West Boylston, MA 01583  
(617) 835-2005

Owner: Charles Blaum  
Studio Manager: Charles Blaum

[8] SOUND SORCERER  
also REMOTE RECORDING  
PO Box 37  
Manorville, NY 11949  
(516) 878-6049

Owner: G.L. Bush Jr.  
Studio Manager: Bushy

[8] SOUNDS EXQUISITE  
also REMOTE RECORDING  
12917 Clarion Rd.  
Fort Washington, MD 20744  
(301) 292-6145

Owner: Kenneth LaCapria  
Studio Manager: Kenneth LaCapria

[8] SOUNDS GOOD  
Rt. 118  
Germantown, MD 20874  
(301) 972-2299

Owner: Thomas Acuna  
Studio Manager: Thomas Acuna

[4] "SOUNDS OF BLANFORD"  
RADIO PRODUCTION  
R-212, Rte. 23  
Blandford, MA 01008  
(413) 848-2157

Owner: Alan R. Peterson

[8] SPIDER SOUND STUDIO  
Box 74  
Sennett, NY 13150  
(315) 253-7591

Owner: Ron Thompson, Jim Frech  
Studio Manager: Spider Murphy

[8] SPLICE OF LIFE, INC.  
Sparhawk St.  
Brighton, MA 02135  
(617) 782-3384

Owner: Amie Beth Doff  
Studio Manager: Amie Beth Doff  
Engineers: Brian Ales, Coleman Rogers

Dimensions: Room 1: studio 23 x 24 w/variable acoustics, control room 13 x 15. Room 2: isolation 10 x 12, isolation 6 x 10.

Mixing Consoles: Sound Workshop Series 30 17 x 8.  
Audio Recorders: Otari 5050 MKIII 8-track 1/2", Otari 5050 MKII 2-track 1/4", TEAC A-7300 2-track 1/4", Sony TC-640 2-track 1/4".

Cassette Recorders/Duplicators: (5) Nakamichi BX-1 (modified), Nakamichi BX-2 (modified), Sony TC-K81 (3-head).

Noise Reduction Equipment: (4) dbx 150 Type I, dbx 155 Type I.

Echo, Reverb, & Delay Systems: Lexicon PCM70 REV 3.0 (MIDI), Lexicon PCM60, Lexicon PCM41, Roland SDE-2500 (MIDI), Yamaha D1500 (MIDI), Korg SDD-1000.

Other Outboard Equipment: (2) Trois 518 parametric EQs, (2) Trois X-Com compressor/expander, Ashly SC-52 stereo compressor, dbx 161 compressor/limiter, Ashly SC-66A stereo parametric EQ, Ashly SC-33 stereo noise gate, Aphex Type C aural exciter, Valley People Dyna-Mite compressor/expander.

Microphones: Neumann U87, (2) AKG 414EB, (2) AKG C451B, E-V RE20, (4) Sennheiser MD 421-U-5, (4) Shure SM57, Beyr M-500, AKG D-12.

Monitor Amplifiers: Hafler 220, Biamp TC-60, SAE Mark IV CM.

Monitor Speakers: (2) Tannoy SRM-12B (sync source), (2) Yamaha NS-10M, (2) Acoustic Research AR-18BX, (2) Auratone.

Musical Instruments: Kawai 6-foot grand piano, Sequential Circuits Pro-One, Oberheim Matrix-6 polyphonic synthesizer, Korg DDD-1 drum machine, Gretsch drum kit.

Rates: Call for more info.

[8] SPRING STUDIO  
Fishkill Rd.  
Nelsonville, NY 10516  
(914) 265-2625

Owner: Don Hurtig  
Studio Manager: Don Hurtig

[8] STAR STREAM SOUND  
also REMOTE RECORDING  
800 Aurora St.  
Lancaster, NY 14086  
(716) 683-6701

Owner: J.M. Stern  
Studio Manager: J.M. Stern

[4] STAR STUDIOS  
3257 Ryerson Cir.  
Baltimore, MD 21227  
(301) 242-9432

Owner: Arvilla Campbell  
Studio Manager: Glen Campbell

[8] STEA SOUND  
also REMOTE RECORDING  
26 Buena Vista Dr.  
Westport, CT 06880  
(203) 227-7113  
Owner: Len Stea

[8] STEELWORKS  
15 Irving Ave.  
Floral Park, NY 11001  
(516) 328-1587  
Owner: Ben Steel  
Studio Manager: Valerie G.

[8] STROBE-LIGHT SOUND STUDIO  
1219 Bergen St.  
Brooklyn, NY 11213  
(718) 771-3411  
Owner: Andrei Strobert  
Studio Manager: Andrei Strobert

[8] "THE STUDIO"  
220 Westbury Ave.  
Carle Place, NY 11514  
(516) 334-7550  
Owner: Professional Recording Services  
Studio Manager: Hector G. La Torre

[4] STUDIO A  
also REMOTE RECORDING  
87 Sherry Ave.  
Bristol, RI 02809  
(401) 253-8428  
Owner: Jack Anderson  
Studio Manager: Ellen Lynch

[8] STUDIO 8  
204 Garfield St.  
Laconia, NH 03246  
(603) 524-5873  
Owner: Steve Brooks, Bill Plisko, Bob Scarsillon  
Studio Manager: Steve Brooks

[8] STUDIO 84  
848 Forge St.  
Jamesburg, NJ 08831  
(201) 521-1369  
Owner: William Lenk  
Studio Manager: "Mr. Bill", Joel Cohen

[4] STUDIO 55 PRODUCTIONS  
also REMOTE RECORDING  
42-55 Colden St., Ste. 11P  
Flushing, NY 11355  
(718) 762-1264  
Owner: George Lerner  
Studio Manager: George Lerner  
Engineers: George Lerner, B.S.  
Dimensions: main studio 16 x 28, auxiliary 14 x 16, control room 12 x 16  
Mixing Consoles: Fender (CBS Labs) M12 24 two of above, one right-channel, one for left channel. Complete customized.  
Audio Recorders: TEAC 5100 4-track (reel-reel), Phase Linear 8000 2-track.  
Cassette Recorders/Duplicators: TEAC 860A 4-track cassette, (2) Pioneer 8181 cassette decks (customized).  
Echo, Reverb, & Delay Systems: (2) Phase Linear 1100 dynamic expander and noise reduction, MXR system for delay, etc., Roland Chorus Master.  
Other Outboard Equipment: (2) SAE Mark XXVII-B 1/3-octave EQ, (3) Phase Linear parametric EQ, Phase Linear 5100 sound analyzer, (2) Phase Linear 8100 linear turntables.  
Microphones: Shure SM58, Shure SM57, Shure SD565, AKG D1000, various E-Vs.  
Monitor Amplifiers: (3) Phase Linear D500, SAE Mark XXV, Pioneer SPEC 1 and 2.  
Monitor Speakers: (6) Altec Lansing A19 custom, ESS Professional #6.  
Musical Instruments: Gretsch (full drums), Gibson Les Paul (lead guitar), keyboards, (2) Marshall 100W stacked lead and bass systems, 2 (4 x 12) 2 (4 x 15). Others upon request.  
Video Equipment: 1/2-track VHS color at request. 24 hour notice.  
Rates: On request.

[4] STUDIO GO  
also REMOTE RECORDING  
1530 Locust St., Ste. 77  
Philadelphia, PA 19102  
(215) 574-0419  
Owner: David Orr  
Studio Manager: Taylor Scott

[4] STUDIO K GOSPEL RECORDING  
also REMOTE RECORDING  
79 Lewiston St., PO Box 177  
Mechanic Falls, ME 04256  
(207) 345-9073  
Owner: Mustard Seed Ministries  
Studio Manager: Stephen D. Kelbreth

[8] STUDIO N  
also REMOTE RECORDING  
706 Waverly St.  
Framingham, MA 01701  
(617) 872-6843  
Owner: Dave Nodiff Recording  
Studio Manager: P. Nodiff

[8] STUDIO ONE, N.Y.  
also REMOTE RECORDING  
212 E. 52 St.  
New York, NY 10022  
(212) 935-3449  
Owner: November Seven Corp.  
Studio Manager: S. Rickey  
Engineers: G. Georgiades  
Dimensions: Room 1: studio 20 x 50, control room 15 x 5.  
Room 2: Room 2: studio 15 x 5.  
Mixing Consoles: TAC Scorpion 32 x 8 x 8.  
Audio Recorders: Tascam 388-track, Tascam 32B 2-track.  
Cassette Recorders/Duplicators: Tascam 122B.  
Echo, Reverb, & Delay Systems: (2) Yamaha SPX90, Roland DEP-5, Yamaha REV7, DOD DigiTech, Eventide 2016, Eventide 9697 harmonizer, Eventide 949 harmonizer, Eventide 910 harmonizer.  
Other Outboard Equipment: Galex 8 gate, (2) dbx 165 compressors, Yamaha 31-band EQ, Symetrix 528 comp, dbx 163 compressor.  
Microphones: Shure SM58, Shure SM57, AKG 414, Beyer M88, AKG D-12.  
Monitor Amplifiers: (6) Crown Micro-Tech 1200.  
Monitor Speakers: JBL Concert Series 4870, JBL 4430 control monitor, JBL 4408 control monitor.  
Musical Instruments: Yamaha recording drums, Marshall JCM800 amp, G&K bass amp, Korg DSS-1, Yamaha DX7, Roland RD-1000, Kawai drum machine.  
Other MIDI Equipment: Apple MacIIc, IBM XT.  
Video Equipment: Panasonic CT 26M, Panasonic CT110M/CT193OU, Panasonic G810, Panasonic U-3.

Extras & Direction: An exclusive multi-media pre-production house with full rehearsal, recording, video and living facilities in an eastside NY townhouse.

[4] STUDIO STRADA  
also REMOTE RECORDING  
Cambridge, MA  
(617) 253-4093  
Owner: Curtis Roads  
Studio Manager: R.L. Blevins

[4] STUDIO 333  
180-72 St.  
New York, NY 11209  
(718) 748-4442  
Owner: Joe Monroe  
Studio Manager: Ellen Nygaard

[8] STUDIO 237  
Yonkers, NY  
(914) 476-1905  
Owner: Victor J. Mandragona  
Studio Manager: Victor J. Mandragona

[4] STUPID FRESH SOUNDS AND STUFF STUDIOS  
50-16 31st Ave., Ste. 5D  
Woodside, NY 11377  
(718) 728-0203  
Owner: Ivan Rodriguez  
Studio Manager: IAR

[8] SUBTERRANEAN SOUND  
also REMOTE RECORDING  
504 High St.  
Long Branch, NJ 07740  
(201) 870-1379  
Owner: Stacy Phelon  
Studio Manager: Stace Phelon

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**[8] SUE'S SOUND KITCHEN**  
*also REMOTE RECORDING*  
 9 Rowe St.  
 Coram, NY 11727  
 (516) 736-1495  
 Owner: Carl P. Davino  
 Studio Manager: Sue Davino  
 Engineers: Carl P. Davino, Paul Orfino  
 Dimensions: studio 22 x 15, control room 12 x 16.5  
 Mixing Consoles: Ramsa WR-T820 20 x 16 x 2  
 Audio Recorders: Otari MX 5050 85AD 8-track, Tascam 32-2 2-track, TEAC X-3 2-track.  
 Cassette Recorders/Duplicators: Onkyo TA-RW11, JVC KD-D4, Technics RS-928R.  
 Noise Reduction Equipment: (4) dbx 150s stereo (for 8-tracks), dbx 155 quad (for 2-track).  
 Synchronization Systems: Roland SBX-10 converter, Commodore 128 computer, Passport MIDI 8 Plus w/tape synch.  
 Echo, Reverb, & Delay Systems: Roland DEP-5 digital effects processor, Ibanez SDR-1000 stereo digital reverb, Ursula Major 323 digital reverb, (2) Korg SDD-2000 digital delays, Korg SDD-1000 digital delay, Roland SDE-1000 digital delay.  
 Other Outboard Equipment: dbx 160X compressor, Valley People 430 Dyna-Mite stereo noise gate, Korg digital voice processor, Omni Craft GT-4 noise gates, Loft 4-channel gate/limiter, Aphex Type B Aural Exciter, MXR Pitch Shift doubler.  
 Microphones: Neumann U87, (2) AKG C451s, (4) Sennheiser 421s, E-V RE20, (4) E-V PL95s, (2) E-V PL6s, (4) Shure SM57s, (2) Shure SM58s.  
 Monitor Amplifiers: AB Systems 9220, AB Systems 2056, Tapco CP-120.  
 Monitor Speakers: UREI 813Bs, Yamaha NS-10s.  
 Musical Instruments: Korg DW-6000 digital synth, Roland Juno 1 synth, Casio CZ-1 synth, Roland 909 drum machine, Slingerland 12-piece drum kit, BC Rich Bitch guitar, Ibanez "P" bass.  
 Rates: \$35/hr. by appointment only

**[8] SUMMER SOUND STUDIO**  
 1551 Monroe Ave.  
 Rochester, NY 14618  
 (716) 442-1631  
 Owner: Bob Manni  
 Studio Manager: Bob Marini

**[4] SURF AND TURF STUDIO**  
*also REMOTE RECORDING*  
 PO Box 416  
 Ocean View, DE 19970  
 (302) 539-5490  
 Owner: John Remy  
 Studio Manager: John Remy

**[8] SWIFTWATER SOUND STUDIO**  
 HCR #1, Box 32  
 Swiftwater, PA 18370  
 (717) 839-9936  
 Owner: Mitchell & Mana Ross  
 Studio Manager: Mana Ross

**[8] SYMBIOS RECORDING AND ENGINEERING**  
*also REMOTE RECORDING*  
 PO Box 2202  
 Worcester, MA 01613  
 (413) 967-3402  
 Owner: Rene Patterson  
 Studio Manager: Rene Patterson

**[8] SYNPHONIC MUSIC PRODUCTION**  
 PO Box 215  
 New Milford, NJ 07646  
 (201) 488-0110  
 Owner: Bill Greenawalt  
 Studio Manager: Samia Mastandrea

**[4] SYRACUSE UNIV. SCHOOL OF MUSIC**  
 Crouse College  
 Syracuse, NY 13244  
 (315) 423-4107  
 Owner: Syracuse University  
 Studio Manager: Mark Drews

**[8] TANDEM RECORDING STUDIO**  
 19 Graylock Rd.  
 Boston, MA 02134  
 (617) 782-4727  
 Owner: Doug Alexander  
 Studio Manager: Frank Wolf

**[8] TAPE TRACKS**  
*also REMOTE RECORDING*  
 56 W. 45th St., 17th floor  
 New York, NY  
 (212) 575-9673  
 Owner: Clack, Inc.  
 Studio Manager: Frank Tomano, Karen Taylor



**[8] TARGET**  
 801 Valley Rd.  
 Newark, DE 19711  
 (302) 731-4431  
 Owner: Marc Moss  
 Studio Manager: Keith Moss

**[4] TECHNICAL SERVICE CO. & LEONARDO FILM, LTD.**  
*also REMOTE RECORDING*  
 2701 Madison St., A-10  
 Chester, PA 19013  
 (215) 876-1341  
 Owner: Lunden Leonardo  
 Studio Manager: Abraham "Ace" Powell

**[8] TECHNISOUND PRODUCTIONS, INC.**  
 140 Madison Ave.  
 Westfield, NJ 07090  
 (201) 233-2026  
 Owner: Stephen Kay  
 Studio Manager: Stephen Kay  
 Extras & Direction: Record, film score, jingle, and demo production featuring the Fairlight CMI Series III, the state-of-the-art digital synthesizer/sampler/audio production device. Fully equipped spacious 8-track studio/MIDI control center, 24 x 8 boards, effects, DX7 w/1500+ sounds, 7' 4" Yamaha grand, two vintage customized ARP 2600s, Apple Computer, more. Complete your project in-house, or do Fairlight III pre-production for transfer at a larger facility. Will travel with Fairlight III to location of your choice for session work. Thirteen years of professional experience. Credits include MTV, Pepsi-Cola, Gianettino & Meredith Advertising, Grand Master Flash, 1st runner-up Keyboard Magazine Soundpage Contest. In-house composition, production, and arrangement available. Call Stephen Kay at 201-233-2026 for more information and a demo tape.

**[2] TELE-COMMERCIAL PRODUCTIONS INC.**  
*also REMOTE RECORDING*  
 25 Spring St.  
 W. Springfield, MA 01089  
 (413) 739-0500  
 Owner: Fredenck P. Speckels, Helen I. Speckels  
 Studio Manager: Helen I. Speckels

**[4] 3RD STREET RECORDING**  
*also REMOTE RECORDING*  
 166 Second Ave., #10E  
 New York, NY 10003  
 (212) 260-6802  
 Owner: Bob Kreizel  
 Studio Manager: Bob Kreizel

**[8] 3D-TV CORPORATION**  
 PO Box 133  
 New York, NY 11374  
 (718) 843-6839  
 Owner: F. Didik

**[8] THUNDER MILL**  
*also REMOTE RECORDING*  
 PO Box 282  
 Center Valley, PA 18034  
 (215) 965-4197  
 Owner: David Karr  
 Studio Manager: Suzanne Ryan

**[2] THUNDER TRAX RECORDING STUDIO**  
 31 Woodland Dr.  
 East Islip, NY 11730  
 (516) 581-3169  
 Owner: Anthony Vecchio  
 Studio Manager: Anthony Vecchio

**[8] TILDEN HILL RECORDING**  
 Tilden Ave.  
 New Hartford, NY

(315) 732-0031  
 Owner: Gary Mazza, Felix Nolan  
 Studio Manager: Gary Mazza, Felix Nolan

**[2] TONMEISTER RECORDINGS**  
*also REMOTE RECORDING*  
 6120 Massachusetts Ave.  
 Bethesda, MD 20816  
 (301) 229-1664  
 Owner: Andrew Lipinski

**[8] TRAX-EAST**  
 32 Beebe Ave.  
 Spotswood, NJ 08884  
 (201) 251-3187  
 Owner: Eric Rachel  
 Studio Manager: Eric Rachel

**[2] TRI-STATE SOUND**  
*also REMOTE RECORDING*  
 61 N. Childs St.  
 Woodbury, NJ 08096  
 (609) 845-1617  
 Owner: Bruce Wm. Wolfrom  
 Studio Manager: Bruce Wm. Wolfrom

**[8] TWO RIVERS PRODUCTIONS**  
*also REMOTE RECORDING*  
 2394 Love Rd.  
 Grand Island, NY 14072  
 (716) 773-6464  
 Owner: Thom Vickers  
 Studio Manager: Thom Vickers

**[8] UNDERGROUND SOUND**  
 426 Ehrhardt Rd.  
 Pearl River, NY 10965  
 (914) 627-2222  
 Owner: Rick Colarelli, Pete Accocella  
 Studio Manager: Rick Colarelli

**[4] UNITED CINE & SOUND**  
*also REMOTE RECORDING*  
 435 W. 45 St., PO Box 403  
 New York, NY 10108  
 (212) 247-5678  
 Owner: John Cacciatore  
 Mixing Consoles: Soundcraft 200B 16 x 4 x 2.  
 Audio Recorders: (2) 4-track Super Beta Hi-Fi, VHS back-up deck, PCM 501ES digital processor modified with audio/design CTC.  
 Cassette Recorders/Duplicators: Sony TC-K777, Sony TC-D5M.  
 Other Outboard Equipment: Custom Gotham audio snake, all gold-plated connectors.  
 Microphones: AKG 414, AKG "tube", Neumann KM84, Neumann U89, Neumann KM86, Beyer M-88, Beyer M-130, Beyer M-160, Sennheiser 431, Sennheiser 421, Sanken CU-41, RCA 77DX, Shure, Countryman direct boxes.  
 Monitor Amplifiers: Bryston 3B.  
 Monitor Speakers: Visonik 9000, UREI 809  
 Extras & Direction: United Cine & Sound specializes in direct to 2-track digital recording on location. All wiring is high-quality Gotham Audio cable to reduce high frequency loss over long runs and all connectors are Neutrik gold-plated XLRs. Many concert halls, barns, lobbies available through us for recording sessions. Equipment is quiet and very portable. U&S can travel anywhere for sessions. Multi-track digital available on request. Rates vary with size of orchestra, etc. Also capable of live mixes for video or film shoots.

**[2] UNIVERSITY OF DELAWARE**  
*also REMOTE RECORDING*  
 Department of Music  
 Newark, DE 19716  
 (302) 451-8130  
 Owner: University of Delaware  
 Studio Manager: Charles Clark

**[8] UNIVERSITY OF LOWELL**  
*also REMOTE RECORDING*  
 College of Music  
 Lowell, MA 01854  
 (617) 452-5000 ext. 2251  
 Owner: Dr. William Moylan  
 Studio Manager: William Carman

**[8] UNREEL STUDIO**  
*also REMOTE RECORDING*  
 PO Box 357  
 Storrs, CT 06268  
 (203) 456-3043  
 Owner: Denise Dixon, Ken Bliven  
 Studio Manager: Denise Dixon, Ken Bliven

[8] UPSTREAM RECORDING SERVICES  
PO Box 3634  
Langley Park, MD 20787  
(301) 270-2568  
Owner: Alan Wonneberger  
Studio Manager: B. Burns

[8] THE VALKRO STUDIO  
Turnpike Rd., PO Box 74  
Sennett, NY 13150  
(315) 253-7591  
Owner: The Valkros & Bud  
Studio Manager: Jim Frech

[8] VIBE STUDIO  
also REMOTE RECORDING  
16 S. 36th Ave  
Long Port, NJ  
(609) 823-1968  
Owner: Lucci Calabrese  
Studio Manager: Mr. Wonderful

[2] THE VIDEOCENTER OF NJ, INC.  
also REMOTE RECORDING  
228 Park Ave.  
East Rutherford, NJ 07073  
(201) 935-0900  
Owner: Frank O'Connell  
Studio Manager: Bob Schaffner

[4] VIDEOPTERIX SOUND STUDIO  
also REMOTE RECORDING  
44 N. Richards Ave.  
Somerville, NJ 08876  
(201) 526-6970  
Owner: Dave Kunze  
Studio Manager: Bryce Apart

[4] VOYAGE SOUND  
556 Route 23  
Franklin, NJ 07416  
(201) 827-2934  
Owner: The Sorcerer's Apprentice, Inc.  
Studio Manager: Joseph Nastasi

[8] W4 RECORDERS  
324 W. 4th St.  
New York, NY 10014

(212) 989-0803  
Owner: R.A. Derby  
Studio Manager: Vera Beren

[2] WALDEN CREATIVE SERVICES  
only REMOTE RECORDING  
6 Kent St.  
Newburyport, MA 01950  
(617) 462-7281  
Owner: Glenn Richards

[8] WALKWORTH INC.  
542 Walnut St.  
Newtonville, MA 02160  
(617) 332-5805  
Owner: Geoffrey C. Wadsworth  
Studio Manager: Geoffrey C. Wadsworth

[2] WAMU-FM  
also REMOTE RECORDING  
4400 Massachusetts Ave. NW  
Washington, DC 20016  
(202) 885-1030  
Owner: The American University  
Studio Manager: Bruce Youngblood

[8] BILL WANGERIN ASSOCIATES  
only REMOTE RECORDING  
75 Middlesex St.  
Winchester, MA 01890  
(617) 354-8332  
Owner: Bill Wangerin  
Studio Manager: Karen Smith

[8] WCKW STUDIO'S  
On The Hill  
Maynard, MA 01754  
(617) 897-4703  
Owner: Professor Curtis Vee, B. Kelley  
Studio Manager: The "Professor"

[8] WERS STUDIO C  
also REMOTE RECORDING  
126 Beacon St.  
Boston, MA 02116  
(617) 578-8823  
Owner: Emerson College  
Studio Manager: Fran Berger

[8] WHARF RAT SOUND  
401 E. 76th St.  
New York, NY 10021  
(212) 249-2571  
Owner: Adam H. Lehman  
Studio Manager: Adam Lehman  
Engineers: Adam H. Lehman, independents  
Mixing Consoles: Tascam 512 12 x 8, Tascam Model 1 8 x 2.

Audio Recorders: Otari 5050-8MK38-track, Tascam 40-4 4-track, Technics 1500 2-track.  
Cassette Recorders/Duplicators: Tascam 122 w/dbx noise reduction, assorted other cassettes.  
Noise Reduction Equipment: (4) dbx 1808-track, dbx 155 2-track simultaneous, dbx 224.

Echo, Reverb, & Delay Systems: (2) Yamaha SPX90, Ibanez 2000 (DDL), Ibanez HD1000 (harmonizer/delay), MXR DDL.  
Other Outboard Equipment: (3) Valley People Dyna-Mites (6-channel) noise gates/limiter, Crown graphic stereo EQ, Soundcraft, graphic stereo EQ, Gemini graphic stereo EQ, (2) dbx 161 limiters, Orban 526-dynamic sibilance controller (de-esser).

Microphones: (2) AKG 414s, (2) Sennheiser 441s, (2) Sennheiser 421s, RCA BK5 ribbon, Beyer M500, Beyer M260, (2) AKG D200E1, E-V RE15, assorted Fostex, Audio Technica and Sony mics.

Monitor Amplifiers: Crown D60, SAE MKXXI.  
Musical Instruments: Kawai 15-year-old 6' baby grand (solid oak soundboard), Ludwig drumkit w/Zildjian cymbals, Yamaha DX7, Yamaha RX11, assorted percussion. All available at no extra, others available through rental.  
Rates: \$30/hr. Block rates available. Attentive budget consideration.

[4] WHEEL TO WHEEL  
only REMOTE RECORDING  
238 Hickory Cr. Rd.  
East Windsor, NJ 08520  
(609) 448-5889  
Owner: Hans Schneider  
Studio Manager: Hans

[8] WHITE CLOUD REC. STUDIO LTD.  
also REMOTE RECORDING  
2396 Eliore Ave.  
— LISTING CONTINUED ON NEXT PAGE

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# LINN 9000s LINNDRUMS LINNSEQUENCERS

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**NORTHEAST STUDIOS**

**4 & 8**

**TRACK**

Mineral Point, PA 15942  
(814) 322-1505  
Owner: Dale E. Wicks

[2] W.L.C.C. INC.  
also **REMOTE RECORDING**  
770 Eastern Pkwy.  
Brooklyn, NY 11213  
(718) 773-7777  
Owner: C.B. Halberstam  
Studio Manager: J. Hackner

[2] WMRG STUDIOS INC.  
only **REMOTE RECORDING**  
PO Box 73  
Cheltenham, PA 19012  
(215) 635-4815  
Owner: Bill Gellhaus  
Studio Manager: Paul Keller

[8] WOLFRIDGE RECORDING STUDIO  
30 Hanrock St.  
Rochester, NH 03867  
(603) 332-2827  
Owner: Don Cormier  
Studio Manager: Dan Cormier

[8] RICH WOODS SOUND/VIDEO  
also **REMOTE RECORDING**  
59 Ridge Rd.  
Marlboro, NY 12542  
(914) 236-7885  
Owner: Rich Woods  
Studio Manager: Rich Woods

[4] WOOLY MAMMOTH STUDIO  
Box #492  
Alpine, NJ 07620  
(201) 768-5797  
Owner: Bill Willis  
Studio Manager: Bill Willis

[8] ROBERT WYNN PRODUCTIONS  
also **REMOTE RECORDING**  
913 Gregory's Way  
Voorhees, NJ 08043  
(609) 770-0311  
Owner: Robert Wynn  
Studio Manager: Robert Wynn

[4] YORK COLLEGE SOUND STUDIOS  
York College/CUNY  
Jamaica, NY  
Studio Manager: Dr. Che-Tsao Huang

[8] YOSH PRODUCTIONS  
also **REMOTE RECORDING**  
1900 Washington St.  
Auburndale, MA 02166  
(617) 965-6883  
Owner: Yonatan Yoshpe  
Studio Manager: S. Yoshpe

[8] ZALMO SOUNDS  
also **REMOTE RECORDING**  
Ditmas Ave. & E. 8th St.  
Brooklyn, NY 11218  
(718) 633-4166  
Owner: Sherman Schreiber  
Studio Manager: Shomer Shabbos

[8] ZAX TRAX  
also **REMOTE RECORDING**  
20 Franklin St.  
Frederick, MD 21701  
(301) 663-0241  
Owner: Zak Mabie  
Studio Manager: Zak Mabie

[8] ZBS PRODUCTIONS  
RR #1, Box 1201  
Fort Edward, NY 12828  
(518) 695-6406  
Owner: MBC Media  
Studio Manager: Tom Lopez

[4] ZELMAN FILM PRODUCTIONS  
also **REMOTE RECORDING**  
623 Cortelyou Rd./Ocean Pkwy.  
Brooklyn, NY 11218  
(718) 941-5500  
Owner: Sidney M. Zelman  
Studio Manager: Jerry Krone

—LISTING CONTINUED FROM PAGE 131  
Merrick, NY 11566  
(516) 868-4768  
Owner: Howard Stein  
Studio Manager: Phil Antonucci

[8] WHITE HORSE PRODUCTIONS  
509 W. 110 St.  
New York, NY 10025  
(212) 749-0513  
Owner: William B. Porter

[8] WHITEHALL STUDIO  
also **REMOTE RECORDING**  
26 Whitehall Rd.  
Rochester, NH 03867  
(603) 332-8614  
Owner: Alphonse B. Therrien  
Studio Manager: Alphonse B. Therrien

[4] WILLCO STUDIOS  
also **REMOTE RECORDING**  
41 Summit Ave.  
Chicopee, MA 01020  
(413) 533-7934  
Owner: Troy M. Williams  
Studio Manager: Troy M. Williams

[8] MARGARET WILLIAMS THEATRE  
2039 Kennedy Blvd.  
Jersey City, NJ 07305  
(201) 547-3441  
Owner: Jersey City State College  
Studio Manager: Joseph Musco

[8] WINDROSE  
also **REMOTE RECORDING**  
PO Box 1078, 3925 E. Landis Ave.  
Vineland, NJ 08360  
(609) 696-0943  
Owner: Dennis Link

[8] WITF INC.  
also **REMOTE RECORDING**  
Box 2954, 1982 Locust Ln.  
Harrisburg, PA 17105  
(717) 236-6000  
Owner: WITF Inc.  
Studio Manager: Bill Pearson  
Dimensions: studio 22 x 19, control room 19 x 9  
Mixing Consoles: NEOTEK Series I 24 x 8 production console, Interface Electronics 200B 12 x 2 (remote recording).

Audio Recorders: Ampex ATR-102 2-track, Tascam ATR-60 8-track, (2) Studer A-810 2-track, (2) Technics PCM digital, Sony 14- and 16-bit, VHS and Beta.  
Cassette Recorders/Duplicators: Yamaha C200, (2) Technics RSB-100.  
Noise Reduction Equipment: dbx 140 A.  
Echo, Reverb, & Delay Systems: Lexicon PCM60 reverb, Yamaha SPX90 reverb/effects.  
Other Outboard Equipment: Valley People Dyna-Mite limiter/compressor.  
Microphones: (4) Neumann U87, (6) Sennheiser 421, (3) Beyer M500, (2) AKG 451, (2) Philips.  
Monitor Amplifiers: Crown, McIntosh.  
Monitor Speakers: Polk, AR, DLW.  
Video Equipment: (3) Sony BVT-2000 C Type 1" VTRs, (4) Ampex AVR-2 2" VTRs, Ampex ADO 2000 digital effects, complete video post-production facilities, incl. 3/4" and Beta-cam.  
Other Equipment: Video satellite uplink facilities (C-band) and downlink in both C and Ku bands.

[8] WIX PIX PRODUCTIONS, INC.  
also **REMOTE RECORDING**  
RD #1, Box 266

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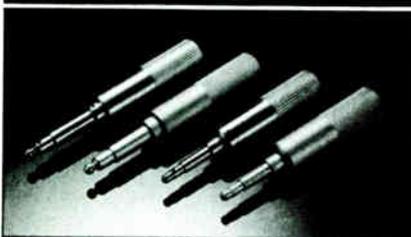
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# NORTHEAST STUDIOS

# 12 & 16

# TRACK

**[12] ADD MUSIC INC.**  
*also REMOTE RECORDING*  
 160 E. 48th  
 New York, NY 10017  
 (212) 486-0278  
 Owner: J. Bromberg  
 Studio Manager: J. Bromberg

**[16] ADVANCED MEDIA PRODUCTIONS**  
*also REMOTE RECORDING*  
 17 Hillcrest Rd.  
 White Plains, NY  
 (914) 368-1143  
 Owner: Advanced Media Productions Inc.  
 Studio Manager: Hans Schambach

**[16] AIR SOUND**  
 1116 Boylston St.  
 Boston, MA 02115  
 (617) 247-4186  
 Owner: Rick Kuehle, Glenn Lacey

**[16] ALLAN STUDIOS**  
*also REMOTE RECORDING*  
 21 Whitman Ave.  
 Syosset, NY 11791  
 (516) 921-6564  
 Owner: Allan Kashkin  
 Studio Manager: Allan Kashkin

**[16] ALPERTRACK STUDIOS/ALTA VISTA MUSIC PRODUCTION**  
 77 Warren St.  
 New York, NY 10007  
 (212) 349-8095  
 Owner: Gregory Alper  
 Studio Manager: Todd Anderson

**[16] AMPHION RECORDING**  
*also REMOTE RECORDING*  
 PO Box 794  
 Rockville, CT 06066  
 (203) 871-1786  
 Owner: Amphion Enterprises  
 Studio Manager: Ed Adams

**[16] ANTHEM PRODUCTIONS**  
 901 Pine Valley Cir.  
 West Chester, PA 19382  
 (215) 431-2963  
 Owner: Charlie Fisk  
 Studio Manager: Skip Hempsey

**[12] ARISTOTLE STUDIOS**  
 37 Seneca Ave.  
 Emerson, NJ 07630  
 (201) 599-2635  
 Owner: Kevin Calnan  
 Studio Manager: Kevin Calnan

**[16] AUDIO FACILITIES, INC.**  
*also REMOTE RECORDING*  
 435 Hudson St., 5th Floor  
 New York, NY 10014  
 (212) 242-7300  
 Owner: Harold Johnson  
 Studio Manager: Cynda Berger

**[16] AUDIO MIXERS, INC.**  
*also REMOTE RECORDING*  
 215 E. 27th St.  
 New York, NY 10016  
 (212) 213-5335  
 Owner: Fred Venitsky, Vernon Collecto  
 Studio Manager: Rosann Baio

**[16] AUDIO RADIANCE SOUND AND RECORDING**  
*also REMOTE RECORDING*  
 34 Hockanum Rd.  
 Hadley, MA 01035  
 (413) 584-1272  
 Owner: Chris Dixon

Studio Manager: Chris Dixon  
 Engineers: Chris Dixon, Glenn Jubilee  
 Dimensions: Studio 12 x 25, control room 12 x 13  
 Mixing Consoles: Soundcraft 400B 24 x 8  
 Audio Recorders: Scully 280 16-track, Scully 280 8-track, Scully 280 2-track, TEAC 3440 4-track, TEAC 1230 2-track.  
 Cassette Recorders/Duplicators: TEAC A550 RX cassette, TEAC W440C dubbing deck.  
 Echo, Reverb, & Delay Systems: Yamaha REV7 digital reverb, Korg SDD3000 digital delay, Yamaha R1000 digital reverb, DeltaLab 1024 digital delay, Orban 106CX spring reverb, Roland Space Echo, MXR Flanger/Doubler.  
 Other Outboard Equipment: (3) dbx 160x compressors, (4) Ashly SC50 compressors, Ashly SC33 stereo gate, Loft 400 quad gate/limiter, Klark-Teknik stereo 1/3 octave EQ.  
 Microphones: (20) Shure SM58, (4) Shure SM57, (2) Sennheiser 421, Beyer M260, Beyer 201, E-V DS35, (4) E-V PL91, AKG D119, (3) Shure 545, Altec 626.  
 Monitor Amplifiers: Crown DC300 II, Crown D150, McIntosh 240.  
 Monitor Speakers: JBL custom, Auratone.  
 Musical Instruments: Fender Stratocaster, Mesa/Boogie amp w/JBL Marshall 4 x 12 cabinet, Bit One digital synth, custom electric 12-string, Takamine acoustic guitar, Roland DR55 drum machine, bass guitar, custom pedalboard.

**[16] AUDIO-TRACK SPECIALISTS**  
*also REMOTE RECORDING*  
 260 Ohio St.  
 Johnstown, PA 15902  
 (814) 539-4197  
 Owner: Robert J. Capotosto Jr.  
 Studio Manager: Robert J. Capotosto Jr.

**[16] AUDIO VISUAL ARTS, INC.**  
*also REMOTE RECORDING*  
 110 Hudson St.  
 New York, NY 10013  
 (212) 925-5739  
 Owner: Jim Tripp  
 Studio Manager: Joh O'Rourke  
 Engineers: Bob Mitchell, Jim Tripp, staff; independents welcome.  
 Dimensions: Room 1: studio 25 x 15, control room 15 x 12. Room 2: studio 18 x 15, control room 10 x 12. Isolation room 9 x 7. Vocal room 7 x 6.  
 Mixing Consoles: Tascam M-16 20 x 8, AHB 1616 24 x 8 w/EX-8, Toa D4/D4E 10 x 2 keyboard mixer, expanding in '87 to 48 x 24.  
 Audio Recorders: Tascam 85-16B 16-track, Fostex B-16 16-track, Technics 1500 2-track, Nagra IV STC 2-track, expanding to 24-track 2", in '87.  
 Cassette Recorders/Duplicators: Nakamichi MR-1, Hitachi D-E1, Sony DS.  
 Noise Reduction Equipment: dbx.  
 Synchronization Systems: Fostex 4035/4030 synchronizer/controller, Garfield Masterbeat, Fostex 4050 MIDI controller/autolocator.  
 Echo, Reverb, & Delay Systems: Lexicon PCM70 digital effects processor, Master Room reverb chamber, Yamaha REV7, TL Electronics sampling delay, Lexicon PCM42 delay unit, DeltaLab CE1700 digital delay, Yamaha SPX90 digital effects processor, ART OIA reverb unit, Akai ME-10 MIDI delay unit.

Other Outboard Equipment: (5) Valley People Kepex II noise gate/duck, (3) Valley People Gain Brain II compressor/limiter, Valley People Maxi-Q parametric equalizer, Valley People DSP digital sibilance processor, Orban 621 B stereo parametric equalizer, Klark-Teknik DN360 stereo graphic equalizer, Aphex Type B Aural Exciter, dbx 160 compressor/limiter.

Microphones: (2) Neumann U87, (2) AKG 414, (5) AKG 451, Sennheiser 441, Sennheiser 421, E-V RE20, (2) Shure SM58, (2) Shure SM57, Sony ECM377, AKS C26A tube w/power supply.

Monitor Amplifiers: McIntosh 2205 power amp, Hafler DH-220 power amp, QSC 3200 power amp.

Monitor Speakers: Altec 604-B6 monitors, KEF 103.2, Yamaha NS-10, Acoustic Research AR92.

Musical Instruments: E-mu Emulator sampling keyboard, E-mu SP-12 turbo sampling percussion machine, Yamaha DX7 (2) HD, Memorymoog Plus, Akai S 900 digital sampling module, Oberheim Matrix 6R synth module, Gretsch five-piece drum-kit, Martin vintage D-18 acoustic guitar, Fender stratocaster, Fender precision bass, Fernandes stratocaster, Korg EX-800 synth module.

Other MIDI Equipment: Southworth MIDI interface, Casio TB-1 MIDI thru-box, AVA Custom MIDI patch bay, Garfield Dr. Click.

Video Equipment: B&H SM-2 VCR monitor, Taxon 116 13-inch high resolution monitor, Hitachi hi-fi stereo VCR, Sony 8mm Camcorder.

Other Equipment: (2) Apple Macintosh computers, Opcode Studio Plus software/Total Music, (2) Mark of the Unicorn Performer/Composer, Opcode DX/TX Editor/Librarian, Digidesign Sound Designer software.  
 Rates: Call for rates.

**[16] AUDIOLINK**  
 1380 Soldiers Field Rd.  
 Boston, MA 02135  
 (617) 783-0433  
 Owner: Steve Olenick  
 Studio Manager: Mary Guest

**[16] AVATAR SOUND PRODUCTIONS**  
 2268 Culver Rd.  
 Rochester, NY 14609  
 (716) 266-5740  
 Owner: William A. Thomas  
 Studio Manager: William A. Thomas

**[16] AVID RECORDERS**  
*also REMOTE RECORDING*  
 PO Box 1727  
 Wallingford, CT 06492  
 (203) 284-2000  
 Owner: D.E. Ferrara  
 Studio Manager: Loyalty Pearson

**[16] BAKER ST. STUDIOS**  
 10 Wheeler Ct.

Watertown, MA 02172

(617) 924-0065

Owner: Baker, Baker & Baker

Studio Manager: Tracey Pope

Engineers: Roger L. Baker, Darleen Wilson, Rick Kolow, Andy Mendelson, Tracey Pope, John Pfister.

Dimensions: Studio 40 x 20, isolation booth 5 x 6 on wheels, variable acoustics and video hard cyc., control room 18 x 18. Studio design by Abdon/Sun.

Mixing Consoles: Tangent 3216 24 x 36 w/automation. Audio Recorders: Otari MTR-90 16-track, Otari 7800 8-track, Otari MTR-10 2-track.

Cassette Recorders/Duplicators: (3) Akai cassette decks. Echo, Reverb, & Delay Systems: Ecoplate large plate, Alesis XT digital reverb, Biamp spring, DeltaLab DL-4 digital delay, (2) Ibanez 230 analog delay, A/D STD-1 stereo delay, Yamaha SPX90.

Other Outboard Equipment: Eventide phaser, MXR auto-phasor, dbx 160x comp./limiters, UREI 1178 dual comp./limiters, UREI 546 dual four-band parametric EQ, MXR pitch transposer, Orban sibilance controller, (4) Loft noise gates, (4) Kepex, (2) Gain Brains, Furman parametric EQ, (2) MXR 31-band graphic EQ, dbx noise reduction all channels.

Microphones: Neumann U67, Neumann U47, Neumann KM84, AKG 451a, E-V RE20, E-V RE55, E-V RE16, E-V CS15, Sennheiser 421a, Sennheiser 441, Shure SM57s, Beyer 160, Beyer 260, RCA 77-DX, AKG D12-E, Crown PZMs.

Monitor Amplifiers: Crown DC300 (monitors), (2) Crown DC60 (for headphones).

Monitor Speakers: UREI 811, Auratone.

Musical Instruments: Steinway grand piano, Hammond organ w/Leslie, Wuritzer electric piano, ARP Omni, Moog, Casio CZ-101 digital programmable synth, Fender tube amps, Ampeg tube amps.

Rates: 16-track \$345/10 hrs., 8-track \$245/10 hrs.

#### [16] BIRCH RECORDING STUDIO

also REMOTE RECORDING

W. Main St.

Secretary, MD 21664

(301) 943-8141

Owner: Paul R. Birch

Studio Manager: Steve Wallace

#### [16] BLACKSTONE RECORDING

also REMOTE RECORDING

325 W. 45th St. #407

New York, NY 10036

(212) 246-0430, ext. 407

Owner: Ed Campbell

#### [16] BULLET RECORDS

Lafayette Center, 40 W. 11th Ave.

York, PA 17404

(717) 843-4230

Owner: Jerrold D. Duncan

Studio Manager: Roy R. Smith

#### [16] BYGOSH MUSIC RECORDING STUDIO

RR #1

Brookfield, VT 05036

(802) 276-3393

Owner: Bobby Gosh

Studio Manager: Bobby Gosh

#### [16] C & C AUDIO-VIDEO STUDIOS

also REMOTE RECORDING

RD #1, Box 581-A, E. New St.

Glassboro, NJ 08028

(609) 881-7645

Owner: Ed Candelora, Jr.

Studio Manager: Terri Candelora

#### [16] CAPE COD AUDIO

also REMOTE RECORDING

80 Enterprise Rd.

Hyannis, MA 02601

(617) 775-1710

Owner: Chip Davis

#### [16] CENTURY PRODUCTIONS

also REMOTE RECORDING

171 Washington Rd.

Sayreville, NJ 08872

(201) 238-5630

Owner: Mickey Yannich, Bob Ligotino

Studio Manager: John Mulrenan

#### [16] CHARLES LANE STUDIOS

also REMOTE RECORDING

7 Charles Ln.

New York, NY 10014

(212) 242-1479

Owner: Michael F.J. Lynch

Studio Manager: Cliff K. Petroll

Engineers: Florian Pamer, Cliff Petroll, Jason Thaler

Dimensions: Studio 20 x 30, control room 12 x 16

Mixing Consoles: Soundtracs CM 4400 28 x 24 w/micro-processor controlled digital routing, (2) Stramp MA8200B 8 x 2, Stramp MX8500/8800 18 x 2.

Audio Recorders: Tascam 85-16 B 16-track, Otari 5050B 2-track, Revox PR99 2-track, Technics SV-110 2-track digital audio processor.

Cassette Recorders/Duplicators: Technics RS-B100, Technics RS-T80R, Nakamichi 582Z.

Noise Reduction Equipment: dbx 16B, Dynaflex DX-2.

Synchronization Systems: Roland SBX-80 sync box.

Echo, Reverb, & Delay Systems: Lexicon PCM60 digital reverb, Dynacord DRS 78 digital echo and reverb, DeltaLab Compuflectron, DeltaLab DL-1 digital delay, Sound Workshop 242A reverb.

Other Outboard Equipment: Gatex noise gates, Aphex Type C Aural Exciter, MXR 124 graphic equalizer, (2) dbx 160X compressor/limiters, dbx 160 compressor/limiters, BSS DPR402 compressor/limiter, Pultec EQP-1A equalizer, (4) BSS AR116 direct boxes, BSS AR130 phase check system, (4) Ashly SC-50 compressor/limiter.

Microphones: Neumann U47, (2) AKG C12A, (2) AKG C60, (4) RCA 770X, Beyer M88, (2) Altec 633, (2) E-V 1776, (2) E-V RE20, Shure SM10, (3) Shure SM56, (6) Shure SM57.

Monitor Amplifiers: (2) Crown DC 300, (3) Crown D150, (2) Stramp 8300.

Monitor Speakers: (2) TAD Spec 15L, (4) Auratone 5C, (2) Koss M80, (4) Altec 604E.

Musical Instruments: E-mu SP-12 drum machine, Hammond B-3 organ, Fender Rhodes, Krakauer piano, (4) Sunn amps, Fender amps, (2) Ludwig drum sets.

Other MIDI Equipment: Stramp 'realcon' mixdown automation system w/four Stramp CP-1A VCA units, 32 channels.

Video Equipment: Panasonic AG-6200 VCR.

Rates: \$25-\$40/hr., call for details.

#### [16] CHESTNUT SOUND INC.

also REMOTE RECORDING

1824 Chestnut St.

Philadelphia, PA 19103

(215) 568-5797

Owner: Joe Allonsi, Jr.

Studio Manager: Joe Allonsi, Jr.

Engineers: Christopher D. Gately, Leslie M. Chew

Dimensions: Room 1: studio 36 x 17, control room 17 x 14.

Room 2: studio 6 x 6, control room 8 x 18.

Mixing Consoles: Sound Workshop Series 30 20 x 16, Hill Multimix 16 x 4, Altec 1567 (tube) 5 x 2.

Audio Recorders: Tascam 85-16B 16-track w/autolocator, Ampex ATR 800 2-track, Ampex ATR 700 2-track, Otari 5050 MKIII 2-track, Tascam 32-2B 2-track.

Cassette Recorders/Duplicators: (3) Tascam 122, Otari DP 4050 CZ.

Noise Reduction Equipment: (2) dbx 180.

Echo, Reverb, & Delay Systems: Lexicon PCM60 w/2.0 update, Yamaha REV7, Yamaha SPX90, Ecoplate III, Lexicon Prime Time, Effectron 1024, dbx 906 flanger, Sound Workshop spring reverb.

Other Outboard Equipment: (2) dbx 905, dbx 119, (2) UREI LA-4, (3) UREI 545, Gatex, Lang PEQ-2, T.C. 2240 parametric EQ, UREI 1176, Technics SL-1200 MKII, Sony CDP 102 CD player.

Microphones: AKG 414 EB, AKG D202, (2) Beyer M500, E-V RE15, E-V RE20, Neumann KM54, (2) Neumann KM84, (2) Sennheiser 421, (2) Shure SM-1, (3) Shure SM57, RCA BK-5.

Monitor Amplifiers: Yamaha P2200, Hafler 250, Yamaha P2100.

Monitor Speakers: Big Reds, (2) Yamaha NS-10, Auratone, Realistic Minimus 7.

Musical Instruments: Yamaha Conservatory grand piano, E-Max, Casio CZ-101, deluxe Sonor drumset, Fender Twin Reverb, Fender Stage Lead, Fender Princeton reverb, Gallien-Krueger bass amp, Yamaha RX11.

Other MIDI Equipment: Southworks MIDI interface to Macintosh Plus computer w/SMPTE.

Other Equipment: Lots more outboard gear and microphones available from our engineers' personal collections. Like the ambience in the lounge? No problem! We've got tie lines everywhere. Free coffee and donuts.

Rates: Available upon request. Call.

#### [16] CODE 2 RECORDING STUDIO

also REMOTE RECORDING

57 Turgeon Ave.

Dracut, MA 01826

(617) 957-5749

Owner: Bob Worthington

Studio Manager: Bob Worthington

#### [16] COMMUNITY COLLEGE OF THE FINGER LAKES STUDIO

also REMOTE RECORDING

Lincoln Hill

Canadawaga, NY 14424

(716) 394-3500

Studio Manager: Frank Vergel

#### [12] COMPETENT PRODUCTIONS UNLIMITED, LTD.

also REMOTE RECORDING

1013 Garden St.

Hoboken, NJ 07030

(201) 798-7867

(201) 792-5735

Owner: Tim Tres Pas, Nick Selby

Studio Manager: Creative Finance Inc.

#### [16] CONCEPTION RECORDERS

73 Bath St.

Ballston Spa, NY 12020

(518) 885-5228

Owner: Ed Carbone

Studio Manager: Ed Carbone

#### [16] CORPORATE STUDIOS

PO Box 2122

Bristol, PA 19007

(215) 785-3669

Owner: John Asta, Jake Asta

Studio Manager: George A. Hajioannou, Vic Murray

Engineers: George Jordan John, John Pollock

Dimensions: Room 1: studio 20 x 14, control room 14 x 12 iso, Room 2: MIDI studio 14 x 12. Room 3: studio 10 x 8.

Mixing Consoles: Sound Workshop Series 30 18 x 18, Yamaha 1204 12 x 4 x 2.

Audio Recorders: Scully Model 288-16B 16-track (2"), Scully Model 280-2 2-track, Nakamichi DMP-100 2-track (digital).

Cassette Recorders/Duplicators: Yamaha K950, Nakamichi MR1, Aiwa L450.

Echo, Reverb, & Delay Systems: Yamaha REV7, Yamaha SPX90, ART DR1, (2) Korg SDD-2000, Roland SDE-1000, AKG BX10 II.

Other Outboard Equipment: (3) Symetrix 544, Symetrix 522, dbx 166, Ibanez GE3101, Yamaha Q2031, Ashly SC-66A.

Microphones: Sennheiser, Shure, E-V, AKG, Neumann, Audio-Technica.

Monitor Amplifiers: Crown Micro-Tech 600, Technics SA-103.

Monitor Speakers: JBL 4312, Realistic Minimus 7.

Musical Instruments: Kurzweil MIDIboard, Kurzweil RMX (all sound blocks), Akai S900, Roland JX3P, Oberheim Xpander, E-mu drumulator, Tama Imperial Star 5-piece kit, (35) assorted cymbals, Rickenbacker 4001 bass guitar, Roland Octapad, Roland SBX-80, Peavey Bandit 65 amp, Fender Stratocaster.

Other MIDI Equipment: Apple Macintosh Plus computer, Mark of the Unicorn Performer, Professional Composer, Digidesign Sound Designer, Intelligent Music Jam factory M.

Video Equipment: Sansui AV-99 audio/video processor, Beta and VHS VCRs.

Rates: Call for rates.

#### [16] COTTON HILL RECORDING, INC.

also REMOTE RECORDING

PO Box 3133

Albany, NY 12203

(518) 489-1321

Owner: Ray Rettig, Ace Parkhurst

Studio Manager: Ray Rettig, Ace Parkhurst

#### [16] CREATIVE CUTS

76-46 Park Lane S.

Woodhaven, NY 11421

(718) 296-6015

Owner: Joseph Fusco

Studio Manager: Joseph Fusco

Extras & Direction: A 16-track recording studio located ten minutes from Midtown Manhattan in the borough of Queens, NYC. An extensive palette of sound available via sampling, FM, phase distortion and analog synthesis. 24-track sequencing available (Steinberg Pro-24) as is a complete selection of guitars, digital effects, Mesa Boogie amplification and AKG mics. Innovative use of the technological strides the audio profession consistently exhibits enables this one room, computer and MIDI oriented studio, to create quality art at competitive prices. Serving independents, ad and jingle work, artists and songwriters from pre-production to finished masters. Unique patches capture the sounds of your inward eye. Arranging available, music written and exquisitely performed to your lyrics. We're constantly expanding our equipment and our knowledge of it, whilst keeping an eye on tomorrow's developments. Rates upon request.

**[16] DANBURY ELECTRONIC RECORDING STUDIO**  
 84 Federal Rd.  
 Danbury, CT 06810  
 (203) 792-2794  
 Owner: Gary Schwartz  
 Studio Manager: Jeff Karpenski  
 Mixing Consoles: Studiomaster Series II 16 x 8 x 2, Akai MG1214, Studiomaster Series I 16 x 8 x 2, Akai MPX820 automated.  
 Audio Recorders: MCI 16-track (2" tape), Akai MG1214, Akai MG12D  
 Cassette Recorders/Duplicators: Akai GX912.  
 Noise Reduction Equipment: dbx Type I.  
 Synchronization Systems: Atan 1040 ST MIDI SMPTE.  
 Echo, Reverb, & Delay Systems: Yamaha REV7 digital reverb, Yamaha D1500 digital delay, Yamaha SPX90 multi-effects.  
 Other Outboard Equipment: Yamaha CG2020 compressor/limiter, Yamaha Q2031 EQ.  
 Microphones: Neumann U89, AKG 414, AKG 451, Sennheiser 421, Sennheiser 441, E-V RE20, Yamaha MC102, Yamaha 104BE.  
 Monitor Amplifiers: Yamaha 2250  
 Monitor Speakers: UREI Time Aligned, Yamaha NS-10M.  
 Musical Instruments: Roland RD-1000, Yamaha TX816, Yamaha DX7 II, Yamaha GS2, Akai S900, Korg SG1D, Korg DSS1, Korg DDD1, Yamaha RXS, Yamaha TX81Z, Roland MKS80, Roland 550.  
 Other MIDI Equipment: IBM PC AT, Atan 1040 ST, Mac 512, Commodore C64.  
 Other Equipment: Roland drums, Simmons drums, Yamaha drums.  
 Rates: Block rates as low as \$35/hr. Call for rates 792-5543 or 792-2794.

**[16] DE LANE PRODUCTIONS**  
 also REMOTE RECORDING  
 176 Straeser Rd.  
 Depew, NY 14043  
 (716) 683-1367  
 Owner: Joe Palmer  
 Studio Manager: Joe Palmer

**[16] DIMENSIONAL SOUND, INC.**  
 300 W 55th St., #2R  
 New York, NY 10019  
 (212) 247-6010  
 Owner: Ed Chalpin



**[16] EASTWIND RECORDING**  
 6820 Ellicott Dr.  
 East Syracuse, NY 13057  
 (315) 463-6759  
 Owner: Michael Jaffarian  
 Studio Manager: Kurt Wagner

**[12] THE EDGE**  
 110 E. 23rd St., Studio 600  
 New York, NY 10010  
 (212) 677-2140  
 Owner: Bill Turley  
 Studio Manager: Susan Pearsall

**[16] EDGEWOOD PRODUCTIONS**  
 #2 Edgewood Dr. Ext.  
 Transfer, PA 16154  
 (412) 646-1061  
 Owner: Howard P. McQuiston  
 Studio Manager: John Strausser  
 Engineers: H.P. McQuiston, J. Strausser  
 Dimensions: Room 1: studio 14 x 20, control room 14 x 19.  
 Room 2: studio 10 x 9, Room 3: studio 6 x 8.  
 Mixing Consoles: Seck 18 8-2 16 x 8 x 2.  
 Audio Recorders: Fostex B16 16-track, Crown 800 2-track.  
 Cassette Recorders/Duplicators: Akai GX912, Otari DB905062 cassette, high speed dubbing.

Noise Reduction Equipment: Rocktron Hush II C, dbx 166.  
 Synchronization Systems: Passport Mastertracks C-128 system, MIDI computer sequencer w/tape sync.  
 Echo, Reverb, & Delay Systems: Lexicon PCM60, Digitech RDS 6500, Digitech 3.6 second delay, ADA S1000, (2) Ross time machines.  
 Other Outboard Equipment: (2) Ross 21 band EQs, Lutec TFE3115 EQ, (2) model GSM Western electric tube preamps.  
 Microphones: (2) Beyer M88N, (2) AKG 320Bs, (2) Shure 515, (2) Shure 555, (4) Audio-Technica 813, (4) SM57, (4) SM58, AKG D190M.  
 Monitor Amplifiers: (2) Sunn SA 20.  
 Monitor Speakers: (2) JBL 4301 B (control room), (2) MXT PRO 115 (studio).  
 Musical Instruments: Akai S900 sampler, MX73 analog synth, Akai X7000 sampler, Akai S612 sampler, CZ 3000, CZ 1, CZ 101, (2) Casio RZ 1, DZ1 w/pads, electronic drum MIDI interface.  
 Other MIDI Equipment: C128 computer w/Mastertracks software and tape interface.  
 Other Equipment: Virtually unlimited; this studio is an annex to Guilar World Music Center of Transfer, PA. All instruments in store are available at a small rental charge.  
 Rates: \$40/hr. and instruments rented.

**[16] ELECTRO-NOVA STUDIOS**  
 342 Madison Ave.  
 New York, NY 10017  
 (212) 687-5838  
 Owner: Mark Z. Sydorak  
 Studio Manager: Roger Kane  
 Engineers: Mark Z. Sydorak, Richard Nagle, Alex Bundziak  
 Dimensions: Room 1: studio 28 x 17, control room 16 x 8.  
 Room 2: studio 16 x 10, control room 16 x 15.  
 Mixing Consoles: Roger Mayer custom console 16 x 16 x 4, Studer 900 Series 12 x 4.  
 Audio Recorders: Studer A-80/16 16-track, (3) Studer A 810 2-track, Ampex ATR-102 2-track, Revox PR-99 Mk. 2 2-track, (2) Revox HS-77 2-track, Studer A-80/4 4-track.  
 Cassette Recorders/Duplicators: (11) Proton cassette decks, Telex stereo duplicator w/11 slaves.  
 Noise Reduction Equipment: dbx 154.  
 Synchronization Systems: Audio Kinetics Q.Lock 3.10.  
 Echo, Reverb, & Delay Systems: AKG BX-10 Mk. 2, Lexicon PCM60 digital reverb, Lexicon Prime Time DDL, Eventide 910 Harmonizer, (2) Echoplex, Ursa Space Station.  
 Other Outboard Equipment: (2) UREI LA-3As leveling amps, UREI 1178 stereo limiter, (2) Roger Mayer limiters, UREI graphic equalizer, UREI parametric equalizer, UREI digital click, Eventide 101 phaser, Mutron stereo phlanger, (4) Roger Mayer noise gates, Roger Mayer custom cue system w/8 x 2 mixer for each musician.  
 Microphones: (2) Neumann U87, (2) Neumann KM84, Neumann U47 tube, (2) AKG C-451, Beyer MC-736, Beyer M-160 double ribbon, (2) Beyer M-500, Beyer M-260 ribbon, AKG C-12, (2) AKG D-1000E, (2) Beyer XIN, (2) E-V RE20, B&O stereo ribbon.  
 Monitor Amplifiers: Yamaha P2200, Studer A-68, Crown D-75, HK-200, Dynaco 120/70.  
 Monitor Speakers: Altec 9849 B, Studer A-68, Toa, Aura-tone.  
 Musical Instruments: Yamaha DX7, (3) EML 101, EML 200, EML 416 sequencer and polybox, Baldwin 6'3" grand piano, Fender Rhodes 73, Hohner D-6 clavinet, Minimoog, Moog Opus 3, SM-400 Mellotron, LinnDrum, Roland 305 drum machine, ARP DGX, set of Pearl drums.  
 Video Equipment: (2) JVC 3/4" U-matics w/interlock, Sony 2860A U-matic  
 Other Equipment: Magna-Tech 16/35mm dual mag machine w/60cps resolver and interlock.  
 Rates: Rates upon request.

**[16] EMBASSY RECORDING STUDIO**  
 260 Amity St.  
 Amherst, MA 01002  
 (413) 549-7640  
 Owner: Steffan Fantini  
 Studio Manager: Dan Colella

**[16] EPSILON RECORDING STUDIOS, INC.**  
 C-10 Carver Pl.  
 Lawrenceville, NJ 08648  
 (609) 895-0833  
 Owner: John Muradyan  
 Studio Manager: Linda Araz  
 Engineers: John Muradyan, Ron Shaffer  
 Dimensions: Studio 14 x 22, control room 7 x 14.  
 Mixing Consoles: Amek/TAC Scorpion 24 x 16, Tascam M-35 8 x 4.  
 Audio Recorders: Tascam 85-16 16-track, Tascam 38 8-track, Tascam 32 2-track.  
 Cassette Recorders/Duplicators: Tascam 122 2-track, (2) Nakamichi BX-300 2-track, Nakamichi 581.  
 Noise Reduction Equipment: dbx Type A for 2-, 8-, and 16-track.  
 Synchronization Systems: SBX-10.  
 Echo, Reverb, & Delay Systems: Lexicon PCM70, Lex-



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icon PCM60, Yamaha REV7, (2) Lexicon PCM41, Lexicon PCM42, Ibanez DM-1000.

**Other Outboard Equipment:** Yamaha SPX90, Eventide H-910, (2) dbx 160x compressor/limiters, (2) USA Audio GateX gates eight channels, Aphex Type B Aural Exciter, UREI 546 two-channel parametric EQ, (2) Valley People Gain Brain comp/limiters.

**Microphones:** Neumann U87, AKG 414, (2) AKG 460, (2) AKG 2000E, AKG D-12E, (5) Sennheiser 421, Shure SM81, (2) Shure SM54, (3) Shure SM57, (2) Crown P2M-30 GP, (5) C-Ducer, (2) Countryman direct box.

**Monitor Amplifiers:** Haller power amps.

**Monitor Speakers:** RCF SCD-6000, Yamaha NS-10, E-V Sentry 100, Eastern Acoustic Works, Auratone cubes, Stax SR-5 headphones.

**Musical Instruments:** Yamaha DX7, (2) Yamaha TX81 2, Akai S-900, Ensoniq Mirage, Oberheim Matrix 6R, Roland Juno-60, Casio CZ-1000, E-mu SP-12, LinnDrum (MIDI)ed, Yamaha Recording Series 5-piece drum set w/Zildjian cymbals, Wurliitzer upright acoustic piano. Most other instruments available on rental basis.

**Other MIDI Equipment:** SBX-10, Apple Macintosh 800K w/800K external drive, Mark of the Unicorn Performer, Southworth Total Music.

**Video Equipment:** Akai 1/2" VHS.

Rates: Call for rates.

[16] EQUATOR

299 Foxhill Rd.  
Rockaway, NJ 07834  
(201) 625-2390

Owner: Jon Amodeo  
Studio Manager: Gary Large

[16] E.S.S. M.I.D.I.

90 Shirley Ave.  
Revere, MA 02151  
(617) 284-9707

Owner: Gordon D. Hookailo  
Studio Manager: Simon Ritt

[16] FANTASIA STUDIOS

20 Thompson St.  
Boston, MA 02136  
(617) 364-6685

Owner: Fantasia Productions  
Studio Manager: Michael P. Russo, James R. Fleming

[16] FAR & AWAY STUDIOS, INC.

also REMOTE RECORDING  
Box 63, RD 1  
Chester, NY 10918  
(914) 294-7763

Owner: Far & Away Studios, Inc.  
Studio Manager: Jim Lynch

[16] FILMSPACE INC.

also REMOTE RECORDING  
615 Clay Ln.  
State College, PA 16801  
(814) 237-6462

Owner: Tom Keiter  
Studio Manager: Dawn Walnoha

Engineers: Andrew Raison, Kate Crossley

Dimensions: Studio 25 x 26, control room 16 x 12.

Mixing Consoles: Amek TAC Matchless 26 x 24, Hill Audio Multimix 16 x 4.

Audio Recorders: Tascam 85-16B 16-track, Otari MX5050 4-track, Otari MX5050 2-track, Ampex ATR-700 2-track.

Cassette Recorders/Duplicators: Tascam 122B, Onkyo HS.

Noise Reduction Equipment: (16) dbx Type 1 16-track, (3) dbx 180 Type 1 4- and 2-track, dbx 150 Type 1 2-track.

Synchronization Systems: Cipher Digital Softouch controller, Cipher Digital 6100 TC reader/generator/char. inserter, (2) Cipher Digital 4700 synchronization units.

Echo, Reverb, & Delay Systems: Yamaha SPX90 digital processor, Lexicon PCM60 digital reverb, (2) Biamp MR/140, (2) DeltaLab ADM 1024.

Other Outboard Equipment: Aphex Type C Aural Exciter, (2) Kepex gates, (2) dbx 161 comp/limiters, MXR dual limiter, Rane dual 15 graphic, Biamp dual 15 graphic, dbx 902 de-esser, (2) Furman PL-8 power conditioner, Trippelite emergency power back-up, Biamp Quad Limiter.

Microphones: A wide range of Neumann, AKG, Sennheiser, Shure, E-V and Sony.

Monitor Amplifiers: Haller DH 500, Haller DH 220, Carver PM 200.

Monitor Speakers: JBL 4425s, KEF C-10s, ADS 8800s, Auratone 5Cs, Minimus 7s.

Musical Instruments: Yamaha CP80 electric grand, Yamaha RX11 drum machine, Yamaha DX7, DX9, Roland JX-3P, Juno-106, Ensoniq Mirage, Akai digital sampler, Oberheim Matrix-6. Almost any other synth/drum machine available.

Video Equipment: Full 1/4" off-line editing, complete au-

dio/video lock-up for audio post/sweetening, Sony Beta-com shooting package.

Other Equipment: (5) Leading Edge and Apple Macintosh for multi-image programming/MIDI interface.

Rates: Call for rates and info.

[16] FISHTRAKS

also REMOTE RECORDING  
62 Congress St.

Portsmouth, NH 03801

(603) 431-5492

Owner: Thomas A. Daly, Bruce Lawson  
Studio Manager: Jeff Landrock

[16] FM SOUND SERVICES; DIV. OF MED/ART VID-EO & CINEMAGRAPHICS

also REMOTE RECORDING  
5904 Char Leigh Cir.

Frederick, MD 21701

(301) 694-0541

Owner: Robert L. Medvee  
Studio Manager: Robert L. Medvee

[16] 40 WAX

Jefferson Borden Mansion  
386 High St.

Fall River, MA 02720

(617) 679-1993

Owner: New England Promotional Inc.  
Studio Manager: Michael Crabtree

[16] FUN CITY STUDIOS

340 E. 22nd St.

New York, NY

(212) 677-6032

Owner: Wharton Tiers

[16] GALLERY SOUND STUDIOS

417 Lake Ave.

Lyndhurst, NJ 07071

(201) 939-1175

Owner: Antonios Smalics  
Studio Manager: Jodi M. Bizzigotti

[16] GAMUT PRODUCTIONS, INC.

also REMOTE RECORDING  
Latrobe 30 Shopping Plaza

Latrobe, PA 15650

(412) 539-3211

Owner: Todd J. Wilkins

Studio Manager: Todd J. Wilkins

Engineers: T.J. Wilkins, Robin Leachman

Dimensions: Studio 20 x 19, control room 15 x 14.

Mixing Consoles: Trident Series 70, 28 x 16 x 24.

Audio Recorders: Tascam 85-16 16-track w/dbx, Otari 5050 BII 2-track w/dbx, Pioneer RT-701 1/4-track.

Cassette Recorders/Duplicators: Technics RS-B100, Dolby B/C, dbx.

Noise Reduction Equipment: dbx 150.

Echo, Reverb, & Delay Systems: Yamaha SPX90 reverb and effects digital rev, MICMIX XL-305 Master Room reverb, Roland SDE-3000 programmable digital delay, Lexicon PCM41 digital delay.

Other Outboard Equipment: Eventide 910 Harmonizer, MXR flanger/doubler, Valley People Dyna-Mite, (2) Ashly SC-50 limiters.

Microphones: Crown PZMs, AKG 535, AKG D12E, Audio-Technica B13R, Shure, Altec.

Monitor Amplifiers: Harman Kardon.

Monitor Speakers: JBL 4411, Auratone.

Musical Instruments: Roland TR-707 rhythm composer, Story & Clark acoustic piano.

Rates: \$55/hr. \$475/block of 10 hrs. No set-up charges.

[12] RAY GANTEK PRODUCTIONS

801 Rockrimmon Rd.

Stamford, CT 06903

(209) 968-0070

Owner: Raymond Gantek

Studio Manager: Raymond Gantek

[16] GDI

also REMOTE RECORDING  
80 Spring St.

Catskill, NY 12414

(518) 943-3915

Owner: GDI

Studio Manager: Philip Passero

Extras & Direction: GDI strives to be a full-service music production center. The experienced audio engineering staff is knowledgeable and can help you obtain the sound you want. Our Graphics Department employs professional

—LISTING CONTINUED ON NEXT PAGE

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—LISTING CONTINUED FROM PAGE 137

graphic artists to work with you designing album artwork, logos, and advertisements. We can produce original music and voice-overs for broadcast applications, and invite you to take advantage of any one or all of our services. Our recording studio offers the latest in music technology, including computer automation, digital mastering, full MIDI implementation, and sequencing. GDI gives you the most advanced 16-track recordings available in an intimate, cooperative environment. From full production broadcast quality for the large organization, to low-cost, no-nonsense demos for the nightclub performer, we promise nothing more than our enthusiastic best. And nothing less.

**[16] GELSIE RECORDING STUDIO PRODUCTION & MANAGEMENT INC.**

92 N. Rte. 9W  
Congers, NY 10920  
(914) 268-5966

Owner: Dolores Gelsomine, Cathy Hammond  
Studio Manager: Dolores Gelsomine  
Engineers: Brenden Harkins, Dolores Gelsomine  
Dimensions: Studio 24 x 25, control room 16 x 15.  
Mixing Consoles: Soundcraft 2400 series console 16 x 16 x 24.  
Audio Recorders: Ampex MM1000 16-track, Tascam 48 8-track, Otari 5050 2-track, TEAC A-2300 S 2-track.  
Cassette Recorders/Duplicators: (2) Nakamichi MR-2.  
Noise Reduction Equipment: (2) dbx 124s, Dolby B+C.  
Echo, Reverb, & Delay Systems: Yamaha REV7, Yamaha SPX90, Korg SD3000, Lexicon PCM60.  
Other Outboard Equipment: (2) Symetrix comp/limiter/gate/expander/ducks.  
Microphones: (4) Sennheiser MD421, (3) Sennheiser C451 Es, AKG MD 441, AKG C414/48, (3) Shure SM57LC, Shure SM58SLC.  
Monitor Amplifiers: Carver PM200, (2) Peavey M2600, Phase Linear 750.  
Monitor Speakers: Urei 809s, Auratone cubes, Toa 3-ways.  
Musical Instruments: Yamaha DX7, Roland JX3P, Casio CZ1000, Yamaha RX11, Yamaha QX7, Yamaha studio custom recording 5-piece drum kit, Sunn bass amp, Fender Twin reverb amp.  
Rates: 2-track: \$20/hr; 8-track: \$25/hr; 16-track: \$35/hr.  
Rehearsal rooms: \$12/hr. Block rates available. MasterCard and Visa accepted.

**[16] GIFT HORSE RECORDING STUDIOS**  
also REMOTE RECORDING

5555 Allentown Blvd.  
Harrisburg, PA 17112  
(717) 652-0215  
Owner: Richard Hower  
Studio Manager: Richard Hower

**[16] GLASSWING STUDIOS**  
also REMOTE RECORDING

6002 Ager Rd.  
Hittesville, MD 20782  
(301) 559-3556  
Owner: Richard & JoAnne Sales, J. Yamall  
Studio Manager: Larrymo Ancurly Ioe

**[16] GRAND SOUND RECORDING STUDIO, INC.**  
also REMOTE RECORDING

1000 Valora St.  
Pittsburg, PA 15220  
(412) 921-1391  
Owner: George J. Salopek  
Studio Manager: Paul G. Stefura

**[16] GRAYWOLFF PRODUCTIONS**

349 W. Commercial St., Ste. 2450  
Piano Works Plaza  
East Rochester, NY 14445  
(716) 381-4881  
Owner: Curt DeWolff, Dave Hayden  
Studio Manager: Lynette DeWolff, John Ebert

**[16] GREEN VALLEY RECORDING**

RD #2, Box 281  
Hughesville, PA 17737  
(717) 584-2653  
Owner: Ricard & Alison Rupert  
Studio Manager: Richard Rupert

**[16] GROUND FLOOR RECORDING**  
also REMOTE RECORDING

PO Box 2982  
Poughkeepsie, NY 12603  
(914) 471-6324  
Owner: Jim & Theresa Osborn, Lou Varuzzo  
Studio Manager: Jim Osborn



Engineers: Lou Varuzzo, Jim Osborn  
Dimensions: Room 1: studio 13 x 18, control room 24 x 10.  
Room 2: studio 19 x 11.  
Mixing Consoles: Yamaha 1604 Mc Series 16 x 4.  
Audio Recorders: Fostex B16-D 16-track, Revox PR99 MKII 2-track.  
Cassette Recorders/Duplicators: Sony TC-K555 cassette deck, Yamaha MT44 cassette deck, BIC T-2 cassette deck.  
Noise Reduction Equipment: dbx 150X Type I noise reduction.  
Echo, Reverb, & Delay Systems: Lexicon PCM60, Furman RV-1, Korg SDD-2000 digital delay, ADA D640 digital delay.  
Other Outboard Equipment: Valley People Dyna-Mite, Ashly SC-50 peak limiter/compressor, Yamaha GQ1031 graphic equalizer, Rane AC22 active crossover, Rane HC6 headphone amplifier.  
Microphones: (2) Audio-Technica AT 813R, (2) Shure SM57, Shure SM59, (2) Shure SM58, AKG B 330 BT, Shure SM78.  
Monitor Amplifiers: Yamaha Model P-2200, Crown Micro-Tech 1000, Yamaha Model P-2100.  
Monitor Speakers: Boston A70s.  
Musical Instruments: Yamaha U3 piano, (2) Yamaha DX7s, Yamaha TX7, Oberheim Matrix 6, (2) Casio CZ101, Casio AZI controller, Korg Poly 61, Yamaha RX11, Pearl DRX-1 electronic drums, Gretsch drums, (5) Zildjian cymbals, Korg AT-12 tuner.  
Rates: \$30/hr. in studio. Call for remote rates.

**[16] JOHN GUTH PRODUCTIONS-HARKIN SOUND**  
also REMOTE RECORDING

48 S. Franklin Ave.  
Bergenfield, NJ 07621  
(201) 385-7435  
Owner: John Guth, Brenda Harkin  
Studio Manager: John Guth

**[12] THE HATCH RECORDING STUDIO**  
also REMOTE RECORDING

6920 W. Lake Rd.  
Fairview, PA 16415  
(814) 474-1032  
Owner: J.D. Kotyuk  
Studio Manager: J.D. Kotyuk

**[16] HI-TOUCH STUDIOS/MUSICIANS NETWORK**  
also REMOTE RECORDING

10200 Owen Brown Rd.  
Columbia, MD 21044  
(301) 596-6612  
Owner: N.B. Tharp  
Extras & Direction: Analog tracks SMPTE synched to eight digital MIDI tracks and LinnDrum (be your own band!). Many instruments available. Complete production services. Record pressing. Cassette duplication. Video services. MIDI software. We have created a casual, low key, yet professional environment where the independent producer, or serious songwriter/musician can work with the latest technology in a user-friendly atmosphere. Everything you need to complete an album master, but affordable enough to experiment and develop your sound, or produce simple demos. We try to encourage the artist with original material, and create the feeling that this is your studio.

**[16] HIGH HEEL STUDIOS**

11110 Hiddentrail Dr.  
Owings Mills, MD 21117  
(301) 363-0749  
Owner: Bernard Geher, Arnold Geher  
Studio Manager: Arnold Geher  
Engineers: Arnold Geher, Fred Derby.  
Dimensions: Room 1: studio 23 x 9, control room 11 x 14.  
Room 2: studio 16 x 11.  
Mixing Consoles: NEOTEK Series III 28 x 24, Tascam Model 15 24 x 8.  
Audio Recorders: Otari MX70 16-track, Otari MTR-10 2-

track, Tascam 52 2-track, Tascam 58 8-track.  
Cassette Recorders/Duplicators: (2) Tascam 122, Nakamichi BX300.  
Noise Reduction Equipment: 8-channels dbx for Tascam 58.  
Synchronization Systems: SMPL System SMPTE time code computer.  
Echo, Reverb, & Delay Systems: Lexicon PCM70 w/3.00 software, Lexicon PCM60, Yamaha REV7, (2) Yamaha SPX90, Lexicon Prime Time 2, Lexicon PCM42, DeltaLab harmonizer.  
Other Outboard Equipment: UREI 1178 compressor, dbx 165 compressor, dbx 900 rack w/904 gates and 903 compressors, (4) Ashly stereo noise gates, Orban de-esser, Orban stereo parametric EQ, Barcus-Berry BBE 802, Valley People dual Dyna-Mite.  
Microphones: Neumann U89, (2) AKG 414, (3) AKG 451, (2) Crown PZM, (4) Sennheiser 421, Sennheiser 441, (2) Beyer M69, (2) E-V PL20, (8) Shure SM57.  
Monitor Amplifiers: Crown PSAII, (2) Crown D-150, Crown D-75.  
Monitor Speakers: JBL 4333s, Yamaha NS-10Ms, Klipsch Herseys.  
Musical Instruments: Akai S-900 multisampler, Yamaha RX11 drum machine, Yamaha PMC 1 percussion MIDI converter, Fender Rhodes 73 piano, acoustic piano, Roland Juno 60, Roland JX 3-P, Casio CZ101, Yamaha DX7, Simmons SDS5 and SDS7 electronic drums, TAMA acoustic drum kit.  
Other Equipment: Complete P.A. system available for rent: all Crown/JBL/Ramsa monitor systems available. Lighting and staging systems available.  
Rates: Please call for rates.

**[16] HIGHLAND STUDIOS**  
also REMOTE RECORDING

5 W. Pittsburgh St.  
Delmont, PA 15626  
(412) 468-6661  
Owner: Highland Studio Associates  
Studio Manager: Karen A. Gustafson

**[16] JOHN HILL MUSIC**

116 E. 37th St.  
New York, NY 10016  
(212) 683-2273  
Owner: John Hill, Rosemary Rogers  
Studio Manager: Carol Schenk

**[16] ICE ASSOCIATES, INC.**  
also REMOTE RECORDING

Ste. LL-40, One Bala Plaza  
Bala Cynwyd, PA 19004  
(215) 668-0714  
Owner: Jerry Mainardi  
Studio Manager: Sandy Martin

**[16] IMPACT RECORDING**

2140 Bellmore Ave.  
Bellmore, NY 11710  
(516) 826-6336  
Owner: Howard Alliger, Rich Hickey  
Studio Manager: Rich Hickey

**[16] IMPACT RECORDING**

2140 Bellmore Ave.  
Bellmore, NY 11710  
(516) 826-6336  
Owner: Howard Alliger, Rich Hickey  
Studio Manager: Rich Hickey  
Engineers: Rich Hickey  
Dimensions: Room 1: studio 20 x 22, control room 14 x 14.  
Room 2: studio 10 x 12.  
Mixing Consoles: Amek/TAC Scorpion 24 x 16.  
Audio Recorders: Tascam MS-16 16-track autolocate/remote, Otari MK-III 5050 2-track, Sony PCM 501-ES 2-track digital, (2) Sony SL-HF500 2-track beta.  
Cassette Recorders/Duplicators: (2) Nakamichi MR-2.  
Noise Reduction Equipment: (2) dbx DX-8DS 16-channels dbx I.  
Echo, Reverb, & Delay Systems: Lexicon PCM70 digital effects processor, Lexicon PCM42 w/MEO DDL, Lexicon PCM41 DDL.  
Other Outboard Equipment: (2) dbx 160x comp/limiter, Symetrix 522 stereo comp/gate, Symetrix SE-400 stereo parametric EQ.  
Microphones: AKG 414, (2) AKG 451, AKG D112, AKG D12E, (2) Sennheiser 421, (2) Crown PZM, (2) Shure SM57.  
Monitor Amplifiers: Hafler P500, JVC A-GX5, Rane HC-6 headphone amp.  
Monitor Speakers: (2) UREI 809, (2) Yamaha NS10M, (2) Auratone.  
Musical Instruments: Yamaha DX7, Yamaha TX7, Akai S900, Roland RD-1000, Korg DSS-1, Korg DW-8000, Roland TR 727, Roland Octapad, Marshall 50 watt amp, Roland jazz chorus amp, Gallien-Krueger 250 RL, Gallien-Krueger 200 RCB.  
Other MIDI Equipment: Aten 520 ST computer, Steinberg Pro-24 sequencing software, Hybrid Arts DX-Droid DX/TX editing software, JL Cooper MSB-10.  
Other Equipment: Large sample and sound library, Sound Ideas CD sound effects library, (2) Countryman D.I., (4) AKG/Fostex headphones.  
Rates: \$35/hr. Package deals available. Please call.

[16] IN LINE RECORDING  
Cinnaminson, NJ 08077  
(609) 829-7457  
Owner: Stephen A. McAleer

[16] INDUSTRIAL STRENGTH  
*also REMOTE RECORDING*  
48 W. 27th St.  
New York, NY 10001  
(212) 532-7294  
Owner: John Cousins, Michael Overn, Bruce Tovsky

[16] INNER EAR RECORDING  
118-17 97 Ave.  
Queens, NY 11419  
(718) 849-5725  
Owner: E. Vavagjakis

[16] INTERFACE RECORDING  
*also REMOTE RECORDING*  
2524 E. Scenic Dr.  
Bath, PA 18014  
(215) 837-1955  
Owner: Guy Bartolacci  
Studio Manager: Guy Bartolacci

[16] IRIS SOUND STUDIO  
*also REMOTE RECORDING*  
237 Main St.  
Royersford, PA 19468  
(215) 948-3448  
Owner: David Ivory  
Studio Manager: Darrah Ribble

[16] ISLAND STUDIOS INC.  
*also REMOTE RECORDING*  
PO Box 242  
Clarksburg, MD 20871  
(301) 972-6145  
Owner: Richard Sheltra  
Studio Manager: Bruce Loughry

[16] IT STUDIOS  
65 S. Broadway  
Tarrytown, NY 10591  
(914) 631-5050  
Owner: Russell Peckham, Robert Cancro, Brian Smith  
Studio Manager: Russell Peckham

[16] "JANGLES"/WHITE MTN. RECORDING  
1 Knight St.  
Rochester, NH 03867  
(603) 332-9666  
Owner: Jangles Inc.  
Studio Manager: Bob Meehan

[16] JK'S UNDERGROUND RECORDING  
*also REMOTE RECORDING*  
800 Surrey Dr.  
East Meadow, NY 11554  
(516) 483-9747  
Owner: John C. Kutkowski

[16] JOE'S RECORDING STUDIO  
*also REMOTE RECORDING*  
981 S. Broad St.  
Trenton, NJ 08611  
(609) 394-JOES  
Owner: R. Gahey, V. Weller  
Studio Manager: Frank Simon

[16] JUNKOR ASSOCIATES  
*also REMOTE RECORDING*  
55 Purdue Dr.  
Millford, MA 01757  
(617) 473-9101  
Owner: Jeffrey Stephen Junkor  
Studio Manager: Edward Noonan

[16] KENNEDY MUSIC AND RECORDING  
*also REMOTE RECORDING*  
5253 Montour St.  
Philadelphia, PA 19124  
(215) 533-2380  
Owner: David Kennedy  
Studio Manager: David Kennedy  
Dimensions: Studio 12 x 14, control room 14 x 15.  
Mixing Consoles: MCI JH416, Tascam Model 5.  
Audio Recorders: MCI JH16 16-track, Tascam 44 4-track,  
Scully 280B 2-track, Technics 1500 2-track, Sony PCM 501  
2-track.

Cassette Recorders/Duplicators: (3) Tascam 122.  
Noise Reduction Equipment: dbx 2-4 16-channels.  
Echo, Reverb, & Delay Systems: PCM60, PCM70, SPX90,  
Prime-Time, (2) Effectrons, Cooper Time Cube, AKG BX20.  
Other Outboard Equipment: Aphex Compellor, (2) Gain  
Brains, (2) Kepex, Valley People 415 sibilance processor,  
Orban 621B, Aphex Exciter, Eventide Omnipressor, Scholz  
Rockman Sustainer, Eventide Instant Phaser, (2) White 4220  
EQs.  
Microphones: (2) Neumann U87s, AKG 414, (6) AKG  
451s, Beyer M500, E-V 668, Shure SM57, Shure SM58,  
Shure SM53, Shure SM81.  
Monitor Amplifiers: Bose 1801, Crown D75, Sansui 881.  
Monitor Speakers: JBL 4311, Yamaha NS10, Auratone.  
Musical Instruments: E-mu Systems SP12, Roland DDR  
30s, Yamaha DX7, E-mu Systems EMAX.

[12] "KEYBOARDS ARE PEOPLE TOO"  
131 W. 28th St.  
New York, NY 10001  
(212) 695-1208  
Owner: Scot Lockhart  
Studio Manager: April Smith

[16] KNO STUDIO  
84 N. Summit Ave.  
Patchogue, NY 11772  
(516) 475-7772  
Owner: Barry Knoedl  
Studio Manager: Barry Knoedl

[16] LAKEWOOD STUDIOS  
*also REMOTE RECORDING*  
4 Terrace Dr.  
S. Nyack, NY 10960  
(914) 358-8810  
Owner: Ron Reitz  
Studio Manager: Scott "Woodman" Suckling

[16] DICK LAPELL PRODUCTIONS, LTD.  
*also REMOTE RECORDING*  
250 W. 54th St., Ste. 800  
New York, NY 10019  
(212) 586-7300  
Owner: Dick LaPell  
Studio Manager: Dota LaPell

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[16] MICHAEL LEVINE  
36 W 38th St., 5th floor  
New York, NY 10018  
(212) 354-4125  
Owner: Michael Levine  
Studio Manager: Claire Nelson

[16] LIPS MUSIC  
also REMOTE RECORDING  
84 Kraft Ave.  
Bronxville, NY 10708  
(914) 961-9637  
Owner: Alan Hemberger

[16] LOCATION SOUND RECORDING  
also REMOTE RECORDING  
32 Beverly Dr.  
Depew, NY 14043  
(716) 684-6307  
Owner: Paul Knedeman  
Studio Manager: Paul Knedeman

[16] LOUDVILLE STUDIO  
also REMOTE RECORDING  
PO Box 823  
Easthampton, MA 01027  
(413) 527-3201  
Owner: Bruce Seifned  
Studio Manager: Bruce Seifned

[16] MAKIN TRACKS/HAZARDOUS RECORDS  
also REMOTE RECORDING  
75 Summer St.  
Chelmsford, MA 01824  
(617) 256-4051  
Owner: Hank  
Studio Manager: Hank

[16] MANOR PRODUCTIONS  
also REMOTE RECORDING  
60 Rear English Plaza  
Red Bank, NJ  
(201) 530-0040  
Owner: Sal Bertolo, Phil Bertolo  
Studio Manager: P.J. Bertolo

[16] MAS SOUND PRODUCTIONS  
29 Franklin Ave.  
Oakville, CT 06716  
(203) 274-1972  
Owner: Martin A. Swiatek  
Studio Manager: Martin A. Swiatek  
Engineers: Martin Swiatek, Chester Rajkowski, Michael Shea  
Dimensions: Studio 17 x 13, control room 7-1/2 x 14-1/2  
Isolation booth 6 x 10  
Mixing Consoles: Tascam M520 Series 20 x 8 x 2  
Audio Recorders: Fostex B16D 16-track, Fostex A-20 2-track  
Cassette Recorders/Duplicators: Technics RS-B11W, Nikko ND-620, Mitsubishi DT-7  
Noise Reduction Equipment: Internal Dolby systems.  
Echo, Reverb, & Delay Systems: Yamaha SPX90, Ibanez SDR 1000, Ibanez HD 1000  
Other Outboard Equipment: Yamaha qc2020 comp./limiter, custom Buss controller, Tascam PB-32W, (4) Furman PB-40  
Microphones: E-V 666, (3) E-V ND408, (3) Shure SM57, Shure SM58, Shure 55S, (2) Toa K1, (2) AKG D200E, AKG D112  
Monitor Amplifiers: Carver PM-200, (2) Rane HC6  
Monitor Speakers: (2) E-V Sentry 100A, (4) Koss K-6X plus, Precept PH 100  
Musical Instruments: Roland JX3P, Ensoniq SDP-1, CB 700 5-piece drum set, Guild A65 acoustic guitar, Crate CR 60 amp  
Rates: \$25/hr Block rates available

[16] MCE RECORDING STUDIOS  
also REMOTE RECORDING  
467 State St.  
Schenectady, NY 12305  
(518) 382-1762  
Owner: Mark C Ernst

[16] MEDIA FX  
also REMOTE RECORDING  
c/o 675 Delaware Ave., #902  
Buffalo, NY 14202  
(716) 884-0974  
Owner: David Musial  
Studio Manager: David Musial



[16] MIDNIGHT MODULATION  
2211 Pine Ln.  
Saugerties, NY 12477  
(914) 246-4761  
Owner: Michael Bitterman  
Engineers: Michael Bitterman, Dave Cook  
Dimensions: Studio 20 x 20, control room 10 x 8  
Mixing Consoles: Sound Workshop 30  
Audio Recorders: Tascam 85-16B 16-track, Tascam 80-8 8-track, Otari 5050B 2-track, Sony PCM-501 2-track digital.  
Cassette Recorders/Duplicators: Tascam 122 2-track cassette.  
Echo, Reverb, & Delay Systems: Ursa 8 x 32 digital reverb, Lexicon PCM41 digital delay, Effectron 1024, Marshall Time Modulator, Lexicon PCM70, Yamaha REV7, Yamaha SPX90.  
Other Outboard Equipment: dbx 160X limiter/compressor, UREI 1176LN limiter/compressor, DOD graphic EQ, Marshall Time Modulator, Valley People Dyna-Mite, Orban 622B parametric EQ, Aphex Aural Exciter  
Microphones: (2) Neumann U87, E-V RE20, (2) Sennheiser 421 U, (2) Shure SM57, (2) Shure SM81, Sony ECM 33, Sony ECM 250, AKG 414 P48 EB, RCA 77DX, Crown PZM.  
Monitor Amplifiers: BGW 750B Symetnx.  
Monitor Speakers: JBL 4411 (control room), Klipsch Cornwall (studio), Toa cubes, Yamaha NS10.  
Musical Instruments: Yamaha grand piano, ARP 2600, LinnDrum computer, Yamaha DX7, Super Jupiter, Yamaha CX5M computer, Akai S900 sampler.  
Video Equipment: VHS documentation of recording session. (Call for rates.)  
Rates: \$40/hr. Call for deals.  
Extras & Direction: We offer full production services. We are songwriters and musicians and we can produce a session or album for you. We offer arrangers and musicians to fit your needs. Our new "California Room" serves many purposes and we know you'll find Midnight Mod a fun place to work. We have only raves about our studio—our clients are our best sponsors. The most beautiful and relaxed studio in the Hudson Valley has had the top people record here. We have available the finest name musicians in Woodstock for your session. John Hall, The Band, The Fugs, Jules Shear, Artie Traum, John Sebastian and Gary Burke are just a few of our recent activity. The key to Woodstock recording is eclecticism—all styles from jazz-folk-new wave-rock-cabaret are all handled with individual style. We are here to service the songwriters and musicians. Our track record has proven this.

[16] MIRROR SOUND STUDIOS  
also REMOTE RECORDING  
1731 Cinnaminson Ave.  
Cinnaminson, NJ 08077  
(609) 829-9413  
Owner: Ken Fordyce  
Studio Manager: Thomas Bitzer  
Engineers: Adam Kessler, Ken Fordyce  
Mixing Consoles: Soundcraft Senes 600 40 x 8  
Audio Recorders: Tascam MS-16 16-track w/autolocator, Technics RS-1500 2-track.  
Cassette Recorders/Duplicators: (2) Sony TC-K555, Marantz PMD-200.  
Noise Reduction Equipment: dbx 150  
Echo, Reverb, & Delay Systems: Lexicon PCM70, Yamaha REV7, DeltaLab ADM 1024, DeltaLab ADM 64.  
Other Outboard Equipment: dbx 160, dbx 166, Symetnx 522, Omni Craft GT4, Biamp 140 parametric EQ.  
Microphones: (2) AKG 451 EB, Neumann KM84, E-V RE20, Sennheiser MD-421, (2) Shure SM57s, AKG 224, AKG D-2000E, Shure PL9, E-V 660, (3) PZM.  
Monitor Amplifiers: BGW 7000B, Crown DC 150  
Monitor Speakers: JBL 4313, Yamaha NS10s.  
Musical Instruments: Roland 707, Yamaha DX7, Fender guitar amps, Roland guitar amps, Aka: 900, Music Man HD 120, Ludwig drums, Gibson, Fender, Ibanez guitars.  
Rates: \$25-\$40/hr.

[16] MJK MAJIC STUDIO  
110 Court St.  
Keene, NH  
(603) 352-9970  
Owner: Michael J. Kiritsy  
Studio Manager: Michael J. Kiritsy

[16] MODERN WORLD MEDIA PRODUCTIONS  
also REMOTE RECORDING  
5219 Overhill Rd.  
Baltimore, MD 21207  
(301) 944-4242  
Studio Manager: Joel Peck

[16] MUSIC FACTORY ENTERPRISES, INC.  
also REMOTE RECORDING  
314 Merion Mills Business Center  
W. Conshohocken, PA 19428  
(215) 825-7557  
Owner: Jeffrey Calhoun  
Studio Manager: Fae Cranshaw

[16] MUSITECH  
115 Newbury St.  
Boston, MA 02116  
(617) 536-5262  
Owner: Peter C. Johnson, Peter Bell  
Studio Manager: Sheldon Mirowitz

[16] NEVERLAND  
also REMOTE RECORDING  
RD #2, Beldons Rd.  
Florida, NY 12010  
(518) 843-5028  
Owner: Francis A. Hamilton  
Studio Manager: Peter Guare

[16] NEW ENGLAND SOUND  
PO Box 75  
Medfield, MA 02052  
(617) 376-5619  
Owner: Jon Chnstanson, Bryan Cellin  
Studio Manager: Chns Johnson  
Engineers: Bryan Cellin, Fred Brass, Jim Phillips, George DiNeen  
Mixing Consoles: Soundcraft Senes 600 24 x 16 x 8  
Audio Recorders: Otari MX-70 16-track, 3M M-56 2-track, Otari 5050 B 2-track, Tandberg 1/4-track, Tascam 80-8 8-track  
Cassette Recorders/Duplicators: Nakamichi 700 2XE, NAD 2040.  
Echo, Reverb, & Delay Systems: Lexicon PCM60, (2) Yamaha SPX90, Intersound RV-1000, Lexicon PCM41, DeltaLab Effectron 1024, DeltaLab Effectron 256.  
Other Outboard Equipment: (2) Ashly SC-50 stereo noise gates, Loft 4-channel gate/limiter, (2) dbx 163X compressors, (2) Ashly SC 33 compressors, DeltaLab Acoustic-computer/harmonizer, Aphex Type C Aural Exciter, (2) MXR 31 band equalizers, MXR dual 15 band equalizer, Biamp Dual 10 band equalizer, Yamaha guitar preamplifier.  
Microphones: Neumann U87, Sennheiser 421, AKG D12 E, AKG D190 E, Beyer M 500, Beyer M 90, (2) E-V PL95, (8) Shure SM57, (2) Shure SM58, (2) Sony ECM condensers, (4) Countryman and Kelsey direct boxes.  
Monitor Amplifiers: (2) Yamaha C50, McIntosh 2100, Edcor 8-channel headphone amplifier.  
Monitor Speakers: UREI 809 Time Aligned, Yamaha NS10M, Auratone sound cubes, AKG K240 headphones, Fostex TC-20 headphones.  
Musical Instruments: LinnDrum (drum machines), Roland TR 505 (drum machines), Roland TR 606 (drum machines), Ensoniq Mirage sampling synth w/13 disks, Prophet V, ARP Omni, ARP Odyssey, Macintosh 512 w/Performer software, various percussion instruments.  
Other Equipment: Full selection of gobos, studio isolation and absorption panels.  
Rates: \$20/hr. including engineer.

[16] NEW LONDON COUNTY RECORDING ARTS  
also REMOTE RECORDING  
229 Pequot Trail  
Pawcatuck, CT 06379  
(203) 599-5293  
Owner: Ron Drago  
Studio Manager: Red T Cook

[16] NEW MUSIC STUDIOS  
2A Mansion Woods Dr.  
Agawam, MA 01001  
(413) 789-2264  
Owner: Kirk Cinillo

[16] NINE PINES RECORDING STUDIO  
 1729 Olean Rd.  
 South Wales, NY 14139  
 (716) 652-3750  
 Owner: Paul J. Rich Richiusa  
 Studio Manager: Bill E. Bakker

[16] NORTHERN STAR  
 264 Reed St.  
 Manchester, NH 03102  
 (603) 623-3479  
 Owner: Ray Grimard, Denis Maltais  
 Studio Manager: Denis Maltais

[16] OAK GROVE RECORDING STUDIO  
 also REMOTE RECORDING  
 65 Clinton St.  
 Malden, MA 02148  
 (617) 321-1017  
 Owner: Emenee Productions  
 Studio Manager: Emir Galevi

[16] OAKWOOD RECORDING  
 Rt. 519, RD #4  
 Milford, NJ  
 (201) 995-2824  
 Owner: Rob Attinello  
 Studio Manager: Rob Attinello

[16] ODYSSEY SOUND STUDIO  
 350 Chelsea Ave.  
 Long Branch, NJ 07740  
 (201) 870-3554  
 Owner: Thomas Maggio  
 Studio Manager: Thomas Maggio

[16] PERSIA SOUND STUDIOS  
 also REMOTE RECORDING  
 378 Bement Ave.  
 Staten Island, NY 10310  
 (718) 816-6384  
 Owner: Chris Vollar  
 Studio Manager: Chris Vollar

[16] POLYMEDIA INC.  
 also REMOTE RECORDING  
 91 Newbury St.  
 Boston, MA 02116  
 (617) 424-1090  
 Owner: David Kowal  
 Studio Manager: David Kowal

[16] Q DIVISION  
 443 Albany St.  
 Boston, MA 02118  
 (617) 542-0081  
 Studio Manager: Mike Denneen, Jon Lupier

[12] RAIN STUDIO  
 PO Box B  
 Prattville, NY 12468  
 (607) 588-6167  
 Owner: Richard McNerney  
 Studio Manager: Donna Hopkin

[16] RED DOG STUDIO  
 503-511 Broadway  
 New York, NY 10013  
 (212) 219-2314  
 Owner: Stuart Kollmorgen  
 Studio Manager: Red Dog

[16] RED ROCK RECORDING STUDIO  
 RD #1, Box 208  
 Saylorsburg, PA 18353  
 (717) 992-5777  
 Owner: Kent Heckman  
 Studio Manager: Lois Browsey  
 Engineers: Kent Heckman, Mark Heath  
 Mixing Consoles: Trident Series 75 26 x 24 x 2.  
 Audio Recorders: Sony JH24-16 16-track w/ autolocator  
 III, Otari MX5050B 2-track, (2) TEAC C3-RX cassette decks.  
 Noise Reduction: dbx 180.  
 Echo, Reverb, & Delay Systems: Lexicon 200 digital reverb,  
 Yamaha SPX90, Ibanez SDR1000, Lexicon PCM70 effects processor,  
 Effectron 1024, Korg SDD-2000 sampling delay.  
 Other Outboard Equipment: Apex Compellor, (4) Valley People Dyna-Mites,  
 (2) dbx 160X compressors.  
 Microphones: Neumann U87, AKG 414, Shure SM81.  
 —LISTING CONTINUED ON NEXT PAGE

# MASTER A FULLERSOUND

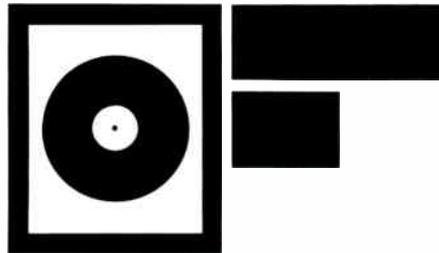
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 America  
 The Bus Boys

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—LISTING CONTINUED FROM PAGE 141

Shure SM57, Sennheiser 441, Sennheiser 421, Audio-Technica ATM 31, Audio-Technica ATM 41, Stewart active direct boxes.

Monitor Amplifiers: Halter DH 500, headphones: Nikko Alpha II.

Monitor Speakers: Yamaha NS10, JBL 4425, Auratone, AKG K240 headphones, Fostex T-20 headphones.

Musical Instruments: A total MIDI system consisting of Macintosh 512 computer w/Imagewriter, Southworth Total Music software w/IamBox 4, E-mu SP-12 turbo drum machine, Yamaha DX7 w/TX416 rack, Korg EX8000, Charvel MIDI guitar, Yamaha U1 acoustic piano, Mesa/Boogie, Rockman, '53 Les Paul, Rickenbacker 12-string, Ibanez guitars and basses.

[16] RED SNEAKER STUDIO  
RD #5, Carpenter Rd.  
Hopewell Jct., NY 12533  
(914) 221-4869

Owner: Mike Ginese  
Studio Manager: Mike Ginese

[16] REEL SOUND STUDIOS, INC.  
also REMOTE RECORDING

PO Box 309  
Whitehouse, NJ 08888  
(201) 439-2117

Owner: David Wollman

[16] REEL TIME 15 RECORDING  
15 Union St.  
New London, CT 06320  
(203) 444-1743

Owner: T. Perrone, T. McKissick  
Studio Manager: Andre Danford

[16] REEL TIME RECORDING STUDIO  
also REMOTE RECORDING

24 Faith Ln.  
Manchester, NH  
(603) 623-2023

Owner: Mark Miville, Paul Miville, Moe Bournival  
Studio Manager: Paul Miville



REEVES AUDIO RECORDING  
Yonkers, NY

[16] REEVES AUDIO RECORDING  
Yonkers, NY  
(914) 793-6496

Owner: Jim Reeves

Studio Manager: Jim Reeves

Engineers: Jim Reeves

Dimensions: Studio 20 x 15, control room 12 x 15.

Mixing Consoles: Tascam 1033 custom console 32 x 8 x 4 x 2 + 7FX bus + 2-stereo cue w/in-place solo.

Audio Recorders: Fostex B16D 30 ips 16-track ½" (Dolby C) w/autolocator AL-16, Tascam 80-8 w/DX8 8-track ½" w/remote, Ampex A6440 2-track ¼", Tascam 7030 2-track ¼", TEAC 3340 4-track ¼".

Cassette Recorders/Duplicators: Kenwood KX-2060 3HD, (2) Kenwood KX-1030 3HD.

Noise Reduction Equipment: dbx 155 4-channel.

Echo, Reverb, & Delay Systems: Yamaha REV7 digital reverb, Master Room III stereo reverb, Sound Workshop 242A stereo reverb, (2) Fisher Spacepander spring reverb K10, Lexicon Prime Time DDL w/extender card, Yamaha D1500 DDL, Eventide H910 harmonizer.

Other Outboard Equipment: MXR 31-band graphic equalizer, (2) MXR stereo 12-band graphic equalizer, TEAC 20-band graphic equalizer, BSR 14-band graphic equalizer, dbx 160 compressor/limiter, dbx 160X compressor/limiter, (2) MXR mini limiter, (2) MXR auto flanger, Aphex Aural Exciter "C", (6) Roger Mayer noise gates RM68.

Microphones: Neumann U67, Neumann U87, Neumann KM84, (2) Shure RE20, Sennheiser 441, (11) Shure SM57, (2) Shure SM58, (2) Crown PZM, AKG D224E, AKG D58E, (10) Sescam SM-10 direct boxes, various transducers.

Monitor Amplifiers: Crown DC300, Marantz 16, Yamaha, Kenwood, Fisher 100C (tube amp).

Monitor Speakers: Alec 848A studio monitors, Visonic David 8001, (4) Auratone 3C, EPI 110C, EPI 100V.

Musical Instruments: (2) Oberheim DMX drum machine w/card and chip library, Casio CZ-101, ARP Omni, Minimoog, Casio 500, Weber 6' acoustic grand piano, Ludwig drum kit w/Zildjian cymbals, Ampeg B-15 bass amp, Fender Deluxe guitar amp w/Celestion speaker, Hinner pipe organ.

Video Equipment: JVC HR 2200 VHS portable, Dumont VHS stereo hi-fi, Sony U-Matic ¾" player, Panasonic WV 3300 color camera.

Other Equipment: (2) Sanyo VM-4509 video monitors, Sony AVC 1420 video camera, Bell & Howell 16mm sound projector.

Rates: \$35/hr.

Extras & Direction: Reeves Audio Recording is a result of Jim Reeves' years of experience as a musician, gold and platinum album engineering, TV and film recording, live "PA" mixing, and remote recordings, electronics expertise and a basic love for making sound recordings with a "Let's hear that again" quality. Separate vocal, drum and guitar booths for maximum separation insure flexibility during the mix when dropping instruments is desirable for rearranging a composition during post-production. The control room is completely isolated from the studio. Visual is achieved through video in the control room leaving the artist with a sense of intimacy while performing. All overdubbing can be done entirely from the control room. VHS is available for jingle production to obtain cues for scoring post-production.

[16] THE RIGHT TRACK  
also REMOTE RECORDING

426 E. Pleasant St.  
Philadelphia, PA 19119  
(215) 438-8059

Owner: Robert B. Johnson Jr.  
Studio Manager: Darold S. Williams

[16] ROAR PRODUCTIONS INC.  
also REMOTE RECORDING

6655-H Dobbin Rd.  
Columbia, MD 21045  
(301) 596-2600

Owner: Steven Rosch  
Studio Manager: Gary Zeichner

[16] RODEL PRODUCTIONS  
also REMOTE RECORDING

1028 33rd St. NW  
Washington, DC 20007  
(202) 338-0770

Owner: Rodel Productions Inc.  
Studio Manager: Renete Funk

[16] ROUND SOUND RECORDING STUDIO  
also REMOTE RECORDING

RR 2, Box 111-C  
Cresco, PA 18326  
(717) 595-3149

Owner: Tommy Lewis, Jr.  
Studio Manager: Tommy Lewis, Jr.

[16] ROUNDHOUSE STUDIOS  
8 Grace Ave.

Wolcott, CT 06716  
(203) 879-9871  
(203) 879-2301

Owner: Robert Taylor Jr., Joe Miko  
Studio Manager: Robert Taylor Jr., Joe Miko

[16] SABER SOUND SYSTEMS, INC.  
also REMOTE RECORDING  
18 Dillon Ave.  
Port Jefferson Station, NY 11776  
(516) 928-7974  
Owner: Shareholders  
Studio Manager: Allen Varela

[16] SAINTS AND SINNERS SOUND STUDIO  
432 Western Ave.  
Albany, NY 12203  
(518) 454-5278  
Owner: College of St. Rose Music Division  
Studio Manager: Mary Anne Nelson

[16] THE SANCTUARY RECORDING STUDIOS  
31-A Roseland Ave.  
Caldwell, NJ 07006  
(201) 228-4084  
Owner: Rich Tozzi, Joe Borges, Vito Capurso  
Studio Manager: Vito Capurso

[16] SANMAN PRODUCTIONS, INC.  
PO Box 7018  
Newark, NJ  
(201) 736-7873  
Owner: Sanford Winnerman  
Studio Manager: Sanford Winnerman

[16] SCENARIO SOUND  
also REMOTE RECORDING  
PO Box 277  
Weymouth, MA 02191  
(617) 331-1742  
Owner: Paul Santo  
Studio Manager: Paul Santo

[16] SCHEMBRIVISION  
also REMOTE RECORDING  
2156 Story Ave.

Bronx, NY 10473  
(212) 863-2986  
Owner: Salvador Schembri  
Studio Manager: Sal Schembri Jr.

[16] SCHOOLHOUSE SOUND  
70 Pine St.  
Easton, MA 02334  
(617) 238-8871  
(617) 395-5843  
Owner: Gregory & Stephen Buck  
Studio Manager: Stephen Buck  
Engineers: David Wilson, Gregory Buck, Stephen Buck  
Dimensions: Room 1: studio 21 x 18, control room 13 x 15.  
Room 2: studio 6 x 8.  
Mixing Consoles: Allen & Heath 1616 16 x 8 w/16-track monitoring.  
Audio Recorders: Tascam MS-16 16-track (SMPTÉ compatible), Tascam 32 2-track, TEAC 3340 4-track.  
Cassette Recorders/Duplicators: Kenwood KX-1030, Nakamichi BX-100.  
Noise Reduction Equipment: (2) Symetrix 511, dbx 224X.  
Echo, Reverb, & Delay Systems: Yamaha R1000, DeltaLab ADM 1024, Fostex 3050, Yamaha SPX90, Alesis MIDI-verb.  
Other Outboard Equipment: (4) Dynedged stereo exciters, dbx 166X, dbx 3BX III, dbx 163X.  
Microphones: E-V RE20, (2) AKG C-535, (3) Sennheiser 421, (6) Shure SM57.  
Monitor Amplifiers: Crown D-150.  
Monitor Speakers: E-V Sentry 100, JBL 4401, Toa RS-21 M.  
Musical Instruments: Fender Strat, Fender Tele, Fender Jaguar, Fender P-Bass, various Fender and Peavey amps, Slingerland drums, Slingerland timbales, cheesy Fartisa. Also available on request, Yamaha DX7, Roland Juno 106, Yamaha DX21, (2) Ensoniq Mirage, Yamaha RX15, Yamaha RX15, Roland TR-707.  
Other MIDI Equipment: Roland MC-500, Roland MSQ-700, total of 24-tracks digital sampling.  
Rates: \$30/hr. Call for package prices.

[16] SEA TRACKS RECORDING  
Post Office Square, Box 1147  
Orleans, MA 02653  
(617) 255-8063  
Owner: Robert Tucker  
Studio Manager: Jim Giberti

[16] SECOND STORY SOUND  
5 Wyngate Pl.  
Great Neck, NY 11021  
(516) 466-4075  
Owner: R. Greenie  
Studio Manager: Ariana Tolins

[16] SHILOH RECORDING STUDIO  
also REMOTE RECORDING  
1108 Boylston St.  
Boston, MA 02115  
(617) 247-6677  
Owner: Jeff Colon  
Studio Manager: Jeff Colon

[16] SHOCKWAVE  
PO Box 950  
Boston, MA 02119  
(617) 265-5268  
(617) 427-6311  
Owner: Johnathan-William Corp.  
Studio Manager: Marwan Moss, Willie Moss

[16] SHUSTER SOUND  
also REMOTE RECORDING  
29 Burt Ct.  
Valley Stream, NY 11581  
(516) 791-2985  
Owner: Bob Shuster  
Studio Manager: Bob Shuster  
Engineers: Bob Shuster  
Dimensions: Studio 12.5 x 26, control room 9.5 x 15.  
Mixing Consoles: Yamaha RM 1608 16 x 8, Sony MX-208 x 4.  
Audio Recorders: Tascam MS-16 16-track 1", Tascam 70H8 8-track 1/2", Scully 280 4-track 1/2", Scully 280 2-track 1/4", TEAC 3300S 1/4-track stereo, Akai GX220 1/4-track stereo.  
Cassette Recorders/Duplicators: (2) JVC KD-V6, JVC KD75, JVC KDA77, JVC KD10.  
Echo, Reverb, & Delay Systems: Grampan spring reverb, ART DR1 A digital reverb, (2) Korg SDD1000 digital delay, Ecoplate tape delay (original tube type), Yamaha SPX90.  
Other Outboard Equipment: dbx 160 comp/limiter, Orban 245E stereo synthesizer, Omni Craft GT-4 noise gates. Dolby noise reduction, Delta-Graph-EQ, UREI digital met—  
LISTING CONTINUED ON NEXT PAGE



# TANNOY®

## SGM-SERIES

- POINT SOURCE  
PHASE COHERENT  
MONITORING

With the Super Gold Monitor series of reference loudspeakers the Tannoy research team has produced some radical new thinking in the area of the much-studied crossover network. The new SGM series implements a form of crossover design which is unique in the distribution of high peak currents. Printed circuit boards and layouts have been discarded. Contacts between potential-

ly dissimilar metals have been eliminated.

The result is a range of loudspeakers which seem traditionally based, bear little external change from the existing series, use the same proven time alignment techniques and yet provide a major step forward in the quality of reproduced and recorded sound for monitoring in the pursuit of gainful profit (or sheer enjoyment).

**TANNOY** NORTH AMERICA INC.

300 GAGE AVE., UNIT #1, KITCHENER, ONT. CANADA N2M2C8 5197451158 TELEX 06955328

Circle #100 on Reader Service Card

—LISTING CONTINUED FROM PAGE 143

ronome/clock, Akai CD-D1 compact disc player, Technics SL1500 MKII turntable, Fedders central air conditioning, free parking.

**Microphones:** All major types of expensive new and vintage Neumanns, Shure, E-V, AKG, Sony, Beyer, etc. Also Jensen type direct boxes.

**Monitor Amplifiers:** H/H V800, Sansui AV6600.

**Monitor Speakers:** Custom Altec/JBL, Yamaha NS10M, Visonik-David 7000, Auratone 5C.

**Musical Instruments:** Baby grand piano, drums, amps.

**Video Equipment:** U-Matic ¾", JVC ½" VHS, Sony TV monitors, Ikegami monitors, video duplication, film transfers.

**Rates:** Call for rates, by appointment only.

[16] SILVER CITY STUDIOS  
also REMOTE RECORDING

944 Somerset Ave.

Taunton, MA 02780

(617) 823-9014

Owner: Ron Pires

Studio Manager: Ron Pires

Engineers: Ron Pires

**Dimensions:** Room 1: studio 14 x 27, control room 14 x 17. Room 2: studio 18 x 26.

**Mixing Consoles:** Ramsa WRT820 20 x 16.

**Audio Recorders:** Fostex B-16 16-track, Revox B-77 2-track, TEAC 32B 2-track, TEAC 244.

**Cassette Recorders/Duplicators:** Technics, Sony, Aiwa.

**Noise Reduction Equipment:** (16) Dolby C, (2) dbx.

**Echo, Reverb, & Delay Systems:** Lexicon PCM70, Lexicon PCM60, (3) DeltaLab delays, Biamp SR 240.

**Other Outboard Equipment:** dbx 166 compressors, (4) Audio Logic noise gates, Biamp EQs, Rane RE-27 analyzer/EQ, (4) Biamp limiters, Furman parametric.

**Microphones:** (2) AKG 414s, (3) Sennheiser 421s, (2) SM57, SM58, (2) ATM63s, AT 813, (3) Shure 545s, E-V PL9.

**Monitor Amplifiers:** Sony STRV55, CP500, CS400.

**Monitor Speakers:** (2) JBL 4311s, (2) Auratones, (2) Advents.

**Musical Instruments:** Ensoniq Mirage sampling keyboard/MIDI, Sequential Circuits Drumtraks/MIDI, Fender Precision, Hamer Cruise bass, Marshall 50W studio amp, strat. guitar, Aria Pro II RSB special.

**Other Equipment:** Rane HC-6 headphone distribution, (3) Fostex T-20 headphones, (6) assorted Koss, AKG, Radio Shack headphones, Technics compact disc reference, Technics SL L25 turntable.

**Rates:** \$25/hr.

[16] SING SING SING STUDIOS, INC.  
also REMOTE RECORDING

37 Iroquois Rd.

Ossining, NY 10562

(914) 941-9476

Owner: Ira Lichtenstein

Studio Manager: Ira Lichtenstein

Engineers: Ira Lichtenstein

**Dimensions:** Room 1: control room 13 x 10. Room 2: live room 16 x 15. Room 3: drum booth 9 x 8. Room 4: vocal booth 6 x 5.

**Mixing Consoles:** Yamaha RM1608 16 x 8, Studiomaster B into 4 x 4.

**Audio Recorders:** Fostex B-16 16-track w/internal Dolby C, 15 ips, Otari MX5050 BII2 2-track 7.5 and 15 ips, Panasonic PV1740 VHS Hi-fi w/internal dbx 2-track.

**Cassette Recorders/Duplicators:** Denon DR-M4 w/Dolby B/C, Akai HX-A3X w/Dolby B/C/dbx.

**Synchronization Systems:** Fostex 4050 autolocator/SMPTE processor.

**Echo, Reverb, & Delay Systems:** Yamaha REV7 digital reverb, Yamaha SPX90 digital effects processor, Yamaha R1000 digital reverb, Roland SDE-3000 digital delay.

**Other Outboard Equipment:** dbx 160X over-easy compressor/limiter, Omni Craft GT-4 Quad noise gate, Rane RE-27 Real Time EQ, Rane GE-27 graphic EQ, Rane HC-6 headphones console, Scholz Bass Rockman.

**Microphones:** (3) AKG 414EB-P48 condenser, Beyer M500 ribbon, Ibanez ID-552 Dynamic, (2) Countryman direct box, SR&D Rockman IIB.

**Monitor Amplifiers:** Perreux 3150, Crown D-75.

**Monitor Speakers:** (2) UREI 809 Time Align, (2) Yamaha NS10M, (2) Auratone 5C, (2) Auratone T6, (2) E-V Sentry 100EL.

**Musical Instruments:** Linn 9000 digital drums/seq, Ensoniq Mirage digital sampling keyboard w/complete library, Yamaha DX7 FM digital synthesizer, Sequential Prophet 5 analog synthesizer w/polysequencer, (2) Yamaha FB01 FM digital synthesizer module, 360 Systems MidiBass, Yamaha CX5M music computer w/software, Oberheim Prommer digital sampler/EPROM programmer, Hardman baby grand piano, electric and acoustic guitars, electric basses, Fender Rhodes suitcase 73 electric piano, Yamaha Recording series drums and percussion.

**Other MIDI Equipment:** Korg MIDI thru box, Casio 2-channel MIDI thru box, IBM PC-XT personal computer w/Texture Vision, Personal Composer, Pyramid software, (5) digital MIDI sequencers provide 90-track sequencing.

**Rates:** Upon request.



[12] SLAB CITY SOUND STUDIO  
Earlville Rd.

Chateaugay, NY 12920

(518) 497-6216

Owner: Dan Wills

Studio Manager: Dan Wills

[16] THE SOUND CENTER  
also REMOTE RECORDING

52 Lily Pond Ln.

Katonah, NY 10536

(914) 232-7550

Owner: Joseph L. Knowlton

Studio Manager: Joseph L. Knowlton

[16] SOUND COTTAGE

PO Box 513

Port Jefferson Station, NY 11776

(516) 928-9397

Owner: Jim Rattazzi

Studio Manager: Irene Rattazzi

[16] SOUND IMAGES RECORDING

314 W. Grant Ave.

Duquesne, PA 15110

(412) 466-2854

Owner: Al Puskarcic

Studio Manager: Ali Buday

Engineers: Al Puskarcic, Ali Buday

**Dimensions:** Room 1: studio 14 x 14, control room 14 x 14. Room 2: studio 12 x 7.

**Mixing Consoles:** Ramsa WR-T820 20 x 16 x 2 w/optional meter bridge, Ramsa WR-8816 16 x 4 x 2.

**Audio Recorders:** Otari MX-70 16-track, Otari MX-5050 Mark III 8-track, Otari MX-5050B 2HD 2-track.

**Cassette Recorders/Duplicators:** Tascam 122 cassette recorder w/Dolby HX.

**Noise Reduction Equipment:** dbx 180 Type I noise reduction.

**Echo, Reverb, & Delay Systems:** Yamaha REV7 digital reverb, (2) Yamaha SPX90 digital reverb, DeltaLab Super Time Line ADM 2048 programmable digital delay, DeltaLab Effectron ADM 1024 digital delay, DeltaLab Echotron ADM 4096 digital delay, Orban 111B dual reverb, ADA TFX-4 time effects (analog) w/flange, chorus, doubling, and echo.

**Other Outboard Equipment:** (2) Valley People Brain II compressor, (2) Valley People Kex II noise gate, (4) Allison Gain Brain compressor, (2) Allison Kexep 500, Symetrx 544 quad noise gate, (2) API 525 compressor/limiter, Aphex Type B Aural Exciter, (2) UREI 537 graphic equalizer, Sundholm 31-band graphic equalizer, (2) Ibanez 31-band graphic equalizer.

**Microphones:** Neumann TLM170i, AKG C414EB-P48, AKG D-12E, (2) Shure SM57, (4) Sennheiser 421, E-V RE20, (2) Jensen custom direct boxes.

**Monitor Amplifiers:** QSC, AB, Edcor 8x headphone amp.

**Monitor Speakers:** UREI 809, Auratone 5Cs.

**Musical Instruments:** LinnDrum machine w/external memory system option, Simmons SDS8 electronic drums, Jacques Cappelle hi-hat w/Zildjian quick beat cymbals, Baldwin studio acoustic piano, Fender Precision Bass, Scholz Research Rockman K-100, Scholz Research Bass Rockman, Yamaha DX7 synthesizer, Roland JX3-P synthesizer, Korg guitar synthesizer, Ovation acoustic/electric guitar, assortment of amplifiers.

**Other MIDI Equipment:** Yamaha CX5M music computer for DX7, Yamaha YME8 MIDI expander, Akai S612 MIDI digital sampler w/disk drive, Apple IIe Pro w/Passport Master Tracks software.

**Other Equipment:** Technics quartz direct-drive turntable, Peterson strobe tuner, 208 pt. Switchcraft patch bay.

**Rates:** \$35/hr. 16-track, \$20/hr. 8-track, blocks available.

[16] THE SOUND LAB  
also REMOTE RECORDING

PO Box 29128

Philadelphia, PA 19127

(215) 483-6666

Owner: David J. Spangenberg

Studio Manager: David J. Spangenberg

[16] SOUND SIDE RECORDING STUDIO

53 Newbury St.

Lawrence, MA

(617) 685-3611

Owner: Carmen DiMarca

Studio Manager: Carmen DiMarca

[16] SOUND SITUATION  
(FORMERLY WATER WHEEL MUSIC)

also REMOTE RECORDING

130 Griswold St.

Glastonbury, CT 06033

(203) 633-1952

Owner: David Budries

Studio Manager: David Budries



SOUNDSCAPE RECORDING STUDIO INC.  
Poughkeepsie, NY

[16] SOUNDSCAPE RECORDING STUDIO INC.  
also REMOTE RECORDING

PO Box 176

Poughkeepsie, NY 12602

(914) 485-2202

Owner: Robert & Susan Sanderson

Studio Manager: Robert Sanderson

Engineers: Robert Sanderson

**Dimensions:** Studio 20 x 40, control room: 18 x 18.

**Mixing Consoles:** Tascam 520 20 x 8, (3) Rane SM 266 x 2.

**Audio Recorders:** Fostex B-16D 16-track w/autolocator, Tascam 80-B 8-track w/dbx, Otari 5050BII 2-track w/dbx, Tascam 32 2-track w/dbx.

**Cassette Recorders/Duplicators:** Tascam 122B, Denon DRM-3, Mono 1 x 1 duplicator.

**Noise Reduction Equipment:** Fostex/Dolby C NR integral w/B-16D, Tascam DX-8 dbx unit, Tascam 2-channel dbx unit.

**Synchronization Systems:** Fostex 4050 autolocator/SMPTE-MIDI converter.

**Echo, Reverb, & Delay Systems:** Yamaha REV7 reverb, (2) ART DR2-A reverbs, Korg SDD-2000 delay, ADA D-640 delay.

**Other Outboard Equipment:** (2) Valley People 6.10 compressor/limiters/gates, (4) GT-4 noise gates, (2) dbx de-essers, Aphex Type B Aural Exciter, Soundcraft I/3-, 2/3-octave stereo equalizer, Ibanez harmonic delay.

**Microphones:** AKG 'The Tube', AKG 414, (3) AKG 460 B, AKG 451, (4) Sennheiser 421, Sennheiser 441, E-V RE20, RCA 77DX, (3) Shure SM57, (2) Countryman direct boxes, (2) Zuess direct boxes.

**Monitor Amplifiers:** Perreux 6000 B (control mains) 350 w/ch, Hafler (studio) 125 w/ch, Pioneer Spec II (studio) 250 w/ch.

**Monitor Speakers:** Tannoy 12Bs w/Kimber cable, JBL 4312, JBL 4313, E-V Sentry 100A, Auratones, (5) AKG 240 phones, (5) Koss phones.

**Musical Instruments:** Korg digital sampling grand piano, Fender Rhodes suitcase 73 key piano, Arrpeg B-15 bass amp, Simmons SDS-9 kit, Simmons SDS-1 pad, Simmons MTM trigger conditioner, Cosmic 5-piece acoustic kit w/Barcus Berry triggers and cymbals especially chosen for studio work.

**Video Equipment:** Associated with Ballantine Communications for multi-camera shoots and video post-production.

**Other Equipment:** Of course we will rent anything you need and will joint-venture for large scale studio or remote projects.

**Rates:** \$45/hr. (1-5 hours); \$35/hr. (over 5 hours); \$35/hr.

(blocks of 10 or more) plus tape and tax.  
**Extras & Direction:** Soundscape is owned and operated by Rob Sanderson-independent producer/engineer and co-owner of Dutchess Entertainment Inc., a music publishing company. Rob provides these professional services to many satisfied clients at reasonable fees. Travel is not a problem. Areas of specialization-mainstream pop/rock, gospel, blues, classical, country. Dependable and consistent, imaginative.

[16] SPECTRUM RECORDING STUDIO, INC.  
 also **REMOTE RECORDING**  
 18 W. Maple Ave.  
 Suffern, NY 10901  
 (914) 368-1143  
 Owner: Glenn Finneman  
 Studio Manager: Michael Zavoski

[16] SQUIRE RECORDING STUDIOS  
 also **REMOTE RECORDING**  
 229 Weimar St.  
 Buffalo, NY 14206  
 (716) 823-2822  
 Owner: Paul J. Squire  
 Studio Manager: Paul J. Squire

[16] S.S. SOUND STUDIOS  
 32 Rolling Ln.  
 Trenton, NJ 08690  
 (609) 587-2279  
 Owner: John Bailey, Dave Kalokitis  
 Studio Manager: Dave Kalokitis

[16] THE STABLE (SOUND DIVISION)  
 21 Erie St.  
 Cambridge, MA 02139  
 (617) 499-2585  
 Owner: William Wangerin  
 Studio Manager: Karen Smith

[16] STABLE SOUND  
 Folly Foot Farm, RD #2, Milford Rd.  
 Downingtown, PA 19335  
 (215) 458-TROT  
 Owner: Hank Boenning  
 Studio Manager: Hank Boenning

[16] STAR BASE STUDIO  
 Woodside, NY 11377  
 (718) 476-0665  
 Owner: Chuck Thompson  
 Studio Manager: Chuck Thompson  
 Engineers: Chuck Thompson  
 Dimensions: Studio 18 x 25.  
 Mixing Consoles: Amek/TAC Scorpion 32 x 16.  
 Audio Recorders: Otari MX-70 16-track, TEAC A3340-S 4-track, Tascam 32 2-track.  
 Cassette Recorders/Duplicators: Sony TC-WR930, Marantz, Bang & Olufsen.  
 Noise Reduction Equipment: dbx 150.  
 Echo, Reverb, & Delay Systems: Yamaha REV7, Lexicon PCM60, Lexicon PCM70, Roland SRV 2000, DeltaLab Super Time Line 2048, DeltaLab Efectron II 1024, Furman RV-2 stereo reverb.  
 Other Outboard Equipment: (2) dbx 160X, Loft quad noise gate limiter, UREI 1176LN, dbx 166, Drawmer DS-201 dual gate, MXR 31-band graphic EQ, (2) MXR dual graphic EQ 15-band, Furman stereo parametric EQ, ADC SS-425X frequency equalizer/analyser.  
 Microphones: Shure SM58s, Shure SM57s, Neumann U89, E-V DO54, AKG 421.  
 Monitor Amplifiers: Crown DC 300A, Crown D-75, QSC 5.1, QSC 3.7.  
 Monitor Speakers: (2) JBL 4412, (2) Yamaha NS10s.  
 Musical Instruments: Yamaha DX7, Casio CZ-1000, Linn-Drum w/MIDI, 360 System MIDIbass, Fender custom Stratocaster guitar, Guild guitar, Ovation 12-string, Ibanez bass guitar, Yamaha FB-01, Roland MKS-10.  
 Other MIDI Equipment: Yamaha QX1  
 Rates: \$45/hr.

[16] THE STAR STUDIO  
 also **REMOTE RECORDING**  
 PO Box 244  
 Morningdale, MA 01530  
 (617) 756-8890  
 Owner: Jonathan Raphaelson  
 Studio Manager: Tracy Raphaelson

[16] STAR TRACK ENTERPRISES, INC.  
 PO Box 647, 14 Laurel St.  
 Putnam, CT 06260  
 (203) 928-9554  
 Owner: Corporate  
 Studio Manager: Ray Miskivitch

[16] STRATA STUDIOS  
 1215 MacDade Blvd.  
 Folsom, PA 19033  
 (215) 237-8134  
 Owner: Dennis Nardi  
 Studio Manager: Dennis Nardi

[12] STUDIO NEW ENTRY  
 12 Crown Ct.  
 Gaithersburg, MD 20878  
 (301) 840-1422  
 Owner: James P. Nalley  
 Studio Manager: James P. Nalley

[16] STUDIO 3  
 18 Portland St., PO Box 8643  
 Portland, ME 04104  
 (207) 772-4446  
 Owner: Tom Blackwell, Tim Tierne  
 Studio Manager: Tim Tierney

[16] STUDIO 1212  
 92 32 Union Hall St.  
 Jamaica, Queens, NY  
 (718) 654-8444  
 Owner: Mick Cory  
 Studio Manager: Mick Cory

[16] STUDIO UNICORN  
 also **REMOTE RECORDING**  
 109 Lenox Ave.  
 Bridgeport, CT 06605  
 (203) 333-0736  
 Owner: Paul Avgerinos  
 Studio Manager: Paul Avgerinos

[16] STUDIO X  
 47 Ethelbert Pl.  
 Ridgewood, NJ 07450  
 (201) 444-9147  
 Owner: Bill Tesar, Rave Tesar  
 Studio Manager: Rave Tesar  
 Engineers: Rick Reineile, Rave Tesar, Bill Tesar  
 Dimensions: Room 1: studio 17 x 12, control room 15 x 9.  
 Room 2: studio 15 x 12, isolation booth 7 x 7.  
 Mixing Consoles: Amek Scorpion 32 x 8 x 16.  
 Audio Recorders: Otari MX-70 16-track, Otari MKIII 5050 8-track, Dokorder 1140 4-track, Technics 1520 2-track, Sony F-1 2-track.  
 Cassette Recorders/Duplicators: Tascam 234 4-track, (2) Tascam 122.  
 Echo, Reverb, & Delay Systems: AMS RMX-16, AMS DMX 15-80s, Lexicon PCM70, Lexicon PCM42, (2) Lexicon PCM41s, Yamaha REV7, ART DR-1 Ecoplate.  
 Other Outboard Equipment: Eventide 910 Harmonizer, Vocoder, dbx 216 noise reduction w/310 cards, (6) Valley People Dyna-Mites, Drawmer dual signal gates, (2) dbx 160X comp/limiters, (2) dbx 160 comp/limiters, dbx 165A comp/limiter, Orban 622B EQ, MXR dual 15-band EQ, Dr. Click, SBX80, MX-1 trigger.  
 Microphones: Assorted Neumann, AKG, E-V, Sennheiser, Shure, Sony, Countryman DIs.  
 Monitor Amplifiers: Crown, BGW.  
 Monitor Speakers: JBL 4313, Yamaha NS10, E-V 100, Auratones.  
 Musical Instruments: E-mu SP-12, Simmons SDS-7, Simmons SDS-V, LinnDrum, DMX, Yamaha RX11, Yamaha TX816, Yamaha DX7, Kiam concert grand piano, Fender Rhodes, Kong Poly 6, OB-8, Prophet 5, Minimooq, Slingerland drums, Marshall, Fender, Yamaha amps.  
 Rates: Call for rates.

[12] SUBURBAN RECORDING STUDIOS  
 11 Winfield St.  
 E. Freetown, MA 02717  
 (617) 763-2546  
 Owner: Gary Amaral  
 Studio Manager: Gary Amaral

[16] SUBWAY SOUND  
 WCYY Radio, 40 Reservoir Rd.  
 Coventry, RI 02816  
 (401) 821-8540  
 Owner: Ken Grady  
 Studio Manager: Chip Maynard

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# Mix

Resources for  
 Creative  
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**[16] SYNTUNE**  
 204 Summit Ave.  
 Brookline, MA 02146  
 (617) 731-3993  
 Owner: Rob Ames  
 Studio Manager: Rob Ames

**[12] TTRAX**  
 also **REMOTE RECORDING**  
 1865 Dryden Rd.  
 Binghamton, NY  
 (607) 347-4559  
 Owner: Tom Paolangeli  
 Studio Manager: Tom Paolangeli

**[16] TECHNORUBBLE**  
 also **REMOTE RECORDING**  
 165 Linden St.  
 New Britain, CT 06051  
 (203) 224-1217  
 (203) 224-1811  
 Owner: Steven J. Wytas, Jason Szostek  
 Studio Manager: Jason Szostek

**[16] THURSDAY PRODUCTIONS**  
 also **REMOTE RECORDING**  
 189 Norman Rd.  
 New Rochelle, NY 10804  
 (914) 235-7505  
 Owner: Daniel M. Welsh  
 Studio Manager: Susan J. Welsh  
 Engineers: Daniel M. Welsh, David C. Moran  
 Dimensions: Studio 23 x 16 w/moveable ceiling to floor gobos, drum booth 11 x 6 w/floating floor, control room 12 x 11.  
 Mixing Consoles: Tascam M16 24 x 8, Carvin MX 1202 12 x 2 remote board  
 Audio Recorders: Tascam 85-16 16-track full dbx, Tascam 80-8 8-track full dbx, Ampex 440-C2, 4-track mono, Otari 5050 MKII 2-track, Otari 5050 B mono, Otari MTR-10 master 2-track.  
 Cassette Recorders/Duplicators: (4) Tascam 122B master cassette recorders, Sony TCM-5000 cassettes  
 Echo, Reverb, & Delay Systems: Lexicon PCM60, Lexicon Prime Time, Master Room XL305, Orban stereo reverb, MXR II digital delay w/full memory.  
 Other Outboard Equipment: dbx limiter/comp, UREI limiters, Ashly Parametric EQ, Orban 245F, Aphex B Aural Exciter, MXR graphic EQ, Valley People line amps, Aphex studio dominator.  
 Microphones: 414s, RE20, 441s, 58s, 57s, SM80, PZMs.  
 Monitor Amplifiers: McIntosh 2120, Crown G150, JVC JAS41  
 Monitor Speakers: JBL 4312, Auratones.  
 Musical Instruments: Customized Baldwin upright piano, Yamaha DX7, Synergy, Roland Juno 106, Simmons drums, E-mu drumulator, Ludwig drums, (3) full kit snares, Roland MKS digital piano, TX 216 rack, Korg DD 1 digital drums, Korg voice processor.  
 Other MIDI Equipment: All MIDI interfaces with: Atan 1049 computer w/several programs available  
 Rates: Available upon request, block discounts available.  
 Extras & Direction: Thursday Productions continues its solid commitment to offer a relaxed yet creative recording environment capable of handling a wide variety of audio projects. Our engineers are more than just button pushers; they are a dedicated core of talented people who know audio and know how to make a client's project shine. Attention to detail is imperative—no aspect of the production chain is overlooked. Thursday has become an industry leader in creating soundtracks for education. Often our productions win awards for the client: The National Educational Film Festival and Learning magazine have recognized our work for its creativity and outstanding ability "to communicate to children." With well over 250 such productions under our belt it's nice to know that our clients have recognized us for our innovative approach in bringing their ideas to reality

**[16] TRIPLE "A" STUDIOS**  
 also **REMOTE RECORDING**  
 236 Walnut St.  
 So. Amboy, NJ 08879  
 (201) 721-5126  
 Owner: Martin A. Ruzsala  
 Studio Manager: Martin A. Ruzsala

**[16] TRS AUDIO SERVICES**  
 also **REMOTE RECORDING**  
 1116 W. 29th St.  
 Erie, PA 10508  
 (814) 864-2308  
 Owner: Keith Veshecco  
 Studio Manager: Dominic Veshecco



**[16] TURNSTYLE PRODUCTIONS**  
 130 W. 25th St.  
 New York, NY 10001  
 (212) 645-7676  
 Owner: Michael Bramon, Susan Feingold  
 Studio Manager: Michael Bramon, Susan Feingold

**[16] TWANG RECORDING STUDIO**  
 2617 Peach St.  
 Erie, PA 16508  
 (814) 864-2308  
 Owner: Keith Veshecco  
 Studio Manager: Dominic Veshecco

**[16] UNITED MASTERWORK RECORDING COMPANY LTD.**  
 324 Mills Pl.  
 Wyckoff, NJ 07481  
 (201) 848-0468  
 Owner: Robert K. Chapman

**[16] UNIVERSITY OF MARYLAND BALTIMORE COUNTY STUDIO 508**  
 also **REMOTE RECORDING**  
 5401 Wilkens Ave.  
 Baltimore, MD 21228  
 (301) 455-2525  
 (301) 455-2140  
 Owner: State of Maryland  
 Studio Manager: William John Tudor  
 Engineers: William John Tudor, Steve Kollander  
 Dimensions: Studio 36 x 60, control room 16 x 28  
 Mixing Consoles: Allen & Heath CMC-24 24 x 16, Biamp 1642 16 x 4, Robins Fairchild 16 x 8, Sony MX-16 8 x 4.  
 Audio Recorders: Tascam MS-16 16-track w/dbx and auto-locate, Scully 280 4-track 1/2", (3) TEAC 3440 4-track, Nagra IV SL 2-track, (2) Revox A-77 2-track, (2) TEAC 3300SX-2T 2-track.  
 Cassette Recorders/Duplicators: B.I.C. T-2 two speed, (3) TEAC V508X.  
 Noise Reduction Equipment: (3) dbx 155 4-channel, (2) Tascam DX-8DS  
 Synchronization Systems: Allen & Heath CMS-64.  
 Echo, Reverb, & Delay Systems: Yamaha REV7, Effectron ADM 1024, Effectron ADM 4096, Biamp SR/240 reverb, ART 01A, (2) Echoplex.  
 Other Outboard Equipment: (2) UREI 527A 1/3-octave EQ, (2) Biamp stereo 10-band EQ, EMS 10-octave filter bank, EMS pitch to voltage convert, Rane SP-15 parametric, Biamp quad limiter, Aphex Systems AX  
 Microphones: (2) Crown PM 30RB, (4) E-V RE55, (4) E-V RE15, (4) E-V RE16, (3) Shure SM59, (3) Shure SM58, (4) Sony ECM-22P, (2) Audio-Technica AT813, E-V RE50.  
 Monitor Amplifiers: (2) McIntosh 250, (2) Biamp TC/60.  
 Monitor Speakers: (4) Altec/Lansing 9845A, (2) Altec/Lansing 9844A, (4) AR-12, (4) Auratone 5C, (4) Polk Audio 7B, (4) Acoustic Control 802.  
 Musical Instruments: (2) Synclavier II w/terminals, 40 mega B. hard disk, two floppies (EA), music printing, sampling, etc., Moog IIP modular system w/dual sequencers, Yamaha DX7, Yamaha CX5M computer (2) EMS synth w/plates and keyboards, Korg Poly 6, Yamaha GB1 baby grand, Fender Rhodes, Hammond B3, Hohner D-6 clavinet.  
 Other MIDI Equipment: Allen & Heath CMR, Yamaha QX1  
 Video Equipment: Sony AVC3250 camera, Sony AV3650 recorder, (2) Sony 21" monitors.  
 Other Equipment: Scott Audio analyzer 8302.  
 Rates: Variable.

**[16] VISCOUNT RECORDING STUDIOS**  
 also **REMOTE RECORDING**  
 486 Wellington Ave.  
 Cranston, RI 02910  
 (401) 467-9362  
 Owner: Russ Martin

Dimensions: Room 1: studio 16 x 23, control room 13 x 14.  
 Room 2: studio 7 x 7.  
 Mixing Consoles: Custom/API 16 x 16.  
 Audio Recorders: MCI JH-16-114 16-track, Scully 280 2-track, Sony PCM-501 2-track digital, TEAC 2300S 2-track.  
 Cassette Recorders/Duplicators: Technics RMS B5 MKII.  
 Synchronization Systems: Yamaha YMC10.  
 Echo, Reverb, & Delay Systems: Lexicon 224, Audicon plate, Lexicon Prime Time.  
 Other Outboard Equipment: Orban de-esser, UREI 1176LN limiter, (2) UREI LA4A limiters, (2) Allison Research Gain Brains, (2) Allison Research Kepex, Eventide phaser.  
 Microphones: (4) Shure SM57, (6) Shure SM81, E-V RE20, E-V RE15, E-V RE16, (2) Neumann U87, Neumann U64, E-V 654A, (2) E-V DOS4, Sennheiser MD421, Altec M30.  
 Monitor Amplifiers: H/H V800, Crown SA3030.  
 Monitor Speakers: (2) UREI 813, (2) Auratone 5C, (2) Jensen TF3.  
 Musical Instruments: Yamaha grand piano, Yamaha DX7, Akai S900 sampler, MIDI bass, Fender Princeton amp, Fender Champ amp, Ampeg B15, misc. percussion.  
 Other MIDI Equipment: Macintosh plus computer.  
 Video Equipment: Sony SL-HF900  
 Other Equipment: (2) White 1/3-octave EQ, (2) White 1/6-octave EQ, AKG K240 headphones.  
 Rates: \$40/hr., 16-track.

**[16] VULTURE CLUB**  
 12 E. 32nd St.  
 New York, NY 10016  
 (212) 683-3767  
 Owner: Dan Daley  
 Studio Manager: Bob Howard

**[16] WAVELENGTH SOUND STUDIO**  
 12 E. 32nd St.  
 New York, NY 10016  
 (212) 686-8687  
 Owner: Todd Hemleb  
 Studio Manager: Todd Hemleb

**[16] WE PRODUCTIONS**  
 University City, PA  
 (215) 729-0406  
 Owner: Adam Goldman  
 Studio Manager: Ken Hymes



**WENDELL RECORDING STUDIO**  
 Wendell, MA

**[16] WENDELL RECORDING STUDIO**  
 also **REMOTE RECORDING**  
 Box 61  
 Wendell, MA 01379  
 (617) 544-6466  
 Owner: Jeffrey Bauman  
 Studio Manager: Rick King  
 Engineers: Rick King, Tom Nestico, Jeffrey Bauman  
 Dimensions: Room 1 studio 25 x 20 x 20, control room 20 x 15 Room 2 studio 10 x 15. Room 3: isolation booth 6 x 8.  
 Mixing Consoles: Ramsa WR-TB20 20 x 16 automated w/Roland Computer Editor.  
 Audio Recorders: 3M M79 16-track 2" 15/30 ips, variable speed, 3M M79 2-track 1/2" 15/30 ips, Otari 5050 2-track 1/4" 15 ips, Revox A77 2-track 1/2", Sony PCM-601 2-track digital.  
 Cassette Recorders/Duplicators: (10) TEAC 122 real time duplicators, Nakamichi 480, Nakamichi 250.  
 Noise Reduction Equipment: dbx 150 Type I.  
 Echo, Reverb, & Delay Systems: Lexicon PCM70, Lexicon PCM60, DeltaLab Super Prime Time, Master Room stereo spring reverb.  
 Other Outboard Equipment: Valley People 610 compressor/expander, dbx stereo compressor limiter, Ashly SC50

limiter, Aphex Type C Aural Exciter, Ashly SE66 stereo parametric equalizers.  
**Microphones:** Neumann, AKG, E-V, Shure, Beyer, Sennheiser, Sony, ATM, Crown.  
**Monitor Amplifiers:** Crown 300, Yamaha P2050, McIntosh 240 (tube).  
**Monitor Speakers:** Altec 604 E, JBL 4311, ADSL710, Auratone.  
**Musical Instruments:** Yamaha Conservatory grand piano, Yamaha RX15 digital drum machine, Martin 1933 000-28 Herznbone, Scholz Rock Module (rack mount), pre-CBS tan Fender Reverb, Roland Cube chorus amp.  
**Rates:** \$35/hr. Block rates available.

**[16] WEST SHORE RECORDING**  
 1225 Bridge St.  
 New Cumberland, PA 17070  
 (717) 774-1862  
 Owner: Bill Grace

**[16] WESTRAX RECORDING**  
 484 W 43rd St.  
 New York, NY 10036  
 (212) 947-0533  
 Owner: Peter Lunk  
 Studio Manager: Bob Lowe  
 Engineers: Jeremy Harris, Jesse Plumley, Todd Anderson  
 Dimensions: Studio: 17 x 24 w/iso vocal and drum booth, control room: 17 x 20.

**Mixing Consoles:** Sound Workshop Series 30, 36 x 16.  
**Audio Recorders:** Tascam 85-16B 16-track w/autolocator and dbx, Otari MKIII 8-track w/dbx, Otari MTR-12 2-track 1/2-inch 30 ips, Technics 1520 2-track w/dbx, (2) Studer/Revox A-77 2-track w/dbx, (2) Tascam 122 cassette.  
**Echo, Reverb, & Delay Systems:** Yamaha REV7s, Yamaha SPX90, Lexicon PCM42, Korg SDD-2000, Ecoplate III.  
**Other Outboard Equipment:** dbx 160X compressor/limiter, UREI 1176 LN peak limiter, Drawmer noise gates, Orban 622B parametric equalizer.  
**Microphones:** Neumann U87s, AKG C-12As (tube), AKG 414s, AKG 535s, AKG 451, E-V RE20, Sennheiser 421,

Shure SM57.  
**Monitor Amplifiers:** Haller 220.  
**Monitor Speakers:** JBL 4313B, Yamaha NS-10M, Auratone.  
**Musical Instruments:** Yamaha 6' grand piano, Roland S-50 sampling keyboard, DX7, TX816 rack, Oberheim OB-Xa w/MIDI, Korg Poly 800II, CZ-101, E-mu SP-12, LinnDrum, Gretsch drums, all at no extra charge.  
**Other MIDI Equipment:** IBM PC-AT w/Octave Plateau sequencer software, Voyetra patch librarian, Macintosh Plus w/Mark of the Unicorn Performer software.  
**Rates:** Please call for rates. Discounts available

**[16] WIDENER UNIVERSITY RECORDING STUDIO**  
 also REMOTE RECORDING  
 14th & Chestnut Sts.  
 Chester, PA 19013  
 (215) 499-4338  
 Owner: Widener University  
 Studio Manager: John A. Vanore  
 Engineers: Terry Hoffman, John Vanore  
 Dimensions: Studio 40 x 50 x 16 (tiered floor and ceiling), control room 18 x 20.

**Mixing Consoles:** NEOTEK 1E 22 x 16.  
**Audio Recorders:** Otari MX-70 16-track, Otari 5050B 8-track, Technics 1500 2-track, Sony PCM-701 2-track digital.  
**Cassette Recorders/Duplicators:** Aiwa 770.  
**Noise Reduction Equipment:** dbx for multi-track, Dolby A for 2-track, Dolby SR for 2-track.  
**Echo, Reverb, & Delay Systems:** Lexicon PCM70, Lexicon PCM60, Yamaha REV7, Yamaha SPX90, (2) Lexicon PCM42, Ursa Major Stargate 626.  
**Other Outboard Equipment:** Valley People Gain Brain, Valley People Kepex, Orban 424 compressor/limiter, Symetrix 522, Ashly parametric equalizer, Aphex Compellor, Acoustilog Image Enhancer.  
**Microphones:** Neumann TLM170, Neumann U87, Neumann KM84, AKG The Tube, AKG 414/P48, AKG 224, AKG 222, AKG 202, AKG D-12, RCA 77DX, RCA 44, RCA BK-11, Sony C-37P, Sony 989, Sony ECM-56, Sennheiser 421, E-V RE20, Crown PZM, Beyer M-500, Countryman D-box.  
**Monitor Amplifiers:** Haller, Crown, Yamaha.  
**Monitor Speakers:** Tannoy, Spica TC-50, Yamaha, JBL.  
**Musical Instruments:** Baldwin grand piano, Fender Rhodes

piano, Yamaha pf15 digital piano, Yamaha DX7 digital synthesizer, drum set, tympani, xylophone, instrument amplifiers.  
**Video Equipment:** Studio is suitable for a video shoot.  
**Rates:** Call.

**[16] WINGS AS EAGLES**  
 also REMOTE RECORDING  
 151 Keeley Ave.  
 Warwick, RI 02886  
 (401) 738-6914  
 Owner: Bill Montella Jr.  
 Studio Manager: Bill Montella Jr.

**[16] WIZARD WORKS STUDIOS**  
 only REMOTE RECORDING  
 2124 Saranac St.  
 Adelphi, MD 20783  
 (301) 434-0537  
 (301) 937-8876  
 Owner: William (Scruffy) Harrison  
 Studio Manager: Michael (Hot) Glaser

**[16] WK STUDIO**  
 also REMOTE RECORDING  
 611 Broadway, Ste. 529  
 New York, NY 10012  
 (212) 473-1203  
 Owner: Phyllis Whitehouse, Konstantine Sareyan

## FAX YOUR TRACKS!

If your studio or business has a facsimile (FAX) machine, you can send your press releases for Current, Studio News, and Preview to Mix via our FAX line: (415) 843-9540.

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dB an additional roll-off up to 33KHz and a unique 100 dB dynamic range, the TC 2290 is very warm, transparent, crystal-clear, musical... with absolutely no noise. It has 18 bit resolution - better sound quality than a compact disc, and many new innovative effects.

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ducking, chorus and delay simultaneously, automatic panning 100 presets and MIDI feature making it possible to control the TC 2290 from a computer.

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# NORTHEAST STUDIOS

# 24+

# TRACK

**[24+] AAA RECORDING STUDIO**  
130 W. 42nd St., Room 552  
New York, NY 10036  
(212) 221-6626  
Owner: Warren Allen Smith  
Studio Manager: Jose Gallegos

**[24+] ACME RECORDING STUDIOS INC.**  
112 W. Boston Post Rd.  
Mamaroneck, NY 10543  
(914) 381-4141

Owner: Rory Young, Andrew Bloch, Peter Denenberg  
Studio Manager: Peter Denenberg  
Engineers: Rory Young, Peter Denenberg, Andrew Bloch, Jon Wolfson, Howard Cander.  
Dimensions: Room 1 studio 25 x 25, control room 12 x 18  
Room 2 studio 12 x 12, control room 12 x 20 Room 3: MIDI studio 12 x 12  
Mixing Consoles: Secret English consoles, 32 x 24, Syncon A 28 x 24 (all discrete)  
Audio Recorders: Otari MTR 90 II 24-track, Ampex 24 track, MCI 2 track 1/2", MCI 4-track 1/2", Ampex 440B 1/4", Ampex 440B 1/2", (2) Tascam 42 Dupe Masters, Sony PCM-701 digital mastering system.

**Cassette Recorders/Duplicators:** Nakamichi, TEAC, Hi tachi  
**Noise Reduction Equipment:** dbx 48 channels, Dolby SR and A for all 2 tracks.

**Synchronization Systems:** BTX Shadow  
**Echo, Reverb, & Delay Systems:** Lexicon 224 4.4, Lexicon PCM70, Lexicon PCM60, (2) REV7, Eventide Harmonizer, Lexicon PCM41, Lexicon Prime Time, various other delays

**Other Outboard Equipment:** dbx 900 rack w/three compressors, two gates and one de-esser, Valley People gates, UREI limiters and notch filters, Aphex Aural Exciters, Orban parametric EQ, White equalizers, Drawmer gates

**Microphones:** AKG "The Tube" system, Neumann U67 tube mic, (3) AKG 414, (2) AKG 451, (2) Neumann KM84, Neumann U87, (2) PZMs, (3) Shure SM57, (4) Sennheiser 421, AKG D 12, (2) Beyer MK II, (2) Calrec mics and others.  
**Monitor Amplifiers:** Yamaha, BGW, Crown  
**Monitor Speakers:** 604E bi-amped custom cabinets, Tannoy, Yamaha NS-10, Auratones

**Musical Instruments:** 1927 Steinway grand, vintage Gretsch drums, complete MIDI room w/Atari ST computer, Steinberg software, Commodore Amiga computer, DX7s, Oberheim Xpander, Emulator II, many guitars and amplifiers available Marshall, Fender, Boogie, Schecter

**Other MIDI Equipment:** Complete MIDI room listed above.  
**Video Equipment:** Sony monitors for sync, playback.

**Other Equipment:** Super sexy light dimmers  
**Rates:** \$100/hr Block rates available

**Extras & Direction:** Acme Studios overlooks the Long Island Sound and is 35 minutes from NYC Client list includes Warner Bros., Sire, Atlantic, Capitol, A&M, Chrysalis, SOS, Rhino, Sonographic, Ansta, Tommy Boy, Teldec, RCA, Chetnick, Enja, Passport, CBS. Many gold and platinum recordings for artists like Atlantic Starr, The Roches, Willie

Colin, Glenn Alexander w/Randy Brewer & Mino Celu, Roland Vazquez w/Anthony Jackson, Rob Mathes w/Will Lee & Joe Bonadio, Infradig, and the greatest food in the world is right up the street.

**[24+] ACTIVE SOUND RECORDING**  
314 "C" St.  
Boston, MA  
(617) 269-0104  
Owner: Larry Lessard  
Studio Manager: Brian Handler

**[24+] A.D.R. STUDIOS, INC.**  
**also REMOTE RECORDING**  
Skylight Run - Taxter Rd.  
Irvington, NY 10533  
(212) 486-0856  
Owner: A.D.R. Studios, Inc.  
Studio Manager: Stuart J. Allyn  
**Extras & Direction:** Very extensive microphone collection (over 200) Microphones available for rent. Our services include Album and jingle production, recording and mixing; audio sweetening and mixing for film and video, audio/video production assistance; and location recording. Our award winning engineers are fully versed in all phases of audio recording and production. They are available for preproduction meetings and all phases of a project including production recording (studio or location), and post-production mixing. We can provide comprehensive follow through of all audio components. Our credits include: Mel Lewis & The Jazz Orchestra *20 Years at the Village Vanguard* (1987 Grammy nominee), Hall & Oates, Aerosmith, Billy Joel, James Galway, Placido Domingo, Lionel Hampton, The DukesMen, Taylor Wines, *Time* magazine, Lee Jeans, Coke, AT&T Communications, Radio 1990 (USA TV), National Geographic specials, *Buddenbrooks* (PBS), Tony awards shows (ABC), *Camelot* (HBO), Major League Baseball (NBC), etc

**[24+] AIR CRAFT STUDIOS**  
Dormont Square  
Pittsburgh, PA 15216  
(412) 343-5222  
Owner: Lost In Music, Inc.  
Studio Manager: Jon T. Arnold  
Engineers: Barney Lee, Henry Yoder, Bruce Marshall  
Dimensions: Room 1 studio 19 x 30, control room 13 x 20, Room 2 studio 13 x 20, Room 3: isolation booth: 9 x 9.  
Mixing Consoles: Trident Series 80B 30 x 24 x 24  
Audio Recorders: Sony JH-24 24-track, Sony PCM-3202 2-track digital, Otari MTR-10 2-track, Otari 5050B 2-track, Tascam 25-2 2-track, (2) Sony PCM-501 2-track Beta processors.  
**Cassette Recorders/Duplicators:** Tascam 122B, (20) Nakamichi MR-2.  
**Echo, Reverb, & Delay Systems:** Lexicon 480L digital effects processor, Yamaha SPX90, (2) Yamaha REV7, Eco-

plate, ADA one second delay, ADA TFX-4, DeltaLab DL-4 digital delay.

**Other Outboard Equipment:** (2) Valley People Kepex, (2) Valley People Gain Brains, (2) Valley People Dyna-Mites, (2) UREI LA-4 compressor/limiter, Orban 622B Parametric EQ, Symetrix Parametric EQ, Symetrix stereo signal gate, Orban Sibilance controller, Aphex II Aural Exciter.

**Microphones:** AKG "The Tube", AKG 414, Neumann U89, (2) Neumann KM84, (2) Sennheiser MKH 40, Sennheiser 441, (6) Sennheiser 421, (2) Calrec, E-V RE20, Sony, asst. Shure and E-V.

**Monitor Amplifiers:** Soundcraft, (2) Crown, (2) SAE.  
**Monitor Speakers:** JBL 4430, (2) Yamaha NS 10M, Visonic Little David 6000

**Musical Instruments:** Yamaha DX7 synthesizer, Yamaha RX11 drum machine, Oberheim OB SX synthesizer, Baldwin 7 grand piano, BC Rich bass guitar, assorted guitars, amps, etc., Tama acoustic drum kit.

**Other MIDI Equipment:** Mac Plus computer, Southworth Jam Box 4 interface, Performer/Composer Mark of the Unicorn software.

**Rates:** \$75/hr Block rates available Prepayment discounts.

**[24+] AIR WAVE SOUND**  
**also REMOTE RECORDING**  
130 W. 42nd St., Ste. 904  
New York, NY 10036  
(212) 724-2152  
Owner: Rick Ulrik  
Studio Manager: Jon Hayward

**[24+] AIRWAVES AUDIO PRODUCTIONS**  
**also REMOTE RECORDING**  
342 Lincoln St.  
Manchester, NH 03103  
(603) 627-2774  
Owner: Joel Schwelling Gerry Putnam  
Studio Manager: Joel Schwelling

**[24+] ALL STAR SOUND STUDIOS**  
4 First Ave.  
Bloomfield, NJ 07003  
(201) 743-8497  
Owner: Sieve Becker, J. Vicari  
Studio Manager: Brian Bannon

**[24+] ALPHA INTERNATIONAL RECORDING STUDIOS, INC.**  
2001 W. Moyamensing Ave.  
Philadelphia, PA 19145  
(215) 271-7333  
Owner: Peter Pelullo  
Studio Manager: Patricia Brown

**[24+] ALPHA RECORDING**  
1197 Teaneck Rd.  
Teaneck, NJ 07666  
(201) 837-0363  
Owner: Gregg Hatten, Russ Kip Moore  
Studio Manager: Russ Kip Moore, Gregg Hatten

**[24+] AMBIENT**  
**also REMOTE RECORDING**  
9622 52nd Ave.  
College Park, MD 20740  
(301) 982-9288  
Owner: Ray Tiikens  
Studio Manager: Deb Tiikens

**[24+] ANDERSEN MOBILE AUDIO**  
**only REMOTE RECORDING**  
1 Artist Rd.  
Saugerties, NY 12477  
(914) 679-8848  
Owner: Chris Andersen  
Studio Manager: Annemarie Sullivan

**[24+] ARSENAL RECORDINGS**  
PO Box 1203  
Marblehead, MA 01945  
(617) 631-9179  
Owner: Gama Skupinsky  
Studio Manager: Gama Skupinsky

**[24+] A.R.T. RECORDING**  
**also REMOTE RECORDING**  
325 Captains Walk, Ste. 307  
New London, CT  
(203) 447-3438  
Owner: David John, Ken Atkins  
Studio Manager: David John



**ASL MOBILE AUDIO/VIDEO**  
Flushing, NY

[24+] **ASL MOBILE AUDIO/VIDEO**  
only **REMOTE RECORDING**  
PO Box 791  
Flushing, NY 11352  
(718) 886-6500  
Owner: Aura Sonic Ltd  
Studio Manager: Steven Remote



**ATLANTIC RECORDING STUDIO**  
New York, NY

[24+] **ATLANTIC RECORDING STUDIO**  
1841 Broadway  
New York, NY  
(212) 484-6093  
Owner: Atlantic Recording Co  
Studio Manager: Tony O'Brien, Pamela Johnston  
Dimensions: Studio A 35 x 48, control room 17 x 22  
Studio B 18 x 33, control room 13 x 22 Mix Room: 21 x 19,  
mix booth: 9 x 13 Post production 16 x 13  
Mixing Consoles: Neve 8078 +2 x 32 (custom), (2) Neve  
8108 48 x 32 (Necam 96 automation), (3) SSL 6000E 64 x 8  
stereo (Tact Recall).  
Audio Recorders: (3) Sony 3324 24 track digital, (5) Studer  
A800 24 track multi-tracks, (5) Sony PCM 16302 track digi-  
tal, Mitsubishi X80 4-track, (17) Studer A820 and A80  
2-track Studer A80 4-track  
Cassette Recorders/Duplicators: (30) Tascam 1.2 cas-  
settes.  
Noise Reduction Equipment: (43) Dolby 361, (4) MicMix  
Dynalect D2B  
Synchronization Systems: (6) Lynx Time Line, (3) Audio  
Kinetics  
Echo, Reverb, & Delay Systems: EMT 250, EMT 251,  
Sony DRE-2000, Sony DDV 1520 (5) EMT 140 stereo plates,  
(3) Eventide 1745 A, (2) Lexicon 224X, Lexicon Super Prime  
Time, Lexicon PCM42, (2) Lexicon PCM70, (4) Kortz SDD  
3000, (2) Marshall AF 300, Audio Digital TC-2, Audio Digital  
TC 3, Ursa Major SST 282, (5) AMS RMX16 and LMX15,  
Quantec QRS, (2) Yamaha REV7.  
Other Outboard Equipment: (2) Fairchild Instruments 670  
compressors, (6) SpectraSonics E0, (4) Magna-Tech comp.,  
(6) Teletronix LA2A comp., (16) UREI 1176LN comp., (8) dbx  
160 and 260X comp., (10) Neve comp., Trident comp., UREI  
1178, Publison 90, (2) Eventide 2016, (3) Eventide H949, (2)  
Publison DHM89, EXR exciter, (2) Eventide FL 201, Eventide  
PS101, MXR phaser/flanger, (3) Scamp racks, (2) Valley  
People Dyna-Mites, Dyna-My-Piano TSC 618, (4) Drawmer  
DS201 gates, (3) Valley People Kepex II racks, (26) Pultec

EQs, (7) Lang EQs, (4) Neve EQs, (17) Datatronix 550A EQs.  
Microphones: (15) AKG including: 414, 451, C33E, D12, (6)  
Beyer including: M88, M160, (12) B&K including: 4003,  
4004, (4) Crown PZM plates, (13) E-V including: RE15, RE16,  
RE20, RE55, (28) Neumann including: KM86, U87, U89,  
U47, U67, KM84, (6) RCA including: 44, SK46, 77, (17)  
Sennheiser including: 415, 421, 441, (2) Sanken C41, (13)  
Shure including: SM7, SM57, SM58, SM81, (8) Sony includ-  
ing: 37A, C48, ECM-50, (2) Telefunken 251.  
Monitor Amplifiers: (28) Bryton 4B and 3B amps, (2)  
Studer A68, (12) Crown amps including: D150A and  
DC300A.  
Monitor Speakers: (8) Yamaha NS 10M, (2) Dahlquist 20,  
(3) Visonik 7000, KEF 101, Tannoy SRM 12B, (4) UREI 813B,  
Hidley studio monitors  
Musical Instruments: Synclavier Poly sampling, (2) Linn  
9000 drum machine, (2) Marshall guitar amps, Polytone  
guitar amps, Music Man guitar amp, (2) Fender guitar amps,  
(2) Fender elec. pianos, Steinway grand piano, LaDiana  
grand piano, (2) Hammond B3/Leslie organs, Hohner clavi-  
net Yamaha DX7, Roland guitar amp.  
Video Equipment: (4) Sony monitors, (8) Sony BVU video  
recorders.  
Other Equipment: (2) complete Neumann cutting rooms.  
Extras & Direction: We specialize in CD production, featur-  
ing two complete CD mastering/editing rooms.

[24+] **AUDIO ANTICS**  
also **REMOTE RECORDING**  
2 Park Pl.  
Bronxville, NY 10708  
(914) 779-7000  
Owner: Susan Winthrop, Nancy Hersh

[24+] **THE AUDIO DEPARTMENT, INC.**  
110 W. 57th St.  
New York, NY 10019  
(212) 586-3503  
Owner: Joe Danis  
Studio Manager: Sue Danis

[24+] **AUDIO IMAGE**  
95 Little Tree Ln.  
Hilton, NY 14468  
(716) 392-9500  
Owner: Larry Ellis  
Studio Manager: Larry Ellis

[24+] **AUDIO INNOVATORS**  
also **REMOTE RECORDING**  
216 Blvd. of the Allies  
Pittsburgh, PA 15222  
(412) 471-6220  
Owner: Norman J. Cleary  
Studio Manager: Tim Benedict

[24+] **AUDIO WEST RECORDING**  
678 Campbell Ave.  
West Haven, CT 06516  
(203) 934-7186  
Owner: Joseph Mendyk  
Studio Manager: Dan Hamson

[24+] **AURA SONIC LTD.**  
also **REMOTE RECORDING**  
PO Box 791  
Flushing, NY 11352  
(718) 886-6500  
Owner: Aura Sonic Ltd.  
Studio Manager: Steven Remote

[24+] **AURID 318**  
also **REMOTE RECORDING**  
PO Box 679  
E. Sandwich (Cape Cod), MA 02537  
(617) 888-3496  
Owner: Daniel C. Frye  
Studio Manager: Daniel C. Frye

[24+] **AUTOMATED SOUND STUDIOS**  
also **REMOTE RECORDING**  
1500 Broadway  
New York, NY 10036  
(212) 869-8520  
Owner: Gordon Enterprises Ltd.  
Studio Manager: Arthur & Steve Friedman  
Engineers: Arthur Friedman, Steve Friedman, Gary Boyle,  
Mane Ostrosky  
Dimensions: Room 1: L-shaped studio 60 x 45 x 36, control  
room 20 x 20. Room 2: studio 30 x 25, control room 15 x 15,  
three 4-track narration rooms.  
Mixing Consoles: (2) Neve 8078 (custom) 40 x 32 w/ Necam,  
Neve 8058 (custom) 38 x 24, (3) Audiotronics 501 24 x  
24.

Audio Recorders: (2) Studer A800s 24-track, (2) Studer  
A80s 24-track, 3M Series 79 24-track, (5) Studer A80s  
4-track, (4) Studer A80s 2-track, (16) Studer A80s, B67s,  
A67s 2-track and mono.  
Cassette Recorders/Duplicators: Studer 8710, (2) Techni-  
sons.  
Noise Reduction Equipment: (2) Dolby SP Senes (PS2)  
24-track, Dolby M24 24-track, (2) Dolby 361s 2-track.  
Synchronization Systems: Adams-Smith, Studer TLS 4000,  
Echo, Reverb, & Delay Systems: (6) EMT 140 TS plates, (2)  
AMS RMX16 digital reverb, (2) Yamaha REV7, (3) Lexicon  
224s digital, Master Room, PCM70, PCM60, (2) Eventide  
DDLs.  
Other Outboard Equipment: (2) Scamp racks, (8) Draw-  
mer gates, (2) Eventide 949 Harmonizer, (4) Neve compres-  
sor/limiters, UREI LA2, LA3, LA4As limiters/compressors,  
(4) dbx 165 limiter/compressors, (2) TC2 Flanger/Delay, (4)  
Pultec EQs, Kepex 1, Gain Brains, Orban parametric EQs.  
Microphones: Neumann U87s, Neumann 47s, Neumann  
KM86s, Neumann KM85s, AKG 414s, AKG "The Tube",  
AKG 460s, PZMs, 100 assorted microphones.  
Monitor Amplifiers: (14) McIntosh 2100s, McIntosh 2300,  
(8) Crown headphone amps.  
Monitor Speakers: UREI 813s, Aitec 604E, Aitec 604-8G  
custom, JBL 4311s, Yamaha NS-10s, Kirksaeters, Fostex, Viso-  
niks, Auratones, KLH, etc.  
Musical Instruments: (2) Yamaha drums (full sets), (2) Ro-  
land Jazz Chorus amps, (5) Fender amps, (2) Dean Markley  
amps, (2) Steinway grand pianos, (2) Hammond B-3 organs  
w/ Leslie speakers, (2) Musser vibes.  
Video Equipment: JVC 3/4", Sony 3/4", Sony 25" monitors.  
Rates: Please call.

[24+] **AVENUE STUDIOS, INC.**  
123 4th Ave.  
New York, NY 10003  
(212) 477-2435  
Owner: L. Buksbaum  
Studio Manager: Larry Jay

[24+] **AZIMUTH RECORDING STUDIO**  
also **REMOTE RECORDING**  
PO Box 677, 11 Catawba Ave.  
Newfield, NJ 08344  
(609) 697-2605  
Owner: Jim Langley  
Studio Manager: Brenda Langley  
Engineers: Jim Langley, Mark Schultz, Rob Hallquist, Mike  
Holland, Carl Langley  
Dimensions: Room 1: studio 18 x 14, control room 13 x 16.  
Room 2: studio 9 x 12. Room 3: studio 6 x 8.  
Mixing Consoles: Soundcraft 1600 Producer's version 24  
x 24 x 2, w/automation.  
Audio Recorders: Soundcraft SCM 760 II 24-track 2",  
Otan 5050 Bil 1/2-track, Nakamichi DMP-100 2-track digital,  
Tascam 4-track cassette.  
Cassette Recorders/Duplicators: TEAC cassette.  
Noise Reduction Equipment: dbx 180.  
Synchronization Systems: SMPTE time code reader/gen-  
erator.  
Echo, Reverb, & Delay Systems: (2) Yamaha SPX90 digi-  
tal effects processor, Yamaha REV7 stereo reverb, Lexicon  
PCM70 multi-effects processor, DeltaLab Compu-electron,  
(2) DeltaLab 1024 delay, Yamaha R1000 digital reverb, Del-  
taLab 1050 delay.  
Other Outboard Equipment: (6) Valley People limiter/de-  
esser/gate/ducker, dbx 160X, (2) dbx 163X, LT Sound ster-  
eo parametric EQ, GLI graphic EQ, Boss assorted pedals  
Microphones: Neumann U87, (2) AKG 414, AKG 451,  
Sennheiser 451, Sennheiser 421, Sony ribbon, (3) Shure  
SM57, (4) ATM-810, (2) ATM-31, (4) Beyer 201.  
Monitor Amplifiers: Hafler, BKG, Rane.  
Monitor Speakers: JBL, Auratone.  
Musical Instruments: E-mu SP-12 digital drum sampler,  
Emulator II+ E-mu Emax, Oberheim DXA, Roland TR-707,  
Oberheim Matrix 6, Yamaha DX7, Juno 106, Casio CZ-101,  
Korg organ, Memorymoog, Kurzweil, Yamaha baby electric  
grand, Ovation guitar, Roland Octapads, Roland digital  
drums.  
Other MIDI Equipment: Complete Macintosh computer  
system used with the following software: Total Music (South-  
worth), Motu Performer and Composer, Editor Librarian for  
most synths, various percussion, etc., complete MIDI se-  
quencing and scoring system.  
Video Equipment: 3/4" video is available through our sister  
studio, C&C Productions in Glassboro.  
Other Equipment: What else would you want? We have  
increased our equipment list about 60% each year since we  
opened in 1985.  
Rates: So low it makes me cry!!

[24+] **BACKDOOR RECORDING STUDIO INC.**  
#1 2nd Ave.  
Huntington Station, NY 11746  
(516) 427-7006  
Owner: Robert Minetta, Chris Pati  
Studio Manager: Chns Pati  
—LISTING CONTINUED ON NEXT PAGE

—LISTING CONTINUED FROM PAGE 149

**Engineers:** Chris Pati, Robert Minetta, John Tabacco  
**Dimensions:** Room 1 studio 15 x 13, control room 13 x 8  
 Room 2 studio 10 x 8 Room 3 lounge 8 x 10 w/cable TV  
**Mixing Consoles:** Amek/TAC Scorpion 28 x 24  
**Audio Recorders:** MCI/Sony Autolocator III 24 track,  
 Otari MX5050 Mark III 8-track w/remote 2 track, Tascam  
 25-2 and 22 2 2-track, Akai GX 4000D 2 track Ampex  
 ATR 700 2-track mastering w/Dolby SR  
**Cassette Recorders/Duplicators:** Nakamichi 2X-7, Sony  
 TCK85, Otari DP 4050C2 duplicator  
**Noise Reduction Equipment:** (8) dbx 411 900 Series cards,  
 dbx 224 noise reduction, Phase Linear autolocator  
**Echo, Reverb, & Delay Systems:** Yamaha REV7 digital  
 reverb, Lexicon PCM60 digital reverb, MXR O1 digital  
 delay, (2) Ibanez SDR1000 stereo digital reverb, Yamaha  
 SPX90, Ecoplate III (2) DeltaLab 1024 ADA D640 delay,  
 DeltaLab DL 1 delay  
**Other Outboard Equipment:** (2) dbx 160 comp/lim, (2)  
 dbx 161 comp/lim Symetrix SE 400 stereo parametric EQ,  
 MXR 15 band stereo EQ, (2) Aphex Aural Exciters, MXR  
 Pitch Shift doubler, Omni Craft GT-4 noise gate, (8) Valley  
 People GateX (2) Kepex  
**Microphones:** (2) Neumann U87, (2) AKG C414 EB, (2)  
 Sennheiser K2 U condensers, (5) Sennheiser 421, Crown  
 PZM, (2) Shure SM81 condenser, E-V RE20, (4) Shure SM57,  
 (3) E V SRD D535, (2) Beyer Dynamic M260N, Beyer Dy-  
 namic label condenser  
**Monitor Amplifiers:** Crown Micro Tech 600, QSC power  
 amp, Rane stereo cue system  
**Monitor Speakers:** Calibration Standard MDM TA 3 JBL  
 4312 Yamaha NS 10M Auratone cubes, Toa cubes, E V  
 Sentry IV  
**Musical Instruments:** Young Chang grand piano, Yamaha  
 DX7, Casio CZ 5000 Juno 106, Oberheim dxba Korg DW  
 8000, Fender Rhodes electric piano, E mu Emax digital  
 sampler, Simmons SDS9 electronic drums, Tama Superstar  
 drum kit, LinnDrum machine, Oberheim DX drum machine,  
 (8) righty and lefty guitars available  
**Other MIDI Equipment:** Roland MSQ 700 digital key-  
 board recorder Macintosh 512K  
**Video Equipment:** Basic video recording available  
**Other Equipment:** Rockman X100 studio, Marshall 100  
 watt amp, Fender Twin Reverb w/stack amp Mesa/Boogie  
 amp, Gallien Krueger 250ML  
**Rates:** \$50/hr for 24 track, \$30/hr for 8 track No extra  
 charge for use of instruments



[24+] **BALANCE SOUND STUDIOS**  
 4917 Cordell Ave  
 Bethesda, MD 20814  
 (301) 951-3900  
 Owner: Robert & Richard Waxman  
 Studio Manager: John C Biehl

[24+] **THE BARGE SOUND STUDIO INC.**  
 92 Lionshead Dr. W  
 Wayne, NJ 07470  
 (201) 835-2538  
 Owner: Jim Barge  
 Studio Manager: Jim Barge  
**Engineers:** Jim Barge, Bill Hamilton, Steve Dorio  
**Dimensions:** Studio 17 x 27, control room 14 x 16  
**Mixing Consoles:** Harrison 4032C 40 x 32  
**Audio Recorders:** Studer A80VU MKIV 24 track, Studer  
 A80VU MKIV 16-track, Studer A80R 2-track 1/4" and 1/2",  
 Otari MX5050 2-track, TEAC 3340 4 track  
**Cassette Recorders/Duplicators:** Tascam 122B  
**Noise Reduction Equipment:** dbx 150 30 channel  
**Echo, Reverb, & Delay Systems:** Lexicon 224XL, Lexicon  
 PCM70, EMT 140 w/New York Tech electronics, Roland  
 SRV2000, DeltaLab DL2, Korg SDD3000, Roland SDE 1000,  
 H910 Harmonizer, Ibanez MD1000, MICMIX XL305



**THE BARGE SOUND STUDIO INC.**  
 Wayne, NJ

**Other Outboard Equipment:** (2) Eventide instant flangers,  
 Loft flanger, (5) Aphex CX1 compressor/expanders, (2)  
 Drawer gates, Aphex Compellor, (2) dbx 160 compres-  
 sors, Orban 622B parametric EQ, Orban 516EC de esser,  
 Klark DN3030 graphic EQ, EXR Exciter  
**Microphones:** (2) AKG C414EB, (2) Neumann U87, (5)  
 Shure SM57, E-V RE20, (2) Sennheiser MD421, AKG D12E,  
 Beyer M88, (2) Beyer M500, Neumann KM84, (2) AKG  
 C505E, RCA 77DX  
**Monitor Amplifiers:** Hatler P500, Crown DC300A, (2) Ya-  
 maha P2100 (cue systems)  
**Monitor Speakers:** (2) 604 based custom built system, (2)  
 Yamaha NS10, (2) E V Sentry 100A, (2) Realistic Minimus 7,  
 Auratones  
**Musical Instruments:** Yamaha DX7, Yamaha TX416 rack,  
 Ensoniq Mirage, Juno 106, Minimoog w/JL Cooper MIDI  
 interface, LinnDrum w/MIDI, Kawai KG 2 grand piano,  
 Hammond B3 w/Leslie, Ludwig 5 piece drum set, assorted  
 cymbals, misc percussion, Marshall 50 / 100-watt head  
 w/cabinet, Fender concert amp.

# Don't be without it!

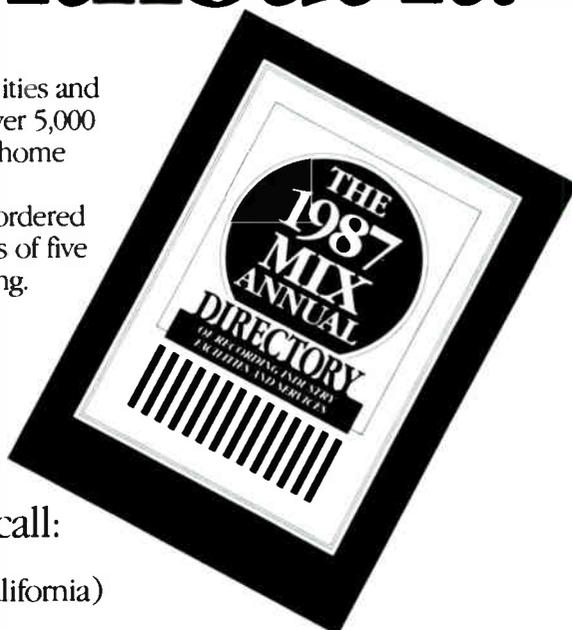
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Other MIDI Equipment: Yamaha QX21 sequencer, IL Cooper MIDI/CU converter.  
Rates: On Request.

[24+] BATTERY SOUND  
90 West St.  
New York, NY 10006  
(212) 227-3896  
Owner: Mark Freedman  
Studio Manager: Psquam Frates

[24+] BAYSIDE SOUND STUDIOS  
also REMOTE RECORDING  
PO Box 129  
Bayside, NY 11361  
(718) 225-4292  
Owner: Bayside Sound Recording Studios, Inc  
Studio Manager: David Eng



BEARSVILLE STUDIOS  
Bearsville, NY

[24+] BEARSVILLE STUDIOS  
PO Box 135  
Bearsville, NY 12409  
(914) 679-8900  
Owner: Sally Grossman  
Engineers: Thom Cadley, Ken McKim, George Cowan  
Dimensions: Room 1: studio 60 x 40, control room 20 x 19.  
Room 2: studio 30 x 25, control room 23 x 18.  
Mixing Consoles: Neve 8088 40 x 16 bus, SSL 6000 48 x 32 bus.  
Audio Recorders: (3) Studer A800 MKIII 24-track, Studer A820 2-track 1/2", Studer A810 2-track 1/4", Studer A80 VU 2-track 1/2", Studer A80 RC 2-track 1/4", Studer B67 2-track 1/4"  
Cassette Recorders/Duplicators: (3) TEAC 122B, (3) Technics M85.  
Noise Reduction Equipment: Dolby A 24-channel, (2) Dolby 361, dbx 206 24-channel.  
Synchronization Systems: Lynx system  
Echo, Reverb, & Delay Systems: Live Chamber, EMT 240, (2) EMT 140 ST, (2) AMS delay, (2) REV7, Lexicon 224 XL, Lexicon Prime Time, Lexicon Super Prime Time, (2) Lexicon PCM70, Yamaha SPX90.  
Other Outboard Equipment: (2) Eventide 949, Eventide 910, Klark-Teknik DN-34, DMP Cyclosonic Panner, Pultec EQP, Pultec MEQ, Valley People Maxi-Q, Kepex II, Gain Brain II, (4) Neve 32264 comp./lim.  
Microphones: Neumann, Sanken, Sennheiser, AKG, Shure, RCA, Sony, E-V, Crown PZM.  
Monitor Amplifiers: Perreux, Crown, Yamaha.  
Monitor Speakers: UREI 813A, UREI 813B, Tannoy SRM-12B, Tannoy NFM-8, E-V Sentry 100, Yamaha NS-10M, Visonik.  
Musical Instruments: Bosendorfer grand piano, Yamaha grand piano, Yamaha DX7 synth, Yamaha CP70 electric piano, Korg Jupiter 8, Hammond B3 w/Leslie, Musser vibes, Ludwig drums, Linn II, Fender amp, Roland amp, Marshall amp.  
Rates: By hour, day or week. Lock-outs and block booking, special rates.  
Extras & Direction: Spacious lodging, 100-acres-property w/outdoor activities, pool and a fully equipped rehearsal barn for pre- and post-production complete with a custom mixing console, equalizers, amps and speakers. Bearsville Studios provides world class recording and rehearsal facilities in a relaxed country setting, just two hours north of New York City.

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Circle #102 on Reader Service Card

**[24+] BERKLEE COLLEGE OF MUSIC**  
150 Mass Ave.  
Boston, MA 02115  
(617) 266-1400, ext. 401  
Owner: Don Pulusse  
Studio Manager: Joe Hostetter

**[24+] BIG APPLE STUDIOS, INC.**  
also **REMOTE RECORDING**  
353 W 48th St.  
New York, NY 10036  
(212) 974-1755

Owner: Bernard Fox, Larry Harlow  
Studio Manager: Larry Harlow  
Engineers: Bernard Fox, Larry Harlow, George Kazane, Samirya Velasquez, Frank D'Augusta, Jon Fausty  
Dimensions: Room 1 studio 40 x 35, control room 18 x 16, plus 8 x 8 vocal booth Room 2: control room 18 x 16, electronic room plus 8 x 8 vocal booth

Mixing Consoles: Neve 8048 custom 32 x 24, Neve 8038 custom 36 x 24

Audio Recorders: Studer A80 Mark IV 24 track, Studer A80 Mark III 24 track, Studer A810 2 track, Studer A67 2 track, Scully 280 4 track, (2) Scully 280 2 track, Revox 2 track

Echo, Reverb, & Delay Systems: Lexicon 224XL, Lexicon PCM41, Lexicon PCM42, AKG BX10, Furman Sound 7 Brick plate, Yamaha R1000 digital reverb, (2) Lexicon Prime Time, ART DR1 digital reverb.

Other Outboard Equipment: (4) Kepex gates, (4) Roger Mayer gates, Eventide Harmonizer, (4) dbx limiters, (2) LA2As LA3A (2) Orban Parametric EQs, (2) MXR graphic EQs, (2) UREI graphic EQs, (2) Blonder Tongue graphic EQs, DeltaLab Electron II, Roland MSQ digital keyboard recorder, MXR flanger/doubler, MPC electronic drums

Microphones: All Neumann, Sennheiser, AKG, Shure, RCA, E-V, PZM

Monitor Amplifiers: (4) Hafler 500s, (4) Phase Linear 400s, (4) Crown 300As

Monitor Speakers: (4) UREI 813A (4) JBL, (4) Yamaha, (4) Auratone

Musical Instruments: (3) Yamaha DX7s, Steinway B 8 grand, Hardman 8' grand, Hammond B3 w/Leslie, (2) Rogers drums, (2) clavinetts, Kustom 88 electric piano, Fender Rhodes, Oberheim OBXA, Oberheim OB 8, Minimoog w/MIDI Ensoniq Mirage sampler, ARP string synthesizer, Korg DW6000

Other MIDI Equipment: Roland MSQ 700, Yamaha QX1 w/SMPTE generator

Video Equipment: (2) Sony cameras w/tripods, (2) Hitachi HP40 cameras w/tripods, (2) NEC 26" monitors, Knox K128B character generator and Color Box, Panasonic effects generator, (2) Tektronix sync generators, Sony RM440 auto-dit control (2) Sony SR500 1/4" recorders, (2) Sony 15" monitors JVC CR6300 1/4" recorder, Sony 1/4" playback, Four Time base corrector ADC 10 channel special effects generator, special effects generator, ChromaKey, large selection of lights, full remote packages available



**BIG MO RECORDING**  
Wheaton, MD

**[24+] BIG MO RECORDING**  
only **REMOTE RECORDING**  
12255 Veirs Mill Rd.  
Wheaton, MD 20906  
(301) 946-7364

Owner: Ed Eastndge  
Studio Manager: Ed Eastndge  
Engineers: Jim Crenca, Ed Casey  
Dimensions: Remote truck 33 x 8, control 8 x 24  
Mixing Consoles: Custom built main 40 x 16 x 24, Soundcraft 24 x 4 sub mix.  
Audio Recorders: MCI JH-114 24-track, MCI JH-12/14 24-track, Revox PR99 2-track, Mitsubishi X-850 32-track dig-



ital, upon request.

Cassette Recorders/Duplicators: (2) Nakamichi BX-1, (2) Sony TCD5M.

Noise Reduction Equipment: 32-channels of Dolby A, dbx 180.

Echo, Reverb, & Delay Systems: Lexicon PCM70, Lexicon PCM60, Lexicon 200, Yamaha REV7, (3) Yamaha SPX90, Lexicon Prime Time.

Other Outboard Equipment: (4) Gain Brain II, (5) Kepex II, dbx F-900 w/compressor, gates, de-esser, and EQ, Audioarts 4200-A parametric EQ, UREI 530 graphic EQ, Klark-Teknik 3-160 EQ, (5) dbx 160 compressors, (2) dbx 160X compressors, dbx 166 compressor/gate.

Microphones: (4) Neumann U87, U89, (2) AKG 414, (6) AKG 451, (6) Sennheiser 421, (4) AKG 535, (2) E-V RE20, AKG D12E, (4) Crown PZM, (8) Shure SM57, (6) Shure SMS8, Sennheiser 431.

Monitor Amplifiers: Crown DC 300-A, Crown D 150 A, Crown D 75 A.

Monitor Speakers: (2) UREI 811B, (2) Yamaha NS-10M, (2) JBL.

Musical Instruments: LinnDrum, Korg DDD 1, Oberheim OB-8 w/sequencer, Moog Source.

Other Equipment: Jensen transformer splitter system 37-input, multi-channel intercom and headphone cue system, color camera and monitor.

Extras & Direction: We specialize in on-location recording. Credits for the past year include Linda Ronstadt, EmmyLou Harris, Ricky Skaggs, Tony Rice, The Seldom Scene, Carl Anderson, Glona Lonng, Danny Gatton, The Nighthawks, John Hammond Jr., Pinetop Perkins, the National Christian Choir, Jeff Jacobs and International Praise, and Donald Yates Choraleers. We also provide complete music production co-ordination, ie rentals, video, lighting, musicians, hotels, and limos. We will gladly provide references and a sample cassette upon request.



**BIOYA RECORDING STUDIOS**  
Paterson, NJ

**[24+] BIOYA RECORDING STUDIOS**

32 Hoxey St.  
Paterson, NJ 07501  
(201) 742-7704

Owner: Len & Lou Argese  
Studio Manager: Len & Lou Argese  
Engineers: Len Argese, Lou Argese, Ron St. Germain, Miguel Otero

Dimensions: Studio 24 x 26, control room 20 x 20, also two iso booths and drum booths

Mixing Consoles: Sound Workshop automated 34 50 x 24 w/74 returns to mix

Audio Recorders: (2) Otan MTR 90 24-track, Nakamichi DMP100 2 track digital processor, Otan MTR-12 2-track 1/2", Otan MTR-12 2-track 1/4", Otan MX5050 MKII 8-track, Otan

MX5050 MKII 4-track.  
Cassette Recorders/Duplicators: (2) Tascam 122B 2-track cassette.

Echo, Reverb, & Delay Systems: Stocktronics 4000 plate, Quantec, (2) ART 01A, Yamaha REV7, (3) Roland SDE 1000 DDLs.

Other Outboard Equipment: (2) Lynx Time Code modules, Roland Vocoder, Aphex Aural Exciter, Panscan, Drawmer DS201, Dyna-Mite signal processors, Yamaha compressor/limiter, dbx, Dolby Type A noise reduction, SPX90, Roland MC-500.

Microphones: Sennheiser 421, Sennheiser 441, AKG 414-C 501 ES, Neumann U89s, Neumann U47s, E-V RE20, E-V RE15, E-V RE16, Beyer, Philips.

Monitor Amplifiers: Hafler, BGW, Carver, SCS.  
Monitor Speakers: Impact Audio/Emilar, Yamaha NS-10s, Auratones, Big Reds.

Musical Instruments: Kurzweil, OB-8, DX7, DSX, Linn-Drum, Tama full drum set, Roland DDR-30 digital drums, Dynacord digital drums, Roland S-50, (2) TX7, CZ-101, Korg DDD-1.

Video Equipment: Available upon request.



**BLACKBEARD STUDIOS**  
Lincoln, RI

**[24+] BLACKBEARD STUDIOS**

1 Court Dr.  
Lincoln, RI 02865  
(401) 333-3377

Owner: Richard Carr Productions, Inc.

Studio Manager: Geoff Read

Engineers: Tony Autore, Geoff Read, Larry Minnis.

Dimensions: Studio 40 x 25, control room 25 x 14.

Mixing Consoles: Sound Workshop Series 34C 50 x 24 w/ARMS II automation and Diskmix disc based automation system.

Audio Recorders: (2) MCI JH-24s 24-track 2", MCI JH-110C 2-track 1/2", Otan MTR-10 2-track 1/4", Sony 601 w/VTR.

Cassette Recorders/Duplicators: (3) Nakamichi cassette, (2) Lynx time lines.

Echo, Reverb, & Delay Systems: Lexicon 480L w/LARC, Lexicon 224, (2) Lexicon PCM70, Lexicon PCM60, (2) Lexicon PCM42s, Lexicon Prime Time II, EMT stereo tube plate, Yamaha SPX90, Eventide H910, ART 01A.

Other Outboard Equipment: UREI LA-2A, UREI LA-4, UREI 1176LN, dbx 165A, dbx 2160X, Aphex Compellor/Exciter, (8) Drawmer DS201 gates, (4) Valley People Dyna-Mites, (3) Orban de-esser, (2) Ashley dual parametric EQs.

Microphones: Neumann, AKG, Sennheiser, Beyer, E-V, Crown, Shure

Monitor Amplifiers: Bryston, Crown, Ashly.

Monitor Speakers: UREI 813C, Yamaha NS-10M, Auratone 5C, JBL 4330.

Musical Instruments: Yamaha DX7, Kurzweil MIDI board, Yamaha grand piano, Rogers 5-piece drum kit, LinnDrum machine.

Other MIDI Equipment: Yamaha TX 816, Roland MKS 10, Roland MKS 20, Roland Octapads, E-mu SP-12 w/turbo, Macintosh Plus w/Performer, Sound Designer, DX/TX library and drum file library.

Other Equipment: IBM PC w/640K dual disk drive.

Rates: Lowest 48-track rates in US. Call for rates.

Extras & Direction: At Blackbeard we specialize in 48-track recording. While we do superb 24-track recording, we offer you the creative freedom and superior performance of 48-track at absolutely no additional cost. We also feature one of the most advanced MIDI suites in New England. A wide range of lodging is available at low prices.

**[24+] BLANK TAPES INC.**

37 W. 20th St.  
New York, NY 10011  
(212) 255-5313

Owner: Louis Vetter, Richie Vetter, Bob Blank  
**Studio Manager:** Jim Doherty  
**Engineers:** John Bradley, Joe Arlotta, Bob Blank, Mike Weisinger, Rich Faszczewski  
**Dimensions:** Room 1: studio 35 x 45 x 15, control room 20 x 26. Room 2: studio 8 x 10, control room 16 x 18. Room 3: 20 x 30 x 12, control room 18 x 22.

**Mixing Consoles:** MCI JH-652 52 x 24, MCI JH-542-C 42 x 32, MCI JH-636 36 x 24, SSL 6056E w/Total Recall.

**Audio Recorders:** Sony 3324 24-track digital, (3) MCI JH-24 24-track w/AL III, MCI JH-110B 4-track, Studer A80 2-track 1/2" and 1/4", (7) MCI JH-110 2-track, Mitsubishi 850 32-track.

**Cassette Recorders/Duplicators:** Nakamichi MR-1 2-track cassette.

**Echo, Reverb, & Delay Systems:** 224XL, PCM60, PCM70, PCM42, Audicon plates, AKG BX-10s, Lexicon 200s, MXR AcoustiComputer, Yamaha SPX90, AMS DMX 15-80S.

**Other Outboard Equipment:** dbx 160, dbx 165, Pultec, Orban 622B, Orban 516 EC, Valley People Dyna-Mites, Panscan, Drawmer gates, Kepex, Roger Meyer, Eventide Harmonizers and effects, UREI 1176, UREI LA2A, UREI LA3A, UREI graphics, Marshall AR300, Prime Time, Bel BD-80.

**Microphones:** Neumann U87s, Neumann U67s, Neumann U47, Neumann KM84, AKG tubes, AKG 414EBs, AKG 451s, AKG RE-20s, AKG SM57s, RCA 44 ribbons, RCA 77 ribbons, 441s, RCA 421s and others.

**Monitor Amplifiers:** UREI, Bryston, BGW, McIntosh.

**Monitor Speakers:** UREI, E-V, Yamaha, Auratone, JBL.

**Musical Instruments:** DX7, LinnDrum, Tama drums, Yamaha grand piano, Steinway baby grand, Emulator, Synclavier II, percussion.

**Video Equipment:** U-matic lock-up, 3/4" and SMPTE lock-up, digital, analog, video.

**[24+] BLUE JAY RECORDING STUDIO, INC.**

669 Bedford Rd.  
 Carlisle, MA 01741  
 (617) 369-2200  
 (617) 369-0766

Owner: Robert & Janet Lawson

Studio Manager: Bob Lawson

Engineers: Ed Goodreau, Rob Jaczko, Rob Feaster

Dimensions: Studio 38 x 28, control room 18 x 19

Mixing Consoles: Solid State Logic 4056/E 56 w/Total Recall 56 x 32

Audio Recorders: (2) Studer A800 24-track, Studer A820



**BLUE JAY RECORDING STUDIO, INC.**  
 Carlisle, MA

2-track 1/2" w/center time code, Studer A80 2-track 1/2", Studer B67 2-track 1/4", Sony JH-110B 2-track 1/4", dbx 700 digital recorder.

**Cassette Recorders/Duplicators:** (7) Tascam 122 cassette decks.

**Noise Reduction Equipment:** Dolby Type A 28-channel, dbx 180 stereo.

**Synchronization Systems:** Lynx TimeLine.

**Echo, Reverb, & Delay Systems:** Lexicon 224 XL, Lexicon 224, Lexicon PCM60, AMS RMX-16, EMT 140 stereo tube plate, AMS DMX 15-80, Lexicon Prime Time II, (2) Lexicon PCM42, Lexicon Prime Time, Ursa Major Space Station, many others.

**Other Outboard Equipment:** (4) Pultec EQP, (3) UREI LA2A, (2) Drawmer DS-20, stereo, (4) Ashly SC-34 stereo, (2) dbx 165A, (2) dbx 160X, (2) UREI 1176, UREI LA-4A stereo, (2) dbx 906 flanger, Loft delay and flanger, many others.

**Microphones:** Telefunken 251 tube, AKG C-12 tube, Neumann U47 tube, (2) Bruel & Kjaer 4006, Bruel & Kjaer 4007, (2) Neumann J87, (2) Neumann KM86, Neumann KM84, (2) Neumann 164, AKG C-451E, (3) AKG 414, many others.  
**Monitor Amplifiers:** (3) Bryston 4, (3) BGW 250, McIntosh 2100

**Monitor Speakers:** UREI 813B (customized), Klipsch Cornwall studio monitors, E-V Sentry 100, Acoustic Research 18, (3) Yamaha NS-10M, Auratone.

**Musical Instruments:** 1927 Steinway-B 7' grand piano, Kurzweil 250 (advanced sampling model), Oberheim DMX drum machine, Fender Stratocaster guitar, Gibson Hummingbird guitar, Ludwig 5-piece drum kit.

**Other MIDI Equipment:** Apple Mac Plus computer w/Mark of the Unicorn Performer Sequences software.

**Extras & Direction:** Located 30 minutes from downtown Boston, Blue Jay offers state-of-the-art equipment and superior acoustics in comfortable, private surroundings. Constructed in 1979, the uniquely designed, earth-sheltered facility reflects a commitment to technical excellence as well as attention to the needs of creative artists. Credits in 1986/87 include: Benjamin Orr, Amy Grant, Pat Metheny, Lyle Mays, 'n' Tuesday, and Genesis. We specialize in mixing but we have a great tracking room as well.

**[24+] BOLOGNESE RECORDING STUDIO**

989 Jerusalem Ave.  
 N Merrick, NY 11566  
 (516) 221-5555

Owner: Lou Bolognese

Studio Manager: Gary Boylan

**[24+] BROCCOLI RABE RECORDING STUDIOS**

15 Gloria Ln.  
 Fairfield, NJ 07006  
 (201) 575-7460

Owner: Brian Drago

Studio Manager: Mike Cleary

**[24+] THE BURLINGTON SOUND FACTORY**

also REMOTE RECORDING  
 415 Lawrence St.  
 Burlington City, NJ 08016

(609) 386-2531

Owner: Michael Capozzoli

Studio Manager: Michael Capozzoli

**[24+] CALF AUDIO**

157 Gray Rd.  
 Ithaca, NY 14850  
 (607) 272-8964

Owner: Alfred B. Grunwell

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## STRAMP

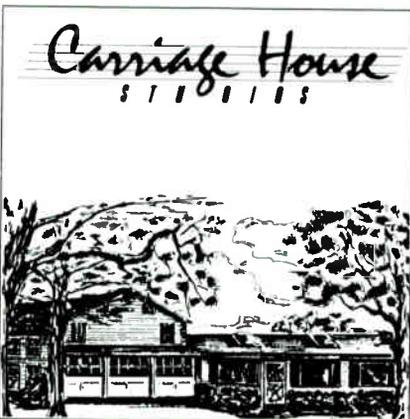
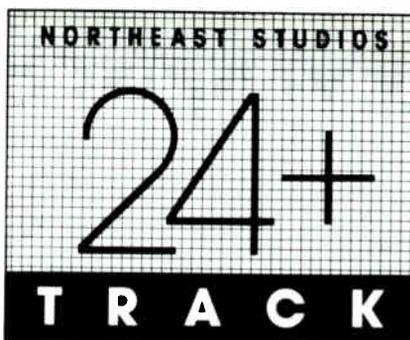


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CARRIAGE HOUSE STUDIOS  
Stamford, CT

#### [24+] CARRIAGE HOUSE STUDIOS

119 W. Hill Rd.  
Stamford, CT 06902  
(203) 358-0065  
Owner: John Montagnese  
Studio Manager: Patricia Spicer  
Engineers: Phil Magnotti, Johnny Montagnese, Matt Lane, Earl Cohen  
Dimensions: Room 1: studio 30 x 30, control room 25 x 25. Isolation booths 8 x 8 and 6 x 6. Live rooms 25 x 20 and 15 x 20.

Mixing Consoles: SSL 4056 Total Recall automation  
Audio Recorders: Otari MTR 90-II 24-track, Otari MTR 2-track 10 1/2", Otari MTR 2-track 10 1/4".  
Echo, Reverb, & Delay Systems: EMT stereo plate, 224X live chamber, Eventide Harmonizer 949, Eventide Harmonizer 910, REV7s, Ursa Major Space Station, Lexicon delays, DeltaLab delays, AMS delay, (6) Yamaha SPX90s  
Other Outboard Equipment: UREI LA-4s dbx 160s, Drawmer gates, comp, UREI 1176s, Dyna-Mites, Roland Dimension "D", Aphex II Aural Exciter, de-essers, UREI Super Prime Time digital metronome, and more.  
Microphones: U87s, 89s, 47, 414s, 452s, 421s, 57s, PZMs, D-12, RCA 77s, 44s, RE-20, Beyer ribbon, etc.

Monitor Amplifiers: UREI, BGW, Acoustat, Phase Linear.  
Monitor Speakers: JBL 4435 bi-amped w/crossover, Yamaha NS-10s.  
Musical Instruments: Kurzweil w/Mac computer, DX7, OBX, QX1, QX7, TX7, Linn, Yamaha, Simmons, Ludwig, Tadashi grand piano, marimba, vibes, tympani, etc.  
Video Equipment: 3/4" and 1/2" decks w/monitors.  
Rates: Project-oriented pricing.  
Extras & Direction: Living accommodations, open spaces, 45 minutes from mid-town New York City, good Italian cooking, trees to climb, fresh air, the best environment. Located on a private New England estate, this is the perfect artist's studio.

#### [24+] DON CASALE RECORDING STUDIOS, INC.

377 Plainfield St.  
Westbury, NY 11590  
(516) 333-7898  
Owner: Don Casale  
Studio Manager: Don Casale

#### [24+] CBS RECORDING OPERATIONS (COLUMBIA STUDIOS)

also REMOTE RECORDING  
49 E 52nd St.  
New York, NY 10022  
(212) 975-2958  
Studio Manager: Rob Grabowski

#### [24+] CELEBRATION RECORDING

2 W. 45th St.  
New York, NY 10036  
(212) 575-9095  
Owner: MZH & F Inc.  
Studio Manager: Chns Terjesen  
Engineers: Chris Terjesen, Maurice Puerto, various independents.  
Dimensions: Room 1: studio 33 x 28 plus drum room and isolation room, control room 18 x 24. Room 2: studio 14 x 16, control room 15 x 17.  
Mixing Consoles: Harrison 3232 32 x 32, Harrison 3624 36 x 24, Soundcraft 200 8 x 4.  
Audio Recorders: Studer A80 MKIII 24-track, Studer A80 MKIII 2-track 1/2", Studer A80 MKIII 4-track 1/2", Studer A80 MKIII 2-track 1/4", (2) Studer A810 full-track, 3M M79 24-track, (2) 3M M79 4-track, (2) 3M M79 2-track, (2) Otari MX5050 2-track, (2) Otari MX5050 full-track.

Echo, Reverb, & Delay Systems: Lexicon 224X, Lexicon Model 200, EMT 140, (2) AKG BX20, Lexicon Prime Time II, Lexicon PCM42, Ursa Major Star Gate 323, Eventide H910 Harmonizer.

Other Outboard Equipment: Pultec, Orban, Audionics, UREI EQ, (5) dbx compressors, (2) UREI Teletronix LA-3A limiters, (2) Universal Audio 1176 limiters, UREI Teletronix LA-2A limiter, (2) UREI digital metronomes, Dolby A-Type noise reduction available throughout.

Microphones: Neumann U87, Neumann U67, Neumann U47, Neumann KM84, Neumann KM64, AKG 414, AKG D224, AKG D190, Beyer M160, Beyer M360, E-V RE20, Sennheiser 421, Sennheiser 441, RCA 77DX, RCA 44BX, Sony 37, PZM.

Monitor Amplifiers: Haller, Crown, Phase Linear.  
Monitor Speakers: Westlake, Yamaha, E-V, Auratone.  
Musical Instruments: At no charge, Steinway grand piano, Baldwin grand piano, (2) Fender Rhodes, clavinet, tack piano, Yamaha drum kit, Ludwig drum kit, vibes, tympanis, congas, hand percussion, guitar and bass amps. All other equipment via rental.

Video Equipment: Q Lock 3.10.2 synchronizer, JVC 8250 video cassette. Synchronization to videotape for post-scoring and video mixing: \$50/hr. extra charge. Audio relay to video cassette.

Rates: Competitive and flexible. Please call for quote.

#### [24+] CELEBRATION SOUNDS

26 Summer St.  
Pawtucket, RI 02860  
(401) 728-0780  
Owner: David Correia, Dan Moretti  
Studio Manager: Cathenne Correia  
Engineers: David Correia, Steve Badessa, Dan Moretti, Ken Carpenter

Dimensions: Room 1: studio 25 x 21, control room 16 x 14. Room 2: studio 22 x 13. Room 3: studio 30 x 30.  
Mixing Consoles: Sound Workshop Series 34B w/Arms II automation, full 24-track hi-resolution metering, supergrouping and peak/shelf 28 x 24 EQ.

Audio Recorders: Otari MTR-90 24-track Series II w/autolocator, Otari MK 5050BII 1/2-track, Revox B-77 1/2-track.  
Cassette Recorders/Duplicators: Nakamichi 680 ZX.  
Echo, Reverb, & Delay Systems: Lexicon 200, Lexicon PCM70, Lexicon PCM41, Lexicon PCM42, Eventide 949 Harmonizer

Other Outboard Equipment: Valley People Dyna-Mite, (2) Ashly SC-33s, (2) Ashly SC-50s, Ashly SC-55, EXR Exciter.  
Microphones: The usual assortment.  
Monitor Amplifiers: Crown Micro-Tech 1000, Crown DC-300 A  
Monitor Speakers: UREI 809s, Yamaha NS-10Ms, Auratones

Musical Instruments: LinnDrum, Young Chang grand piano, Prophet 2000, Prophet 600, Apple Macintosh and all appropriate software. CBS Sound Effects Library  
Rates: Available upon request.

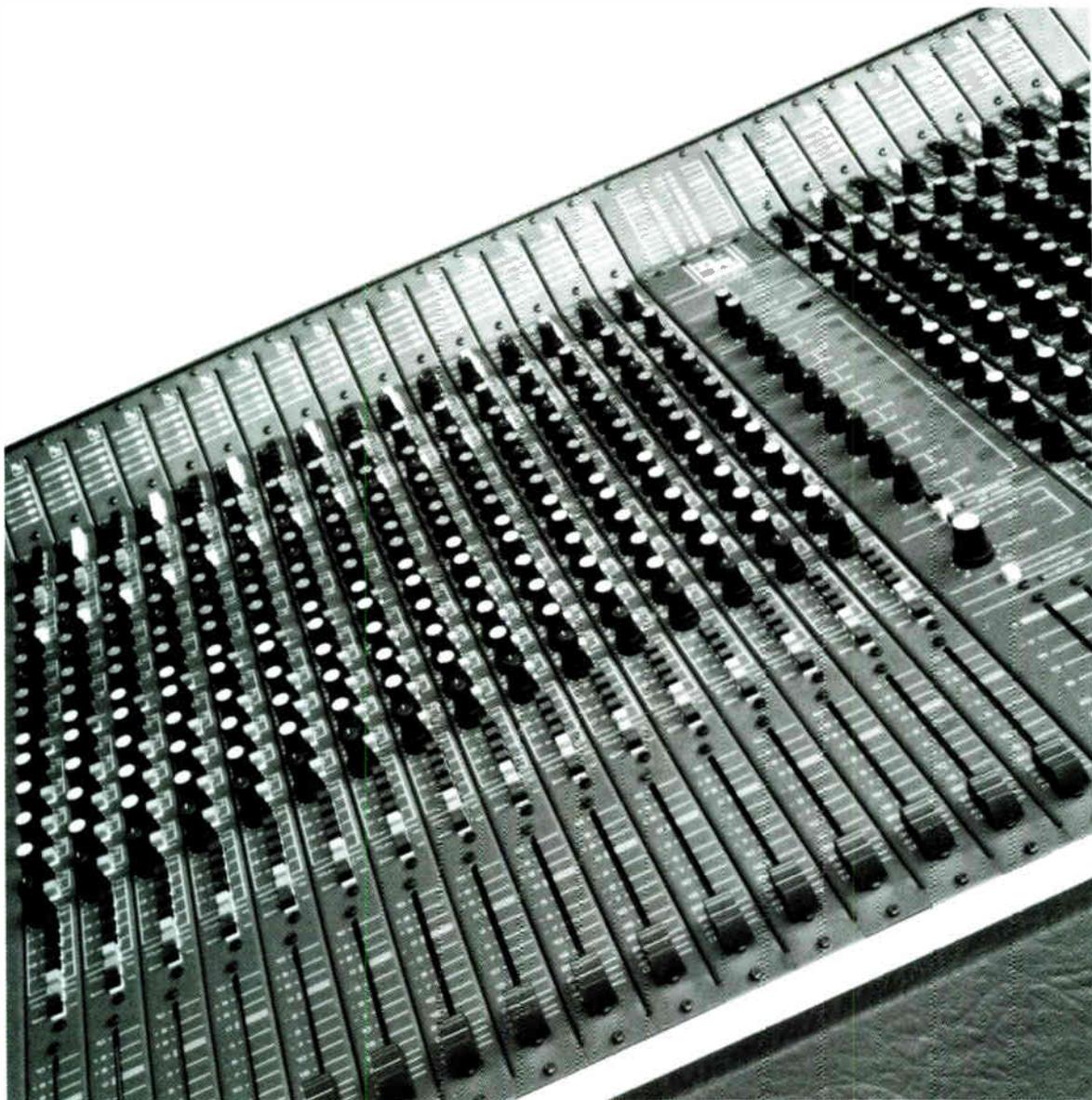
#### [24+] CELESTIAL SOUNDS

919 Second Ave.  
New York, NY 10017  
(212) 355-4825  
Owner: Toni & Celeste Pinelli  
Studio Manager: Pete Sobel  
Engineers: Kurt Upper, Ron Banks, Larry DeCarmine, Arthur Zarate

Dimensions: Studio 22 x 20, control room 21 x 17  
Mixing Consoles: MCI 636 36 x 44 automated.  
Audio Recorders: Studer A80 MKIII 24-track w/MKIV mods, Studer A80 2-track 1/2", (2) Studer B67 2-track 1/4".  
Cassette Recorders/Duplicators: (2) Nakamichi MR-1.  
Noise Reduction Equipment: dbx 216 30-channel.  
Echo, Reverb, & Delay Systems: EMT 250 digital reverb, EMT 140 stereo plate, Lexicon Prime Time, Eventide Harmonizer, Eventide Flanger.

Other Outboard Equipment: (2) Neve 4-band EQ/pre-amps, (6) Neve 3-band EQ/pre-amps, (3) Pultec EQP/A, (8) API 550/550A EQs, (4) Kexep II noise gates, (2) Teletronix LA-2A limiters (tube), (2) dbx 160 comp/limiter, dbx 165 comp/limiter, (2) UREI LA-4 comp/limiter (stereo), (2) Orban parametric EQ.

—LISTING CONTINUED ON PAGE 156



# D&R DAYNER SERIES CONSOLE

- **Totally modular I/O design, with new 30mm wide channel modules:** provide unlimited expandability with unparalleled compactness. Individual LED metering, 4 band EQ, and 8 aux busses are all standard.
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 4451 N. Log Cabin Dr., ste. 132, Smyrna GA 30080  
 Tel. 404-436-7605—Telex 271942 WJRDIST

—LISTING CONTINUED FROM PAGE 154

Microphones: Neumann U47 tube, Neumann VF14 tube, Neumann U67 tube, AKG C-24 stereo tube, (2) Neumann U87, Neumann U89, (3) AKG 414 EB, (2) Sennheiser 441, (6) Sennheiser 421, (2) E-V RE20, AKG D224E, (10) Shure SM57

Monitor Amplifiers: (2) BGW 750B, BGW 250, (3) SAE 2200

Monitor Speakers: (2) UREI 813, (4) Yamaha NS-10M, (2) ADS 300, (4) Auratones

Musical Instruments: Steinway baby grand, Dyno-My Rhodes, Yamaha DX7 (rental), Marshall 200 W amp w/h-watt 4 x 12 cabinet, Mesa/Boogie guitar amp, Sunn bass amp, Pearl drums, Hammond B-3/Leslie, assorted percussion, Fender Super Reverb

Rates: \$100/hr Block and discounted rates available

[24+] CENTRAL STUDIO  
9111 Georgia Ave.  
Silver Spring, MD 20910  
(301) 565-3734

Owner: Kevin Morales, Alan Leary  
Studio Manager: Monsy Morales

[24+] CLASSIC SOUND STUDIO  
also REMOTE RECORDING  
548 Broadway, Ste. 5-J  
New York, NY  
(212) 925-1839

Owner: Fred Hersch  
Studio Manager: Fred Hersch



CLINTON RECORDING STUDIOS, INC.  
New York, NY

[24+] CLINTON RECORDING STUDIOS, INC.  
653 Tenth Ave.  
New York, NY 10036  
(212) 246-2444

Owner: Bruce Merley, Ed Rak  
Studio Manager: Charles Mills  
Engineers: Ed Rak, Gene Curtis

Dimensions: Room 1 studio 2,000 x 22 (ceiling), control room 450 sq feet Room 2 studio 1200 x 15 (ceiling), control room 400 sq feet Room 3 studio 75 sq feet, control room 275 sq feet

Mixing Consoles: (3) Neve 8078 w/Necam II, 40 X 32

Audio Recorders: (2) Mitsubishi X850 32 track digital, Mitsubishi X80 2 track digital, (3) Studer A800 24-track, (2) Studer A80 2-track, (3) Studer A80 4-track, (7) Studer A810 2 track

Cassette Recorders/Duplicators: (5) Tascam 122B cassette decks, (2) Sony 701 ES digital processors

Noise Reduction Equipment: (3) Dolby SP24s, (4) Dolby 361s

Synchronization Systems: BTX Cypher reader/generator, BTX Softouch System (four machine lock up capability), BTX Shadow System (two machine lock up capability), Otan Time Code reader

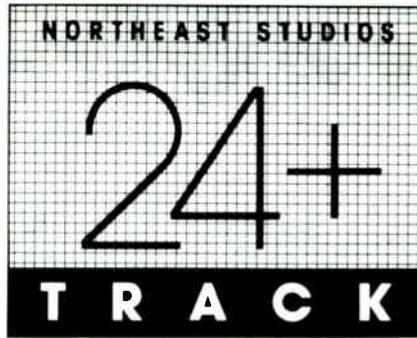
Echo, Reverb, & Delay Systems: (6) EMT 140s plates, (3) Lexicon 224XL w/larc, AMS DMX 1580, (2) AMS RMX, (6) Audio Digital TC2s, Lexicon Super Prime Time, (4) Yamaha REV7, (4) SPX90

Other Outboard Equipment: Neve limiters, UREI LA3As, UREI 1176s, dbx 160s, dbx 165As, Scamp racks, Audio Digital TC2s, Marshall AR300s, Marshall time modulator, Eventide 910, Eventide 949, Eventide 969, Harmonizers, Orban 622 EQs, Pultec EQP1As, Drawmer noise gates, UREI 964 metronomes, Dyna Mite noise gates

Microphones: Over 100 AKG, Crown, E-V, Neumann, Sony, Shure, Sennheiser, Schoeps

Monitor Amplifiers: Bryston 6B, Bryston 4B, McIntosh 2500, McIntosh 2300

Monitor Speakers: UREI 813B, Westlake BBSM10, Yamaha



NS-10M, Visonik 9000, Visonic 803, E-V Sentry 100, Auratone 5C

Musical Instruments: Steinway D9 grand, Yamaha C7 7 grand, Fender Rhodes Dyno-my-piano, Yamaha Tour Series drums, acoustic bass amps, Roland JC120 guitar amps, Marshall guitar amp, DX7

Video Equipment: (3) Sony Pro Feel 26 monitors, (3) JVC 6650 U-Matic VCRs w/remotes

Other Equipment: Magna-Tech 10,000 16/35mm film recorder, w/1, 3, 4- and 6-track, Leed head stacks.

Rates: Inquire

[24+] COAST STUDIOS  
also REMOTE RECORDING  
Ste. 32, Independence Mall  
Wilmington, DE 19803  
(302) 654-2713

Owner: Mitchell E Hill  
Studio Manager: Robert Bowersox

[24+] CONNECTICUT RECORDING STUDIOS, INC.  
1122 Main St.  
Bridgeport, CT 06604  
(203) 366-9168

Owner: Paul Leka  
Studio Manager: Grant Ames

[24+] COUNTERPOINT RECORDING STUDIOS, INC.  
723 7th Ave.  
New York, NY 10019  
(212) 398-9550

Owner: Jerry Ragovoy  
Studio Manager: Jerry Ragovoy

[24+] COURTLIN RECORDING  
149 MaQuan St.  
Hanson, MA 02341  
(617) 294-8316

Owner: Fred Danner  
Studio Manager: Patricia Danner

[24+] COVE CITY SOUND STUDIOS  
7 Pratt Blvd.  
Glen Cove, NY 11542  
(516) 759-9110

Owner: Clay Hutchinson, Richie Cannata

Studio Manager: BJ Burtis  
Engineers: Clay Hutchinson, Ric Wake, Glen Koloitkin

Dimensions: Room 1 studio 40 x 38, control room 15 x 20, Room 2 studio 15 x 20, control room 10 x 12

Mixing Consoles: Neve 8068 32 x 16, Soundcraft 400B 24 x 4

Audio Recorders: Studer A80 24-track, (2) Studer B67 2 track, Ampex 440C 2 track

Cassette Recorders/Duplicators: (2) Nakamichi MR-1, Studer A 710, Akai GX750

Echo, Reverb, & Delay Systems: AMS reverb, Lexicon PCM, Yamaha REV7, Eventide 969 Harmonizer, Eventide 949 Harmonizer, Eventide 1745M DDL

Other Outboard Equipment: (8) Kepex II, (2) Pultec PIA EQ (2) Orban stereo EQ, (4) UREI 1176 limiters, (2) dbx 160 compressors, (4) dbx 160X compressors, dbx 166, Alembic tube pre amp

Microphones: (4) Neumann U87, (2) Neumann 47 tube, (4) AKG 414 EB, (4) AKG 452, (2) AKG D12, (24) Shure SM57, (4) Sennheiser 421, (2) E-V RE20

Monitor Amplifiers: (2) McIntosh 2255, McIntosh 2155, (3) Crown DC 300 A

Monitor Speakers: (2) UREI 813 B, (2) Yamaha NS-10M, (2) Auratone, (2) Altec 604E.

Musical Instruments: (2) Yamaha DX7, TAMA drum set, LinnDrum, SP 12, Emulator II, Memorymoog, Roland Juno-60

Other MIDI Equipment: Oberheim Xpander, Yamaha QX1

Rates: Call for info

[24+] D&D RECORDING  
320 W. 37th St.  
New York, NY 10018  
(212) 736-7774

Owner: Douglas Grama, David Lotwin  
Studio Manager: Barry Grama

[24+] DAK AUDIO  
also REMOTE RECORDING  
315 Rickert Rd.  
Sellersville, PA 18960  
(215) 723-1167

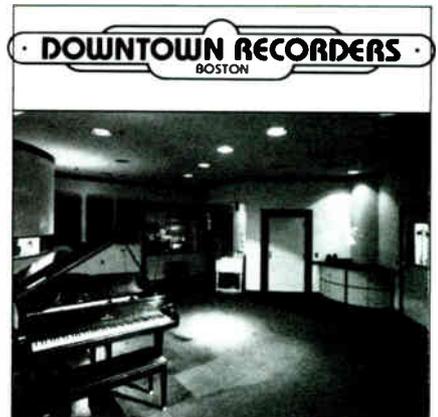
Owner: Daniel A. Kendra  
Studio Manager: William Gottshall

[24+] BOB DIGANGI RECORDING  
39 Hariland Ave.  
Emerson, NJ 07630  
(201) 262-6681

Owner: Bob DiGangi  
Studio Manager: Bob DiGangi

[24+] DIGITAL SOUND  
210 J Church St.  
Philadelphia, PA 19106  
(215) 922-1340

Owner: John Hodian



DOWNTOWN RECORDERS  
Boston, MA

[24+] DOWNTOWN RECORDERS  
537 Tremont St.  
Boston, MA 02116  
(617) 426-3455

Owner: Mitch Benoff  
Studio Manager: Anne Richmond  
Engineers: Joe Cuneo, Jeff Whitehead  
Dimensions: Studio 23 x 28 plus four iso booths

Mixing Consoles: MCI 636 28 x 24 fully automated  
Audio Recorders: MCI JH-24 24-track (16-track also available), MCI JH-110C 2 track, Olan M5050B 2 track, Revox A77H 2-track

Cassette Recorders/Duplicators: Akai 770, Akai 660  
Echo, Reverb, & Delay Systems: Lexicon 224X digital reverb w/LARC, Lexicon PCM70, Lexicon Prime Time, PCM42, Lexicon Super Prime Time, DL-4 digital delays, Yamaha SPX90

Other Outboard Equipment: Eventide Harmonizer, dbx 165s, LA4s, 1176s, UREI 175 tubes and Ashly SC50 comp compressors, Valley People noise gates, Roger Mayer noise gates, Ashly SC66A parametric EQs, Orban stereo EQ, CompEffectron, Emulator SP 12.

Microphones: Neumann U87s, Neumann KM88s, Neumann KM84, Sennheiser 441s, Sennheiser 421s, Shure SM81s, Shure SM57s, AKG D12, AKG 414s, AKG 451s, E V RE15, E V RE20s, E-V 664, Beyer 500s, Crown PZMs

Monitor Amplifiers: Ashly FET500s, Ashly FET200, Crown DC-300s, Crown DC-150, Dynaco.

Monitor Speakers: UREI 813s, Yamaha NS-10Ms, JBL 4311 s, Auratones

Musical Instruments: 1920 Steinway grand piano, Hammond B-3 organ w/Leslie speaker, LinnDrum, Yamaha DX7

Rates: Call for rates

[24+] DREAMLAND RECORDING STUDIOS  
PO Box 383  
Bearsville, NY 12409  
(914) 338-7151

Owner: Joel Bluestein  
Studio Manager: Joel Bluestein  
Engineers: Dave Cook, Harvey Sorgen, Jay Bender

**Dimensions:** Room 1: studio 25 x 20 x 12, control room 25 x 15 x 10, ambient room 40 x 50 x 35. Room 2: control room 20 x 15 x 9.

**Mixing Consoles:** API 3232 36 x 16 x 32 68 channels in remix. MCI 428 (highly modified) 20 x 20.

**Audio Recorders:** Studer A80 MK IV 24-track, MCI JH-24-16 16-track, Ampex ATR-102 2-track, Otari 5050 2-track, Sony 523 2-track digital processor.

**Cassette Recorders/Duplicators:** Hitachi D2200M, TEAC 122B, Telex high speed duplicator.

**Noise Reduction Equipment:** dbx 208 16-channel.

**Synchronization Systems:** BTX Shadow 4700 w/Cypher reader/generator.

**Echo, Reverb, & Delay Systems:** Lexicon 224, Lexicon PCM60, Ecoplate II, Roland DEP5, (2) Yamaha REV7s, (2) Korg SD 2000, DeltaLab Effectron II, DL2A.

**Other Outboard Equipment:** UREI 1178 limiter, UREI 1176 limiter, UREI LA-4 limiter, UREI 546 EQ, UREI 527 EQ, dbx 900 Series limiters, noise gates and EQs, Pultec EQP1A equalizer, Pultec EQH equalizer, White 4100 EQs, Eventide 949 Harmonizer, Eventide 201 flanger, EXR Exciter, DeltaLab DL5, (2) Valley People Dyna-Mite, Orban 422A.

**Microphones:** Neumann, Schoeps, AKG, Sennheiser, E-V, Crown, Shure, Countryman, Altec Lansing, Beyer, Radio Shack.

**Monitor Amplifiers:** McIntosh 2500, (2) McIntosh 2100, BGW 500, (6) Crown DL-300A, BGW 150, AB Systems 150, Yamaha 2200, Yamaha 2300.

**Monitor Speakers:** UREI 813B, CSI TA3, Yamaha NS-10, JBL 4433, Pioneer HPM-700, Auratone, Altec 604 w/Mastering Lab crossovers.

**Musical Instruments:** Young Chang 7' grand piano, Kurzweil MIDBoard, Yamaha DX7, Roland Super Jupiter, Prophet V w/MIDI 120 presets, Korg DW6000, Akai S900 sampler, acoustic and electric guitars, and basses from Martin, Fender, Gibson, Guild & Veillette-Citron, full studio drum and percussion setup, Oberheim DMX drum machine w/MIDI.

**Other MIDI Equipment:** J.L. Cooper MSB plus MIDI patch-bay, Commodore C64 w/Passport Master Tracks sequencing software.

**Extras & Direction:** Accommodations, full kitchen, production assistance with in-house musicians and video support available. Dreamland reflects the desire for new ideas within the media community. Wired for audio and video, our rooms have been intimately designed while retaining the ambience of a 100-year-old church. Our staff is experienced in all types of production and our space was inspired well before we redefined it with appropriate technology. Located five minutes from scenic Woodstock, we offer the discerning professional a creative alternative and the perspective to make it work.

[24+] D.S.M. PRODUCERS  
also REMOTE RECORDING

161 W. 54th St.  
New York, NY 10019  
(212) 245-0006

Owner: Suzan Bader  
Studio Manager: Suzan Bader

[24+] DYNAMIC RECORDING STUDIOS  
also REMOTE RECORDING

2846 Dewey Ave.  
Rochester, NY  
(716) 621-6270

Owner: Dave Kaspersin  
Studio Manager: Phyllis Bishop

[24+] EAST COAST SOUND LAB  
also REMOTE RECORDING

8317 Philadelphia Rd.  
Baltimore, MD 21237  
(301) 574-4223

Owner: Norman F. Noplock  
Studio Manager: Norman F. Noplock  
Engineers: Brent Mingle, Garry Shertinger, David Kalmbach, Norman Noplock

**Dimensions:** Studio 30 x 33, control room 12 x 15.  
**Mixing Consoles:** Harrison 3624 36 x 24 w/automation, TEAC Model 2A 6 x 4, Biamp 8802 8 x 4.

**Audio Recorders:** Stephens 821B 24-track, Ampex ATR-102 2-track, Otari MX-5050 2-track, TEAC 3340 4-track, Telex 6120 2-track duplicator (cassette).

**Echo, Reverb, & Delay Systems:** EMT stereo plate, Yamaha digital reverb, Lexicon Prime Time II, (2) Lexicon PCM42, Digital Echorec wheel echo, Fender tube reverb, Eventide 910 Harmonizer.

**Other Outboard Equipment:** UREI 1176 limiters, UREI LA4 limiter/compressor, dbx 118 dynamic range enhancer, Dolby A, Gatec noise gate/expander, Biamp 10-band graphic EQ, Telex 6120 stereo cassette duplicator.

**Microphones:** Neumann U84 tube type, Neumann U87, AKG 202D, Beyer M160, Shure SM58, Shure SM33, E-V, Sony, Altec, Sennheiser 421, Sennheiser 441.

**Monitor Amplifiers:** Crown DC 300A, Ashly FET-200.  
**Monitor Speakers:** JBL 4411, Toa RS-21M.

**Musical Instruments:** Yamaha 7' 4" acoustic grand piano,

Yamaha DX7, Moog synthesizers, Roland synthesizers, Oberheim DMX drum machine, Emulator SP-12 sampler and drum machine, Gretsch drum set, Kramer basses, Washburn basses, Roland 707 guitar synthesizer and controller.

Rates: \$65/hr. (block time available and negotiable).

[24+] EAST SIDE FILM & VIDEO CENTER

216 E. 45th St.  
New York, NY 10019  
(212) 867-0730

Studio Manager: Jane Blecher

[24+] EAST SIDE SOUND CO. INC.

98 Allen St.  
New York, NY 10002  
(212) 226-6365

Owner: Louie Holtzman

Studio Manager: Louie Holtzman

Engineers: Lou Holtzman, Nick Prout, Rich Clark

**Dimensions:** Studio 22 x 42, control room 22 x 25, MIDI room 10 x 12

**Mixing Consoles:** Sound Workshop Series 34 B 34 x 24.  
**Audio Recorders:** Studer A80 24-track, MCI JH-110 2-track, MCI JH-110 4-track, Revox PR 99 2-track, Sony Beta PCM-10 2-track.

**Cassette Recorders/Duplicators:** Nakamichi, Tascam 600.

**Noise Reduction Equipment:** dbx 4-channel, dbx 8-channel.

**Synchronization Systems:** Garfield Master Beat.

**Echo, Reverb, & Delay Systems:** Lexicon 224, Lexicon PCM70, Lexicon PCM60, Yamaha SPX90, Yamaha REV7, Yamaha D1500 delay, Lexicon PCM42 delay, Master-Room MKII

**Other Outboard Equipment:** Barcus-Berry 202E, (6) Drawer noise gates, (8) dbx 160 and 165 limiters, (4) Orban parametric EQs, Klark-Teknik DN-360 graphic EQ.

**Microphones:** Neumann 47, Neumann 87, Sennheiser 421, Sennheiser 441, Beyer, E-V 414, E-V 66, Shure, Crown P2M.

**Monitor Amplifiers:** Ashly, Yamaha, Crown.  
**Monitor Speakers:** UREI 813, E-V Sentry 100A, Yamaha NS-10M.

**Musical Instruments:** DX7, Linn 9000 w/Garfield 9000 card, Sequential 2002 sampler, DX 100, Casio CZ101, (2) Yamaha FB01, Sequential Prophet 600, Baldwin grand piano, Rogers drums, Mesa/Boogie amp, Marshall.

**Other MIDI Equipment:** Mac 20 Meg. computer.

Rates: Very competitive—please call.

[24+] EASTERN ARTISTS RECORDING STUDIO  
("EARS")

also REMOTE RECORDING  
36 Meadow St.  
East Orange, NJ 07017  
(201) 673-5680

(212) 874-1358  
Owner: William Galanty  
Studio Manager: Howard Kessler

[24+] EDGE TRACK  
also REMOTE RECORDING

235 E. 13th St.  
New York, NY 10003  
(212) 505-9281

(201) 391-2486  
Owner: Visual Music  
Studio Manager: Gene Perla

[24+] EFFANEL MUSIC  
also REMOTE RECORDING

66 Crosby St., 4B  
New York, NY 10012  
(212) 807-1100

Owner: Randy Ezratty  
Studio Manager: Mark Shane

[24+] ELECTRIC LADY STUDIOS

52 W. 85th St.  
New York, NY 10011  
(212) 677-4700

Owner: Alan Selby

Studio Manager: Carla Citarelli

Engineers: Jamie Chaleff, Bob Tis, Dennis Alichwer  
**Dimensions:** Room 1: studio 38 x 35 x 16, control room 23 x 13 x 9, Room 2: studio 19 x 20 x 9, control room 27 x 17 x 10, Room 3: studio 21 x 19 x 9, control room 21 x 16 x 8.

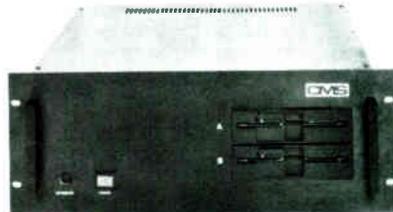
**Mixing Consoles:** Neve 8073 40 x 24, SSL 4000E 56 x 32, SSL 6000E 72 x 32.

**Audio Recorders:** Studer A800 MKIII 24-track, Sony 3324 24-track digital, Studer A80 2-track, Studer 810 2-track, Studer 820 2-track, Studer B-67 2-track, Sony 1610 2-track digital, Tascam 122-B cassette.

**Echo, Reverb, & Delay Systems:** EMT, Lexicon 224XL,

—LISTING CONTINUED ON NEXT PAGE

# MIDI MADE AFFORDABLE



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Roland compatible interface with 1 input and 4 outputs, tape in and out, and metronome out. The CMS-VSS is designed around a 8mhz turbo motherboard with 640K RAM. Software included is the Sequencer Mark 1 and MS/DOS 3.1. It will also run all IBM music software and 99.9% IBM business and application programs.

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**Technical service  
by N.Y. Tech-Support**

**Roxanne Schramm  
Studio Manager  
(212) 840-3285**

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—LISTING CONTINUED FROM PAGE 157

AMS reverb, Space Station, Sony DRE-2000, Yamaha REV7, Yamaha SPX90, AMS DDL, PCM42, Prime Time, and many more.

**Other Outboard Equipment:** EQ Pultec, Orban, Klark-Teknik, Neve. Compression: LA-2A, 160, 1176, ADR, Neve. Gates: Kepex, Drawmer, Dyna-Mites. Toys assorted flangers, phasers and mysterios.

**Microphones:** Neumann, AKG, PZM, Sennheiser, Electro-Voice, Beyer, Shure, Sony, many more.  
**Monitor Amplifiers:** Crown PSA-2, Crown PS-200, Yamaha P2200

**Monitor Speakers:** Westlake HRM-1, Westlake BBSM-12, Yamaha NS-10M, plus alternates.

**Musical Instruments:** Latest in drum machines and synthesizers, many keyboards and amplifiers.

**Video Equipment:** Complete tape lock and video playback systems.

Rates: Please call for rates.

[24+] **EMMAUS SOUND STUDIO**

also *REMOTE RECORDING*

533 Oak Terrace

Point Pleasant, NJ 08742

(201) 899-5586

Owner: Joe Saint, Jim Scott

Studio Manager: June Santucci

[24+] **THE ENTERTAINMENT GROUP, LTD**

also *REMOTE RECORDING*

348 Willis Ave.

Mineola, NY 11501

(516) 747-5100

Owner: Gregg Ralfa

Studio Manager: Scott Ralfa

[24+] **ERNY RECORDINGS**

also *REMOTE RECORDING*

1410 E. Carson St.

Pittsburgh, PA 15203

(412) 431-4848

Owner: David W Erny

Studio Manager: David W Erny

[24+] **EUPHORIA SOUND STUDIO**

also *REMOTE RECORDING*

90 Shirley Ave.

Revere, MA 02151

(617) 284-9707

Owner: Howard A. Cook

Studio Manager: Simon Ritt

Engineers: Gordon Hookalo, Dicky Spears, Amir Ben

Moshe, Joe Laquidara

Dimensions: Room 1: studio 32 x 24, control room 14 x 14.

Room 2: studio 16 x 20, Room 3: studio 18 x 22.

Mixing Consoles: Soundcraft 800 Series 36 x 16, Tascam

M-216 16 x 4.

Audio Recorders: Otan MTR-90 16-track 2" tape, Otan

MX5050 8 track 1/2" tape, (3) Otan MX5050s 2 track 1/4"

tape

**Cassette Recorders/Duplicators:** (4) Aiwa F 660 stereo cassette decks.

**Noise Reduction Equipment:** dbx 8-track noise reduction, (2) dbx 900 Series noise gates, Ashly stereo noise gates.

**Synchronization Systems:** Roland MPU-401 computer interphase, Garfield Masterbeat SMPTE synchronizer, clock converter, IBM PC sequencing software and Mimetics DX-Connect software.

**Echo, Reverb, & Delay Systems:** Lexicon Model 200 digital reverb, (2) Lexicon PCM70 digital processor and reverb, Master-Room XL-305 reverb, (2) Lexicon

PCM42 digital delay processors, Lexicon Prime Time digital delay, Yamaha Model E-1010 analog delay, Rockman Pro

rack

**Other Outboard Equipment:** (2) Valley People multi-function dynamic processors, dbx 20/20 computerized equalizer/analyzer, (3) dbx 900 Series parametric EQ, (2) dbx

900 Series compressor/limiters, dbx 900 Series de-esser, SAE Mark XVII, Delta Graph Model EQ-10 graphic equalizer, (2) Furman Sound parametric equalizers, dbx 161 compressor/limiter, Symetrx signal gate.

**Microphones:** (2) Neumann U89, (2) Crown PZMs, (4) Shure SM57s, (3) AKG 451s, AKG 414, (2) Sony ECM 56s, (2) Sony ECM 22Ps, Sony ECM 33P, (2) E-V RE20s.

**Monitor Amplifiers:** Crown Micro-Tech 1000-watt, Dunlap Clarke Dreadnaught 500-watt, Marantz 500-watt.

**Monitor Speakers:** (2) Altec Lansing Model 604s, Yamaha NS-10, Auratone super sound cubes.

**Musical Instruments:** Yamaha 63 grand piano, Oberheim xPander XPI mega synth, Yamaha DX7, Yamaha TX218 rack, (3) TXI modules, Roland JX-3P, Gibson SG, Gibson acoustic round back, E-mu Systems SP-12 drum computer w/turbo kit, Tascam Sync cassette.

**Other MIDI Equipment:** Akai S612 polyphonic sampling w/drive, Garfield Master Beat SMPTE/synchronizer, and clock converter, Mac computer running Performer software.

**Video Equipment:** JVC 320 camera, JVC 3/4" portable deck, tripod and lighting kit.

**Other Equipment:** Promo photography studio, Normon electronic flash setup, (3) umbrella system, Nikon 35mm F2 cameras, Roliflex SL66 2 1/2" and 4 x 5 Sinar formats.

Rates: \$28/hr. 8-track, \$38/hr. 16-track, \$53/hr. 31-track, \$25/hr. MIDI studio.

[24+] **EVERGREEN RECORDING INC.**

215 W. 91st St.

New York, NY 10024

(212) 362-7840

Owner: Joel Greenbaum

**Extras & Direction:** We are a full service, 24-track studio with an enormous, clean sound and a meticulously maintained facility. We are about to undergo a major expansion.

Our existing studio will be renovated and the control room greatly enlarged. We will be adding 3/4" video and SMPTE

lock-up as well as lots of other goodies. We are also opening up a second control room which will be a MIDI room with an

extensive array of synthesizers (analog, digital and sampling), computer and outboard gear. There will also be tie-lines between the two rooms. Both rooms should be up

and running by spring '87.

[24+] **EXCALIBUR SOUND LABS**

750 8th Ave.

New York, NY 10036

(212) 302-9010

Owner: Art Polhemus

Studio Manager: Annie Rose

[24+] **ROBERT FAIR FILM SCORING PRODUCTIONS**

also *REMOTE RECORDING*

268 Elizabeth St.

New York, NY 10012

(212) 966-2852

Owner: Robert Fair

Studio Manager: Curtis McKonly

[24+] **SAMMY FIELDS**

35 Wellwood Rd.

Demarest, NJ 07627

(201) PMR-8824

(201) 279-8291

Owner: Sammy Fields

Studio Manager: Robert Ferguson, Mike Crvello

[24+] **FISH BROOK MUSIC**

2 Lawrence Rd.

Boxford, MA 01921

(617) 887-9896

Owner: Ross Warner

Studio Manager: Ross Warner

Engineers: Ross Warner

Dimensions: Studio 30 x 12 x 16 high, control room 12 x 18

LEDE

**Mixing Consoles:** Sony/MCI JH-636-AF/VU 36 inputs,

tully automated.

**Audio Recorders:** Sony/MCI JH-24 24-track, Studer A810

2-track, Revox PR99 2-track, Tascam 25-2 2-track.

**Cassette Recorders/Duplicators:** (2) Tascam 122B cas-

sette.

**Echo, Reverb, & Delay Systems:** Lexicon 224XL w/LARC and PCM60 digital reverbs, Lexicon PCM42, Lexicon Prime

Time DDLs, MXR flanger/doubler, Yamaha SPX90.

**Other Outboard Equipment:** dbx 166 compressors, dbx 163 compressors, (2) Valley People Dyna-Mites stereo, Sym-

metrx 501 compressors, (2) Ashly SC-50 compressors, Eventide H969 Pro-pitch Harmonizer, Aphex Aural Exciter,

(4) Audioarts 4100 parametric EQs, Mutron Bi-phase, Peterson strobe tuner, Rockman Sustainer, Roland Octapad.

**Microphones:** Neumann U87, AKG 414, (2) AKG 460B, (3) Shure SM81, (5) Shure SM57, PESOSP, (3) Sennheiser MD421, E-V RE20, (2) E-V PL5, Beyer M260, (2) Crown

GP-30 PZM, (2) Audio-Technica ATM-31, Countryman and

Whirlwind direct boxes

**Musical Instruments:** Baldwin Howard 330C baby grand piano, Yamaha DX7 and Sequential Circuits Prophet 600 synths, Fender Rhodes, clavinet D6, Oberheim DX drum machines, E-mu Drumulator drum machines, Yamaha TX816, Akai S900 sampler.

**Other MIDI Equipment:** Macintosh Plus computer w/20 mb hard disk drive, Performer sequencer software, Sound Designer for Akai S900, Opcode MIDIMac patch librarian/editor for DX/TX synths.

Rates: Call for competitive rates.

**[24+] FLIP SIDE SOUND PRODUCTIONS**

3616B Falls Rd.  
Baltimore, MD 21211  
(301) 467-3547  
Owner: John S. Ball  
Studio Manager: Barbara A. Patterson

**[24+] FM RECORDING STUDIOS**

also **REMOTE RECORDING**  
Front St.  
Schenectady, NY  
(518) 452-1475  
(518) 355-9774  
Owner: Don Millard, Marty Fornal  
Studio Manager: Marty Fornal



**FORGE RECORDING STUDIOS**  
Malvern, PA

**[24+] FORGE RECORDING STUDIOS**

also **REMOTE RECORDING**  
119 Great Valley Pkwy.  
Malvern, PA 19355  
(215) 644-3266  
(800) 331-0405  
Owner: Inc.  
Studio Manager: Warren R. Wilson  
Engineers: Warren R. Wilson  
Dimensions: Studio 28 x 32, control room 18 x 22.  
Mixing Consoles: NEOTEK Elite 32 x 26  
Audio Recorders: Sony 3324 24 track digital, Sony 3202 2-track, Ampex ATR 100 2-track, Ampex ATR 100 4-track, (2) Ampex ATR-700 2 track, Scully 4-track, Stevens 8-track one inch.  
Cassette Recorders/Duplicators: MTI bin duplicator, (4) Tandberg 910s and 911s.  
Noise Reduction Equipment: Dolby A, B and SR, dbx Echo, Reverb, & Delay Systems: Klark Teknik DN 780, AKG BX-20, Eventide Time Squeeze and Harmonizer, Mar shall Time Modulator.  
Other Outboard Equipment: A/V pulse generator and reader, (4) Valley People noise gates, (2) Technics turntables, Soundcraft graphic EQ, UREI notch filter set.  
Microphones: (8) assorted Neumann, (2) AKG 414, (2) Sennheiser, (2) Synchron, (10) assorted Electro-Voice, (3) direct boxes, Crown PZM, Sony ECM 250.  
Monitor Amplifiers: (2) Crown  
Monitor Speakers: (2) JBL 4315 speakers, (2) Auratone, (2) Altec  
Musical Instruments: Rogers drum set, Baldwin concert grand piano, Baldwin micro computer orch., Emulator II, many percussion instruments, bells, Mark Tree, blocks, etc.  
Video Equipment: Video duplication only, (no production).  
Rates: \$95/hr. 24 track digital, \$45/hr. 2 track and editing.

**[24+] FOUR STAR STUDIOS**

412 W. Knowlton Rd.  
Media, PA 19063  
(215) 485-8604  
Owner: Bob Freed  
Studio Manager: Bob Freed

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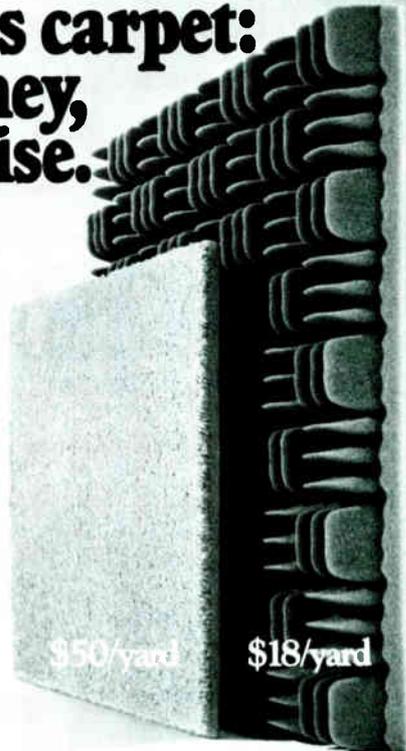
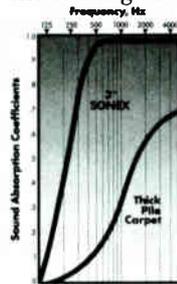
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or write for the SONEX brochure, complete with acoustic charts and all the facts.

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Acoustic Products for the Audio Industry

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[24+] **FRANKLIN-DOUGLAS INC.**  
52 Main St  
Port Washington, NY 11050  
(516) 883-2122  
Owner: Doug Wood  
Studio Manager: Sam White

[24+] **FREDONIA RECORDING STUDIOS**  
*also REMOTE RECORDING*  
Suny College at Fredonia  
School of Music, Mason Hall  
Fredonia, NY 14063  
(716) 673-3154  
(716) 673-3151  
Owner: State University of New York  
Studio Manager: Michael Klein

[24+] **FUNKY RECORDS RECORDING STUDIO**  
244 Lyell Ave.  
Rochester, NY 14608  
(716) 458-5610  
Owner: Boyd McCoy  
Studio Manager: David Dusman

[24+] **THE GALLERY**  
87 Church St.  
East Hartford, CT 06108  
(203) 528-9009  
Owner: Douglas W. Clark

[24+] **CHRIS GATELY AUDIO SERVICES**  
*only REMOTE RECORDING*  
PO Box 526  
Bryn Mawr, PA 19010  
(215) JBL-3605  
Owner: Christopher D. Gately  
Studio Manager: FD Katz

[24+] **GLAMOUR**  
25 Blossom Heath  
Williamsville, NY 14221  
(716) 633-6520  
Owner: Eric D. Wobschall  
Studio Manager: Eric Wobschall

[24+] **GOLDEN HORN RECORDING STUDIOS**  
97 W. 2nd St.  
Freeport, NY 11520  
(516) 623-1672  
Owner: Sami Uckan  
Studio Manager: Hope Uckan



**GRACE RECORDING STUDIO, INC.**  
Hamden, CT

[24+] **GRACE RECORDING STUDIO, INC.**  
159 Pelham Ave.  
Hamden, CT 06518  
(203) 288-9771  
Owner: Fred Rossomando, Lee Walkup  
Studio Manager: Fred Rossomando, Lee Walkup  
Engineers: Fred Rossomando, Lee Walkup  
Mixing Consoles: Audioarts 32 x 24.  
Audio Recorders: Otari MTR-90 II 24-track, Ampex 351 2 track (Inovonics elec.), Otari 5050B 2 track, Otari 2 track playback only, TEAC 3300S 2 track.  
Cassette Recorders/Duplicators: Nakamichi MR-1, Tascam 122B, Otari DP4050-C2.  
Noise Reduction Equipment: dbx 180 2-track, dbx 180A 2-track, dbx 208 8-track.



Echo, Reverb, & Delay Systems: Lexicon PCM70, Yamaha REV7  
Other Outboard Equipment: (2) UREI 1176 limiters, Studio Technology AN-2 stereo simulator.  
Microphones: Neumann U87, Shure SM81, E-V RE20, E-V RE15, Sony 33P, Sony ECM270, Sennheiser 421, AKG D1000E.  
Monitor Amplifiers: Crown DC300A, Yamaha P2150.  
Monitor Speakers: (4) JBL 4311.  
Musical Instruments: Kurzweil 250 A, B, C, D and 50 kHz sampling w/Sound Blocks, Yamaha DX7, Yamaha RX11, Steinway grand piano, Fender Rhodes.  
Other MIDI Equipment: Professional Composer software (Mark of the Unicorn), Performer software (Mark of the Unicorn), Total Music (Southworth Music Systems), Macintosh computer.  
Video Equipment: 3/4" and 1" available.  
Other Equipment: Sound Ideas SFX Library on compact disc, Emil Ascher Music Library.  
Rates: Call us.  
Extras & Direction: We've been creating music together for over 15 years. Highly motivated, highly creative, extremely competent. We built Grace Recording as our production facility where we write, arrange, record and deliver every format of musical and commercial production. You'll find a state-of-the-art Kurzweil 250. You'll find veteran composers with graduate degrees in music from Indiana University mixing at the 24-track console. Best of all, you'll find an intimate suite of rooms in which you can produce and create your tracks with no pressure except the intensity you bring to the session (Specialize in commercial music and production for radio, TV, motion pictures) Credits: Planet Earth PBS TV series, "Ma Rainey's Black Bottom"—Broadway play, Children's Television Workshop

[24+] **GRAMAVISION STUDIO**  
260 W. Broadway  
New York, NY 10013  
(212) 226-7057  
Owner: Jonathan F.P. Rose  
Studio Manager: Peter Min

[24+] **GRC STUDIOS**  
*also REMOTE RECORDING*  
1137 Fillmore St.  
Baltimore, MD 21218  
(301) 889-4228  
Owner: GRC Inc  
Studio Manager: Robert J. Friedman



**GREAT IMMEDIATELY RECORDING**  
New York, NY

[24+] **GREAT IMMEDIATELY RECORDING**  
New York, NY  
(212) 206-8561  
Owner: Bob Christanson  
Studio Manager: Bob Christanson  
Engineers: Bob Christanson  
Mixing Consoles: Harrison Raven 32 x 24.  
Audio Recorders: Ampex MM1200 24-track, Ampex ATR-102 2 track, Otari 5050B 2 track.  
Cassette Recorders/Duplicators: Nakamichi cassette Echo, Reverb, & Delay Systems: Lexicon 200, Lexicon 60 reverb, Yamaha REV7 reverb, Eventide 949 Harmonizer, Korg SDD 3000, Korg SDD2000 delay, Lexicon PCM41 delay.  
Other Outboard Equipment: dbx 166 and 160 compressors, UREI 1176 compressor, Orban de-esser, Rane parametric EQ, UREI metronome.  
Microphones: Neumann U87, AKG 414, Shure SM41, Shure SM81, Crown PZMs.  
Monitor Amplifiers: UREI and BGW.  
Monitor Speakers: E-V Sentry 100s, Yamaha NS-10Ms, Auratones.  
Musical Instruments: 1939 Steinway M grand, Roland Super Jupiter, Emulator II, Yamaha DX7, Yamaha DX5, Yamaha TX416, Minimoog, Korg CX-3, Linn 9000, Dr. Clock.  
Video Equipment: JVC 3/4" deck and Toshiba monitor.  
Rates: Available upon request.  
Extras & Direction: For in-house production only. Not available for rent to the public.



**GREENE STREET RECORDING**  
New York, NY

[24+] **GREENE STREET RECORDING**  
112 Green St.  
New York, NY 10012  
(212) 226-4278  
Owner: Steve Loeb  
Studio Manager: David Harrington

[24+] **GRENADIER**  
*also REMOTE RECORDING*  
10 Parkwood Ave.  
Rochester, NY  
(716) 442-6209  
Owner: Tom Greene  
Studio Manager: P. Greene

[24+] **GRENADIER AUDIO**  
*also REMOTE RECORDING*  
3 Lille Ln.  
Cheektowaga, NY  
(716) 668-1133  
Owner: T. Greene  
Studio Manager: T. Greene

[24+] **GROG KILL STUDIO**  
Grog Kill Rd.  
Woodstock-Willow, NY 12495  
(914) 688-5373  
Owner: Michael Mantler, Carla Bley  
Studio Manager: Michael Mantler  
Engineers: Tom Mark  
Dimensions: Room 1: studio 25 x 20, control room 14 x 22.  
Room 2: studio 10 x 12, control room 10 x 12  
Mixing Consoles: Harrison Raven 36 x 24  
Audio Recorders: Otari MTR90-II 24-track, Otari MTR12-II 2 track 1/2" and 1/4", MCI JH-120 2-track 1/2" and 1/4".  
Cassette Recorders/Duplicators: (2) Tascam 122B, Denon DR M22.  
Noise Reduction Equipment: Dolby SP 24 24-track, Dolby 361 4-track  
Echo, Reverb, & Delay Systems: Lexicon 224XL, AMS

RMX-16, EMT 240, Lexicon Prime Time II/95, AMS DMX-15-80S

**Other Outboard Equipment:** Neve 2254A stereo/compressor/limiter, (2) UREI 1176LN compressor/limiter, (3) dbx 160 compressor/limiter, (2) Drawmer DL231 compressor/limiter, (4) Drawmer DS20L noise gates, (3) Roger Mayer RM68 noise gates, Orban Parasound 621B stereo parametric EQ, ROR parametric, UREI 565T Little Dipper filter, (2) UREI 527A graphic EQ.

**Microphones:** (4) Neumann U87, (2) Neumann KM84, (2) Sanken CU41, (2) Bruel & Kjaer 4006S, (4) Schoeps CMC54U, (4) Beyers M160/M88, (8) AKG C414, AKG C451, AKG D12E, AKG D12E, AKG D224E, AKG Tube, (4) E-V RE15 and RE20s, (2) Sennheiser MD421, (2) Shure SM57, (2) Sony ECM-33P.

**Monitor Amplifiers:** (2) Yamaha PC2002M, Crown D-150, (2) Crown D-60.

**Monitor Speakers:** Control room: UREI 813B, Visonik David 7000, Tannoy NFM-8. Studio: JBL 4311.

**Musical Instruments:** Steinway B grand piano, Hammond B-3/Leslie, LinnDrum, Ludwig drums, Korg 61, Korg 800, Korg 6000, Korg 8000, Korg DSS-1, Korg BX-3, Korg DDD-1, Ampeg B15N amp, Fender Twin Reverb amp.

**Other Equipment:** Yamaha CDX1 CD player, Denon DP-51F turntable, Philips GA212 turntable, Beyer, AKG, Sennheiser, Fostex headphones, Countryman direct boxes, Sescorn direct boxes.

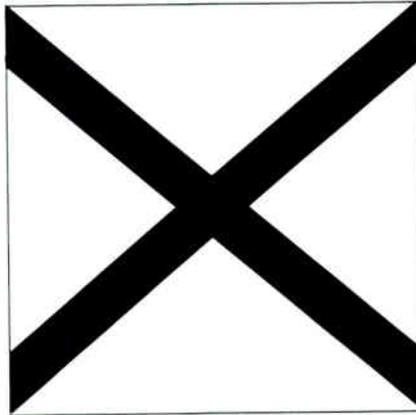
**Rates:** Per day only/on application

SDS9, and E-Drum electric drums.

**Other MIDI Equipment:** Commodore 64, Apple IIe, Synth Studio 1 MIDI software, J.L. Cooper MIDI switching box, Garfield Drum Doctor.

**Video Equipment:** Film and video synchronization services available upon request.

**Rates:** \$50/hr., includes all equipment and instruments listed.



**HIT AND RUN STUDIOS**  
Rockville, MD

**[24+] HC & F RECORDING STUDIO INC.**

6 Brooklyn Ave.  
Freeport, NY 11520  
(516) 867-0900

Owner: Philip Smart, Michael McDonald  
Studio Manager: Philip Smart



**HILLSIDE SOUND STUDIO**  
Englewood, NJ

**[24+] HILLSIDE SOUND STUDIO**

102 Hillside Ave.  
Englewood, NJ 07631  
(201) 568-3268

Owner: RPM Music Productions

Studio Manager: Dae Bennett, Dave Kowalski

Engineers: Dave Kowalski, Tracey Melvin, Dae Bennett  
Dimensions: Studio 35 x 20, control room 15 x 15.

Mixing Consoles: Trois Engineering & Design 305-A, 48 x 24.

Audio Recorders: Studer A80 MKIV 24-track, Studer A80 2-track, Studer A810 2-track.

Cassette Recorders/Duplicators: (4) Tascam 122 cassette recorders.

Echo, Reverb, & Delay Systems: Lexicon 224-XL, Lexicon Prime Time, (2) Lexicon PCM70, Lexicon PCM60, Lexicon PCM42.

**Other Outboard Equipment:** (8) Valley People Kepex II, (2) Valley People Gain Brain, Eventide H949 Harmonizer, Eventide FL-20L instant flanger, Aphex II stereo Aural Exciter, Aphex stereo Compellor, (2) UREI 1176 LN limiters, (2) Scholz Rockman Sustainors, Orban Model 536-A stereo de-esser.

**Microphones:** (4) Neumann U87, (4) E-V RE20, (2) Neumann KM84, Neumann U47 FET, (2) AKG 414, AKG D-12, (6) E-V RE16, (3) Shure SM58, (2) Shure SM57.

**Monitor Amplifiers:** (2) Crown DC-300A, Crown D 60.  
**Monitor Speakers:** UREI 813 B, Yamaha NS-10M, Auratone 5C.

**Musical Instruments:** Bosendorfer 7'4" piano, Yamaha DX7, Emulator II, Oberheim Matrix-6R, E-mu SP-12 turbo sampling drum machine, LinnDrum, Roland Octapad, Pitchbender 7000 MIDI guitar system, Slingerland fibes and Pearl International acoustic drum kits, full set of roto toms, set of Latin Percussion congas, Rickenbacker, Fender and Gibson electric guitars and basses, ARP 2600, Simmons

**[24+] HIT AND RUN STUDIOS**

18704 Muncaaster Rd.  
Rockville, MD 20855  
(301) 948-6715

Owner: Steve Carr

Studio Manager: Diane Castellanos

Engineers: Steve Carr

Dimensions: Studio 27 x 18, control room 17 x 13, drum room 14 x 13.

Mixing Consoles: Soundcraft 1600 24 x 8 x 24 producer. Audio Recorders: Soundcraft 760 Mark III 24-track, Soundcraft 760 Mark III 16-track, Otari MKIII 8-track, Technics 1500U 2-track, TEAC 3440 4-track, Otari MTR-12 2-track.

Cassette Recorders/Duplicators: (4) Technics cassettes. Echo, Reverb, & Delay Systems: DeltaLab DL-5 harmonizer, Lexicon PCM41, (2) Korg 3000 programmable digital delays, (2) Lexicon PCM60 digital reverbs, Orban III B stereo reverb, Yamaha REV7, Lexicon PCM70.

**Other Outboard Equipment:** (2) ATS vocal exciters, (2) UREI 1176LN comp/limiters, (2) dbx 163 comp/limiters, dbx 165 comp/limiters, (2) Ashly 66 dual parametric EQs, Orban dual parametric EQ, (2) Ashly 50 dual noise gates, dual 10-band graphic EQ, punching bag, EXR IV Exciter, (2) Brooke Siren comp., Drawmer gate, Orban 424 compressor, Aphex Compellor.

**Microphones:** Neumann U87, AKG 414, AKG 451, Crown PZM, Sennheiser 441, Shure SM57, AKG "tube"

**Monitor Amplifiers:** Hafler 250, Bryston 100.

**Monitor Speakers:** UREI 811 A, Yamaha NS-10, Auratone 5-C, home stereo speakers, Tannoy DTM 8".

**Musical Instruments:** Five-piece drum set, LinnDrum, Yamaha DX7 synth, Prophet 2000 w/Macintosh computer, Marshall 50-412 guitar amp.

**Rates:** Call

**[24+] THE HIT FACTORY, INC.**

237 W. 54th St.  
New York, NY 10019  
(212) 664-1000

Owner: Edw. Germano

Studio Manager: Troy Germano

**[24+] HOLLAND SOUND STUDIOS**

also **REMOTE RECORDING**  
1 Dunham Dr.  
Dunmore, PA 18512  
(717) 34-MUSIC

Owner: John C. Nasser

Studio Manager: John C. Nasser

**[24+] HOT HOUSE PRODUCTIONS**

also **REMOTE RECORDING**  
Rd. 1, Box 362A  
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(914) 691-6077

Owner: Hot House Productions Ltd.

Studio Manager: Richard Rose

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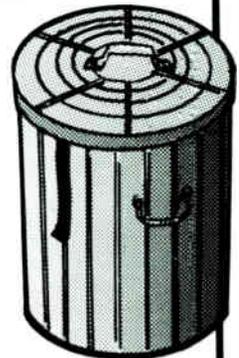
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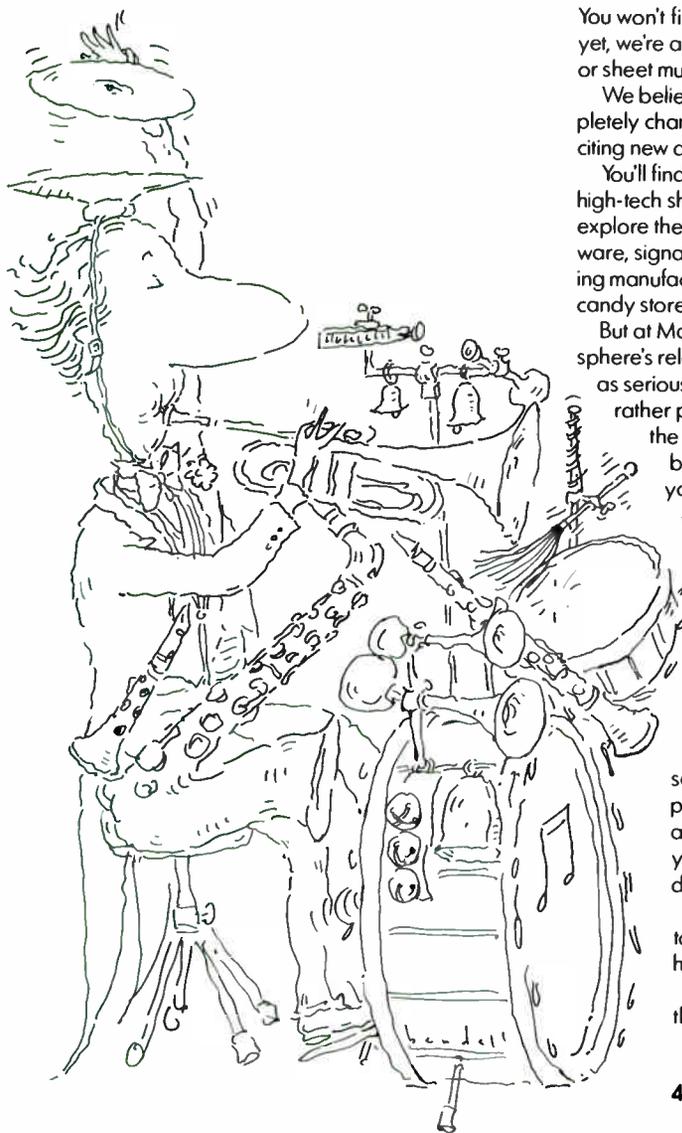
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We believe the very definition of a music store has completely changed today, thanks to microchips, MIDI and the exciting new directions of electronic instruments.

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Martin even sponsors a continuing series of in-house seminars in Synthesis, Sampling, Signal Processing and Recording to help you keep up with the latest developments.

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**NORTHEAST STUDIOS**

# 24+

**TRACK**

**[24+] HOUSE OF MUSIC, INC.**

1400 Pleasant Valley Way  
West Orange, NJ 07052  
(201) 736-3062  
(212) 964-7444

Owner: Charles E. Conrad  
Studio Manager: Irene Conrad  
Engineers: Jim Bonnetfond, John Rollo, Nelson Ayres, Daniel Gngsby

Dimensions: Room 1: studio 30 x 40, control room 18 x 22. Room 2 studio 18 x 23, control room 16 x 22. Room 3: control room 24 x 32.

Mixing Consoles: Neve Model 8078 40 x 32 w/Neacm. MCI Model 528 28 x 32 w/automation, Trident D-A n (Jan. 1988) 40 x 32.

Audio Recorders: (2) Studer A800 MKIII 24-track, (2) Studer A820 (Jan. '88) 24-track, (2) MCI JH-24-24 24-track, (4) Studer A80 VU 2-track, (2) Studer A820 2-track, Sony PCM-F1 2-track

Cassette Recorders/Duplicators: (4) Pioneer, (5) Technics, (4) Tascam.

Noise Reduction Equipment: Dolby 26-track, dbx 56-track, Dolby SR (Jan. '88) 52-track.

Synchronization Systems: Adams-Smith synchronizer, MCI JH 45 synchronizer.

Echo, Reverb, & Delay Systems: Live chamber, (3) EMT 140 plates, EMT 250 digital, (2) AKG BX20, (2) Yamaha REV7, (2) AMS DDL, (2) AMS reverb, Lexicon 224XL, (2) Lexicon PCM70, (2) Yamaha SPX90.

Other Outboard Equipment: (8) Eventide DDLs, (4) Eventide Harmonizers, (40) outboard equalizers, (2) Fairchild 670 stereo limiters, (24) UREI limiters, (40) outboard equalizers, (12) dbx limiters, (8) Pultec tube limiters, (4) UREI LA2 tube limiters, (20) noise gates.

Microphones: Over 140 microphones including many tube and stereo mics, Neumann, Schoeps, E-V, AKG, Sony, Shure, PZMs

Monitor Amplifiers: (4) Mac 2500, (16) Crown DC 300, (8) Crown D 150.

Monitor Speakers: (4) UREI 813Bs, (2) Westlake TM 1, (6) Yamaha NS-10, (8) Big Reds, Tannoy, NFM-8, ROR, Auratone, JBL 4401, JBL 4311, JBL 100s.

Musical Instruments: (2) Pearl drums, (2) Yamaha 7'4" grand pianos, Hammond B3 w/Leslie, (2) Fender Rhodes, (3) Tympani, all percussion, (2) Honer clavinetts, (12) assorted guitar amps, Steinway 9' grand piano, vibes.

Video Equipment: Synchronization to Sony 3/4" via Adams-Smith lock-up.

Other Equipment: (4) Apex Aural Exciters, UREI Little Dipper filter set, UREI cooper time cube, (2) Neve limiters, DeltaLab acoustic computer.

Rates: Upon request.

Extras & Direction: Comprehensive synthesizer consultation and production services available on arrangement with Larry Fast/Synergy. Available is a full range of digital, analog, sampling and MIDI-linked synthesis. Rental synthesizers range from Fairlight CMI, Emulator II, and LinnDrums, down to Casio CZ-101. Synchronous Technologies SMPTE to sequencer link-up. Full in-house production and arranging services available for all styles of music from an experienced staff who have impressive track records including productions for Kool and the Gang, Bonnie Tyler, Jimmy Cliff, Peter Gabriel, The Kinks, Southside Johnny and the Asbury Jukes, Little Steven, Meat Loaf and others. Scenic seven acre site 25 minutes from midtown Manhattan with our own 24 hour limousine service. Pool, jacuzzi, kitchen and residential facilities. House of Music provides a full range of client services for record production; audio for visual post-production for TV, music video, film, and commercial advertising work.

**[24+] "IF WALLS COULD TALK" STUDIOS**

Box 309  
Caldwell, NJ 07006  
(201) 226-1461

Owner: Glenn M. Taylor  
Studio Manager: Pauline Taylor  
Engineers: Glenn M. Taylor  
Dimensions: Studio 22 x 15, control room 20 x 15, MIDI

room 13 x 38, iso booth 8 x 3

Mixing Consoles: Harmson Raven 32 x 32.

Audio Recorders: 3M M-79 24-track, 3M M-79 16-track, 3M M-79 8-track, Sony PCM-501 ES 2-track digital processor, Otari MKIII 8-track, Otari MKIII 4-track, TEAC 3440 4-track, (2) Otari MX 5050B 2-track, Studer MKIV A-80VU 2-track 1/2", 1/4", Pioneer 1020L 1/4-track

Cassette Recorders/Duplicators: (8) Tascam 122 cassette.

Noise Reduction Equipment: Dolby A 28 channels, dbx, Echo, Reverb, & Delay Systems: Lexicon 224XL digital w/LARC and new version 8.20 software, Lexicon 224 digital, EMT 140 stereo plate w/custom NY Technical Support electronics, Master Room XL-305 spring reverb, DDLs, Lexicon Prime Time, Lexicon PCM41, Korg SD3000, DeltaLab ADM-2048, MXR DDL (4 cards), Echoplex tape unit, Yamaha REV7, Lexicon PCM70, Yamaha D1500 delay.

Other Outboard Equipment: Eventide H949 Harmonizer, A&D Panscan, Aphex Exciter, EXR Exciter, (5) Kepex, (2) Gain Brain, (2) Maxi-Q EQs, (2) MXR flangers, Omni Craft 8-channel noise gates, Symetrix N.R. limiters, (2) dbx 161, (2) dbx 165, (2) Trident, Ashly parametric EQ-stereo, biamp graphic EQ-stereo, White Room EQs, (3) Orban de-essers, (2) Valley People Dyna-Mites, Yamaha SPX90 FX unit, Drawmer gates (pair), Scholz Rockman overdrive module, Valley People GateX 4 channels, Axe D1-400 4-channel direct box, Orban stereo synth, EMAX sampler.

Microphones: (2) Neumann U87s, Neumann U89, Neumann U47, (2) AKG 414s, AKG D-12, (2) AKG 451-Es, (2) AKG C-60 tube, AKG "The Tube," (2) Shure SM81s, (2) Shure 58s, (6) Shure 57s, Shure 54, (6) Sennheiser 421s, Sennheiser 441, (2) Crown PZMs.

Monitor Amplifiers: Crown 600LX Micro-Tech, BGW 250 "D", Yamaha 2050, Pioneer int. amp., Yamaha 2075

Monitor Speakers: UREI 813s, JBL 4311s, Yamaha NS-10Ms, Auratones, Yamaha "walkman" phones, JBL 4408s

Musical Instruments: E-mu II, very large disc library, Prophet-5, Roland Super Jupiter, Minimoog, Oberheim X-Pander, Korg 800, Poly-6, ARP, Elka-strings, Roland Vocoder, Yamaha DX7, Yamaha TX Xpander, LinnDrum, all keyboards MIDI'd, Simmons, Rhodes, Hammond/Leslie, Wurliizer, Casio, Fender, Gibson, Martin guitars, Fender, Marshall and acoustic amps, full seven-piece Slingerland/Rogers/Zildjian drum kit, percussion, Yamaha DX5, Yamaha C7 grand piano, Emulator CD-ROM Universe of Sound library.

Other MIDI Equipment: Roland MC-500 64-track sequencer, I.L. Cooper 8 x 10 MIDI patch bay, MIDI modification to LinnDrum.

Video Equipment: Video post: JVC 3/4" deck, TimeLine

Lynx generator synchronizers, Panasonic monitor, Panasonic VHS services full custom music production for industrial or commercial broadcast, Panasonic monitor, NEC 26" monitor/receiver

Rates: Reasonable rates available on request. Call anytime!

**[24+] INDEPENDENT AUDIO SERVICES**

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235 W. 76th St.  
New York, NY 10023  
(212) 580-9825

Owner: S.E. Fitzstephens  
Studio Manager: Fitz

**[24+] INDIE MUSIC PRODUCTIONS**

PO Box 1065  
Fairlawn, NJ 07410  
(201) 794-1753  
(201) 546-5649

Owner: Scott Patterson, Phil Pfisterer  
Studio Manager: Scott Patterson, Phil Pfisterer

**[24+] I.N.S. RECORDING, INC.**

19 Murray St.  
New York, NY 10007  
(212) 608-1499

Owner: Ian & Debbie North  
Studio Manager: Terry Selders  
Engineers: Steve Linsley, Steve Gnflin, Jeff Neiblum, Dan Sheehan

Dimensions: Studio 12 x 13, control room 12 x 17.

Mixing Consoles: MCI 636 36 x 24 w/automation.  
Audio Recorders: Otari MTR-90 24-track, Otari MTR-12 2-track 1/2", (2) MCI 110C 2-track 1/2", Tascam 32-2-track 1/4".

Cassette Recorders/Duplicators: (4) Nakamichi MR2.  
Echo, Reverb, & Delay Systems: Lexicon 224XL, Lexicon 200, Yamaha REV7, AMS DMX 15-80s, Lexicon PCM41, Lexicon PCM42, DeltaLab CompuEffectron, (2) DeltaLab 1024 Effectron II, Korg SDD 2000, Roland SDE 1000.

Other Outboard Equipment: API 5502 dual four-band parametric EQ, (2) UREI dual graphic EQ, (2) Valley People MaxiQ parametric EQ, (2) dbx 165A compressor/limiters, (2) dbx 160X compressor/limiters, Valley People Gain Brain comp./lim., (4) Kepex noise gates, Drawmer dual noise

—LISTING CONTINUED ON NEXT PAGE

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Landisville, PA 17538  
(717) 898-6092  
Owner: John FS Rees, Jr  
Studio Manager: Bradley J Flick

[24+] **LEMANS SOUND**  
331 Triangle Rd  
Somerville, NJ 08876  
(201) 359-5520  
Owner: Bernie Goydish  
Studio Manager: Sam DeSalvo



**LION AND FOX RECORDING, INC.**  
Washington, DC

[24+] **LION AND FOX RECORDING, INC.**  
also **REMOTE RECORDING**  
1905 Fairview Ave. NE  
Washington, DC 20002  
(202) 832-7883

Owner: Hal Lion, Jim Fox  
Studio Manager: Rick Starkweather  
Engineers: Jim Fox, Rob Buhman, Leigh Stevens, Janie Mereness, Alex McCullough, Bentley Westfield  
Dimensions: Room 1 studio 35 x 20, high sloping ceiling, isolation booth and drum section. Room 2 studio 20 x 8 Room 3 studio 8 x 10 narration booth Room 4 studio 10 x 12

Mixing Consoles: 32 channel automated mixing.  
Audio Recorders: MCI, Studer, Ampex, Nagra, Otari  
Echo, Reverb, & Delay Systems: Lexicon 224XL, Lexicon 200, Lexicon Prime Time, (3) Effectrons, Echotron, Super Time Line, Marshall Time Modulator, RCI reverb, Clover reverb, EMT plate

Other Outboard Equipment: dbx noise reduction, (6) dbx 160 compressors, stereo LT sound compressor and noise gate, (2) Valley People Dyna-Mites, (2) Gain Brains, (4) Kepex, MXR pitch transposer, Lexicon Vanspeech, MXR phasers and flangers, Orban dynamic silabance controllers, UREI parametric EQs, Burwen dynamic noise filters, real time analyzer phase monitoring.

Microphones: Neumann, Sennheiser, AKG, E-V, Shure, Sony

Monitor Amplifiers: BGW 500, BGW 250, OPAMPLABS  
Monitor Speakers: UREI 813B Time Aligned speakers, JBL 4313, Auratones

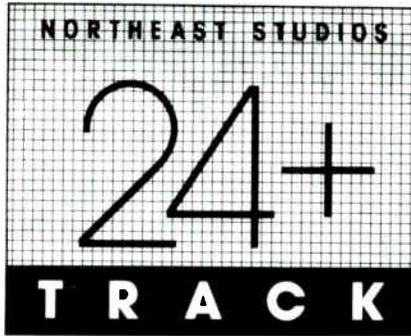
Musical Instruments: LinnDrum, Ludwig drum set, Pearl drum set, Zildjian cymbals, Minimoog, Hammond B 3 w/ Leslies, Wuritzer electric piano, Wuritzer acoustic piano. Available for rent. Emulator II, Synergy, Jupiter 6, Prophet 5, Korg DW 6000

Video Equipment: BTX Softouch for video interlock w/ 24 track, MCI ¼" JVC video recorder and Studer AB10 2-track master recorder, Panasonic video monitor Motion picture sound (5) Magnasync 16mm dubbers, Magnasync interlock, Bell & Howell projector

Rates: \$80/hr. for 24-track time.

Extras & Direction: Services: Complete 24 track production of music and drama, 24-track automated video sweetening, jingle and production narration recording, original scoring for film and video SMPTE and Pilotone synchronization formats, audio visual production for all programming formats, use of sound effects library and four major music libraries, location recording for music, broadcast film, video and seminars. Voice casting, booking, and payment arrangements. Direction: Move forward

[24+] **LIVING ROOM**  
also **REMOTE RECORDING**  
59 Franklin  
New York, NY 10013  
(212) 226-8161



Owner: Dryden, Christensen, Munkacsi  
Studio Manager: V Stevens



**IAN LONDON STUDIO**  
East Islip, NY

[24+] **IAN LONDON STUDIO**  
229 Sherry St  
East Islip, NY 11730  
(516) 277-6273

Owner: Ken Wallace  
Studio Manager: Mike Hogan  
Engineers: Ken Wallace, Mike Hogan, freelance engineers  
Dimensions: Studio 22 x 18, control room 16 x 18

Mixing Consoles: Amek Angela 39 x 39 automated  
Audio Recorders: Studer A820 24-track w/ Dolby SR, Otari 2 track ¼", MCI 2 track ½"

Noise Reduction Equipment: Dolby SR  
Synchronization Systems: Roland SBX 80  
Echo, Reverb, & Delay Systems: Quantec room simulator, Lexicon 200, Lexicon PCM70, Yamaha REV7, (2) Yamaha D1500s, (2) Lexicon Prime Times, MXR digital delay, Eventide 2016

Other Outboard Equipment: (24) USA Audio Gate: x gates, (4) dbx 160 compressors, dbx 162 stereo compressor, Eventide Harmonizer, UREI 1176 limiter

Microphones: Neumann, Sennheiser, AKG, E-V, Shure, Sony Bey-er

Monitor Amplifiers: Crown  
Monitor Speakers: UREI 839, Auratones, Little Davids

Musical Instruments: Linn 9000, Emulator II, Matrix 12, DX7, TX 816, Prophet 5, Roland MKS 20, LinnDrum

Other MIDI Equipment: Macintosh computer w/ 20meg hard disk

Video Equipment: Panasonic 6300, Sony 20" monitor

Rates: Available upon request

[24+] **LONG VIEW FARM**  
also **REMOTE RECORDING**  
Stoddard Rd.  
North Brookfield, MA 01535  
(617) 867-7662  
(800) 225-9055

Owner: Gil Markli  
Studio Manager: Andreu Marchand  
Engineers: Jesse Henderson, Bill Ryan, Geoff Myers, Kerry Roch

Dimensions: Room 1 studio 25 x 30 x 16, control room 16 x 27 x 9 Room 2 studio 26 x 32 x 23, control room 14 x 21 x 12, Soundstage 38 x 28 x 18, video suite 12 x 12 x 8

Mixing Consoles: Sound Workshop Series 34 32 x 24 x 32 w/ ARMS, MCI 528 28 x 28.

Audio Recorders: Otari Twin MTR-90 24 track, MCI JH



**LONG VIEW FARM**  
North Brookfield, MA

24-track, 3M M79 16-track, Studer A-80VUII 2-track ½", Studer A-80RC 2-track ¼", Tascam 122s, Sony TC-V7.  
Cassette Recorders/Duplicators: Nakamichi 1000 cassette.

Echo, Reverb, & Delay Systems: Lexicon 224XL digital reverb, Lexicon Super Prime Time, Ursa Major Stargate 626 digital reverb, Publison DHM 89 acoustic computer, live acoustic chamber, EMT 140 stereo plate, Lexicon PCM42, Eventide 1745 digital delay, harmonizer, DeltaLab DL2 delay line, DeltaLab DL4 delay line, AKG BX-10 spring reverb, AKG BX-20 spring reverb.

Other Outboard Equipment: ADR Vocal Stressers, Apnex, Ashly, Kepex and Roger Mayer noise gates, Pultec tube, API 550, API 560 and Aenqus EQ, Aphex parametric and Aural Exciter, dbx 160, dbx 160X, UREI 1176 limiter, UREI LA-3A limiter.

Microphones: Neumann, AKG, Sennheiser, Shure, Sony, E-V, Crown PZM, rare Schoeps, RCA vintage ribbons, Countryman direct box, JBA direct box.

Monitor Amplifiers: Bryston 4Bs, Crown 300s, McIntosh, BGW cue amps.

Monitor Speakers: UREI 813A, UREI 813Bs, Yamaha NS-10M, JBL 4411, JBL 4311s, JBL L-100s, E-V Sentry 100A, Auratone.

Musical Instruments: Linn 9000 drum machine, Roland Jupiter 6, JX8-P and Prophet-5 synths, Roland MPS MIDI package, Steinway grand piano, Baldwin grand piano, Hammond and organ w/ Leslie, Fender Rhodes, studio drums, and percussion kit.

Video Equipment: ¼" to ¾" computer assisted A/B roll editing, w/ switcher and digital effects, specializing in 48 track audio for video. Convergence 195 editor, Crosspoint Latch 6112 effects switcher, JVC portacam, Ikegami cameras, Sony BVU-800s, JVC 4700 VCRs, BTX synchronizers.

Rates: Competitive, negotiable, call for details.

Extras & Direction: User friendly computers: to access music and video industry professional, via telecommunication networks and electronic mail. In-house cable and satellite TV, movie library, game room, sauna, jacuzzi, well-equipped exercise room, horseback riding. Secretarial services, in-house IATA travel agency and private air charter. Entire facility linked via audio/video tie lines throughout. Located on 145 acres of picturesque countryside. Long View offers privacy, sumptuous accommodations and fine food by a friendly and highly experienced support staff. Credits include: 'til Tuesday, J. Geils Band, The Rolling Stones, Face to Face, Pat Metheny, Arlo Guthrie, Graham Nash, Dan Fogelberg and many more.

[24+] **LYX MUSIC PRODUCTION & RECORDING STUDIOS**  
25 Foster St  
Worcester, MA 01608  
(617) 752-6010

Owner: Paul Weddle, Bob Gilpatrick, Andy Cellery

[24+] **M&I RECORDING ENT. LTD.**  
630 Ninth Ave.  
New York, NY 10001  
(212) 582-0210  
Owner: Mitch & Ira Yuspeh  
Studio Manager: Steve Hasday

[24+] **MANHATTAN RECORDING COMPANY**  
also **REMOTE RECORDING**  
135 W. 14th St.  
New York, NY 10011  
(212) 929-5960  
Owner: Manhattan Recording Company, Inc  
Studio Manager: Nick Gutfreund



**MANHATTAN RECORDING COMPANY**  
New York, NY

[24+] **MARJON RECORDS**  
159 Easton Rd.  
Hermitage (Sharon), PA 16148  
(412) 347-4726  
Owner: John T. Kznzancic  
Studio Manager: John T. Kznzancic

[24+] **MARK STUDIOS**  
also **REMOTE RECORDING**  
10815 Bodine Rd.  
Clarence, NY 14031  
(716) 759-2600  
Owner: Vincent S. Morette  
Studio Manager: Frederick A. Betscher

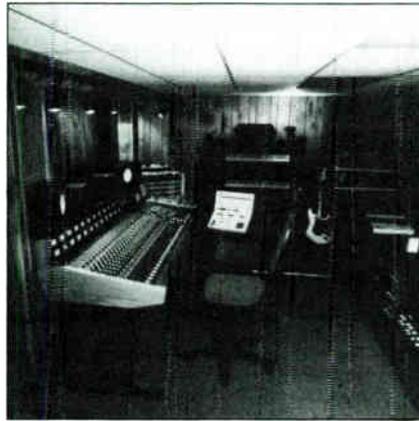
[24+] **MARVEL PRODUCTIONS**  
10220 River Rd., #2  
Potomac, MD 20854  
(301) 299-3903  
Owner: Elliot Denniberg  
Studio Manager: Elliot Denniberg

[24+] **MASTER SOUND ASTORIA**  
34-12 36th St.  
Astoria, NY 11106  
(718) 786-3400  
Owner: Ben Rizzi, Maxine Chrein  
Studio Manager: Maxine Chrein, Kathy Boyle  
**Extras & Direction:** Master Sound Astoria is located within the Kaufman Astoria Studios, a motion picture and communications complex. Built in 1984-1985, while MSA's layout and design encourage the inter-relation of all media, painstaking effort has gone into the integrity of its acoustical design. We believe our Studio A1 is NYC's best "big room". A1 features 48 tracks of digital, double Sony 3324s and 48 tracks of analog, dual Ampex ATR-124s. Some other features include an advanced moving fader automation system, huge iso booths, tons of silent AC, new generation reflection free control rooms and a permanent connection to Teleport's fiber optic network to accommodate our world-wide remote digital recording services.

[24+] **MASTERBLASTER SOUND**  
5 E. 22nd St., Ste. 27-A  
New York, NY  
(212) 505-0653  
Owner: Pamela Roof  
Studio Manager: LeAnne Roof

[24+] **MASTERWORKS STUDIOS**  
109 Park Ave. E.  
Arlington, VA  
(703) 237-7646  
Owner: Michael Zook  
Studio Manager: Michael Zook

[24+] **MATRIX PRODUCTIONS**  
124 Knickerbocker Rd.  
Cresskill, NJ 07626  
(201) 568-6247  
Owner: Joel Kipnis  
Studio Manager: Jim Singer  
Engineers: Jim Singer, Joel Kipnis, Jeff Gellis, Jonathon Pines  
Dimensions: Studio 18 x 18, control room 20 x 16.  
Mixing Consoles: Sound Workshop custom Series 34B 32 x 24.  
Audio Recorders: Otari MTR-90 Mark II 24-track w/remote



**MATRIX PRODUCTIONS**  
Cresskill, NJ

locator. Otari 2-track, Otari 4-track.  
**Cassette Recorders/Duplicators:** (3) TEAC 122B  
**Noise Reduction Equipment:** Rack of dbx S900 noise gates, (4) Valley People noise gates.  
**Synchronization Systems:** IBM custom software based SMPTE synchronization system.  
**Echo, Reverb, & Delay Systems:** (2) Lexicon PCM7C digital effects processor, Lexicon PCM60 digital reverb, Lexicon PCM41 digital delay, (2) Yamaha SPX90 digital effects processors, Yamaha D1500 digital delay, Valley People 610 compressors and gates, dbx 160 gates and limiter.  
**Other Outboard Equipment:** dbx S900 noise gates, (4) Valley People noise gates.  
**Microphones:** AKG 414, Neumann U87, Neumann U67, Shure SM58, Shure SM57, Sennheiser 421.  
**Monitor Amplifiers:** Bryston.  
**Monitor Speakers:** Yamaha NS-10M, Fostex nearfield.  
**Musical Instruments:** Emulator II digital sampling keyboard/computer (extensive disk library), various guitars, Linn 9000 w/sampling capability digital sequence/drum machine (extensive disk library), (2) Yamaha DX7 synthesizers, Oberheim Xpander synthesizer, Roland JX8P synthesizer, Yamaha TX 3-16 MIDI rack synthesizer.  
**Other MIDI Equipment:** Roland MKS30 synthesizer.  
**Video Equipment:** Sony 1/2" video, Sony 3/4" video.  
**Rates:** Available upon request.  
**Extras & Direction:** Matrix is a new 24-track state-of-the-art facility, and production company, which specializes in album work, jingles and film work. One of Matrix's strongest points is a staff of experienced studio musicians, writers and programmers, making complete in-house production possible, with uncompromised standard. Credits include work for Luther Ingram, Champagne, Michael Day Productions, The System, Paul Bernhart, Lisa Sheer, as well as numerous national jingles and film scores.

[24+] **MAYFAIR RECORDING LTD.**  
701 Seventh Ave.  
New York, NY 10036  
(212) 719-2810  
Owner: Jay Siegel  
Studio Manager: Jay Siegel

[24+] **MEDIA SOUND INC.**  
311 W. 57th St.  
New York, NY 10019  
(212) 765-4700  
Owner: Michael D. Hektden  
Studio Manager: Marsha Lawler

[24+] **MEGA MUSIC**  
345 E. 62nd St.  
New York, NY 10021  
(212) 838-3212  
Owner: Donald Donnsmann  
Studio Manager: Pete Serenita

[24+] **MEGAPHONE**  
also **REMOTE RECORDING**  
Stes. 200/300, 45 Casco St.  
Portland, ME 04101  
(207) 772-1222  
Owner: Megaphone  
Engineers: John Etinier, John Stuart, Martin Gleitsman, Michael McInnis  
Dimensions: Room 1: studio 30 x 15, control room 20 x 25.  
Room 2: studio 8 x 10, control room 15 x 20, Room 3: studio 6 x 8, control room 10 x 12. Room 4: control room 14 x 12.  
Mixing Consoles: Sound Workshop 34B 32 x 24 w/Disk-mix II automation, Tangent 3216A 21 x 16, Tangent 3216A  
—LISTING CONTINUED ON NEXT PAGE

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—LISTING CONTINUED FROM PAGE 167

12 x 16, Interface 100 8 x 8.

**Audio Recorders:** Otari MTR-9011 24-track w/autolocator, Otari MX-70 16-track w/autolocator, Otari MX-7800 8-track, Otari MTR-1211 2-track w/center-track SMPTE, (2) Otari 5050BQII 4-track, (5) Otari 5050 2-track various series, Sony PCM-F1 2-track digital.

**Cassette Recorders/Duplicators:** (4) Tascam 122B 2-track, Marantz PDM 430.

**Noise Reduction Equipment:** Assorted dbx and Dolby. **Synchronization Systems:** (2) Fostex 4030 SMPTE synchronizers link 24/16/2 video decks, (2) Roland SBX-80 SMPTE/MIDI synchronizers.

**Echo, Reverb, & Delay Systems:** Lexicon 480L digital effects system, (4) Yamaha REV7 reverbs, (2) Yamaha SPX90 digital effects units, Lexicon PCM60 reverb, ART OLA reverb, Lexicon PCM42 MEC delay, Eventide 969 Harmonizer/delay, Marshall Time Modulator, Loth 440 delay, Korg SDD-1000 MIDI delay.

**Other Outboard Equipment:** Teletronix LA2A limiter, Aphex Compellor, (2) dbx 160 limiters, (2) Inovonics 210 limiters, Valley People 610 gain control, Valley People Dyna-Mite gain control, Ashly SC-33 noise gate, Aphex C Exciter, Orban 674-A equalizer, (2) Orban 536 de-essers.

**Microphones:** Sony C-37A tube, AKG Tube, (2) Neumann U87, (2) B&K 4006, (2) AKG 414, (2) Neumann KM84, (2) AKG 451, (2) Crown P2M, (4) Shure SM57, (2) E-V RE20, many more.

**Monitor Amplifiers:** (2) Bryston 4BPro, (2) Crown D-150, Yamaha 2200.

**Monitor Speakers:** (2) UREI 813B, (2) JBL 4411, (2) Klipsch Heresy, (2) Boston Acoustic 150, (2) Yamaha NS-10, (4) Auratone.

**Musical Instruments:** Steinway 1926 Model M grand piano, (2) Yamaha DX7 synths, (2) Yamaha TX7 synths, Digital Keyboards Synergy II+ w/Kaypro programming computer, Roland JX-8P synth, Roland DDR-30 digital drums w/pads, Akai sampling synth, Oberheim Matrix-6 synth, Casio CZ-101 synth, Korg Mono-Poly synth, Moog Sonic 6 synth, Hammond Porta-B organ w/Leslie, Fender Rhodes piano.

**Other MIDI Equipment:** Roland SBX-80 MIDI/SMPTE interfaces, Apple Macintosh-Plus Hyperdrive 20 running Total Music, Performer and Professional Composer, Commodore SX-64 computer w/Dr. T software.

**Video Equipment:** JVC 8250 3/4" deck, syncs to audio, Jensen 26" monitor in control room A, Amdek color monitor. Rates: On request.

### [24+] METRO RECORDING STUDIO

also REMOTE RECORDING

1422 Crain Hwy. SW  
Glen Burnie, MD 21061

(301) 761-6159

Owner: Joe Jacobs

Studio Manager: Joe Jacobs

### [24+] METROPOLIS MUSIC LTD.

1650 Broadway, Ste. 310

New York, NY 10019

(212) 246-8420

Owner: Leslie Fradkin, Elizabeth Rose

Studio Manager: Elizabeth Rose

Engineers: Cynthia Daniels, Carl Casella, Leslie Fradkin, Elizabeth Rose

Dimensions: Room 1: studio 150 square feet, control room 350 square feet. Room 2: control room 140 square feet.

Mixing Consoles: D&R Series 8000 in-line 64 x 32 w/full automation.

**Audio Recorders:** Studer A80 MKIV 24-track w/autolocator, Otari MTR-1211 4-track 1/2", Otari MX-5050B-2 2-track 1/4", Sony PCM-501 2-track digital.

**Cassette Recorders/Duplicators:** (3) Onkyo TA-2056.

**Synchronization Systems:** Roland SBX-80 SMPTE/MIDI sync box, Synclavier SMPTE option and clock interface module, Roland SBX-10 sync box.

**Echo, Reverb, & Delay Systems:** Lexicon PCM70, Yamaha REV7. (2) Yamaha SPX90s, Yamaha D1500, Lexicon



METROPOLIS MUSIC LTD.  
New York, NY

Model 200, Lexicon PCM42.

**Other Outboard Equipment:** EXR Psychoacoustic Projector, (2) dbx 160s, dbx 166, (2) Drawmer gates. **Microphones:** (2) Neumann TLM170s, AKG 414, Sennheiser 441.

**Monitor Amplifiers:** Crown MT-600.

**Monitor Speakers:** Westlake BBSM-12, Yamaha NS-10M. **Musical Instruments:** Synclavier II w/Poly sample-to-memory, 200-track seq. and music notation, Yamaha TX816 w/3400-sound library, (2) Oberheim MATRIX-6Rs, Yamaha TX7, Yamaha FB01, (2) Ensoniq Mirages w/1000-sound library, Yamaha KX88 Master MIDI keyboard, Yamaha PMC-1 MIDI drums, Roland Octapad, K-Muse Photon MIDI guitar converter w/hyperspeed, (3) Yamaha MEP4s, Yamaha RX11, Yamaha RX21L, (2) Yamaha QX5, (2) Yamaha QX7, Fender Telecaster w/Phaton hyperspeed pickup, Vox AC15 amplifier, Rockman Sustainer and chorus/delay modules, selection of Boss effects.

**Other MIDI Equipment:** (2) IBM PC/XT computers w/Sequencer Plus, Texture, MIDI Ensemble, Yamaha CX5M computer w/all software, (2) Syclogic MIDI Matrix switcher (16 x 48), Yamaha MCS 2 MIDI control station.

**Video Equipment:** JVC CR-8250U 3/4" editing video cass. rec w/RM70U, Sony PVM-1910 19" Trinitron monitor, Sony SL-HF500 Beta hi-fi 1/2" video cass. rec.

Rates: On request.

**Extras & Direction:** We offer a world class, high-tech electronic environment for recording, scoring, mastering, videotape, TV and radio commercials and film which cuts hours off production costs. Our Synclavier II and IBM/MIDI systems provide digital editing choices that are impossible by conventional analog means.

### [24+] MINOT SOUND STUDIOS, INC.

19 S Broadway  
White Plains, NY 10601

(914) 428-8080

Owner: Thomas Cimillo



MISSION CONTROL  
Boston, MA

### [24+] MISSION CONTROL

545 Boylston St.  
Boston, MA 02116

(617) 262-2070

Owner: Michael Jonzun

Studio Manager: Karen Erdos

Engineers: Sidney Burton, Jimi Randolph

**Mixing Consoles:** Solid State Logic SL-4048E 32 x 32, Sound Workshop Series 30 24 x 24.

**Audio Recorders:** (2) Otari MTR-90 24-track, Studer A80 VU-2 2-track 1/2", (2) Otari MX5050 2-track 1/4", Sony PCM-501 2-track digital.

**Cassette Recorders/Duplicators:** (2) Nakamichi MR-1, (2) Tascam 122, Akai.

**Synchronization Systems:** Adams-Smith 2600.

**Echo, Reverb, & Delay Systems:** Yamaha REV7, Lexicon 224XL, Lexicon PCM60, AKG BX-10 spring, MXR 01, (2) Yamaha SPX90, Ibanez HD-1000, DeltaLab DL-2, (2) Lexicon PCM42, Korg SDD-3000.

**Other Outboard Equipment:** AMS DMX 15805 sampling harmonizer, Eventide H949 Harmonizer, MXR pitch transposer, (2) Roland SDE-3000, MXR 191, (2) Audio & Design Panscan, Roland SVC-350 Vocoder, Orban 536A de-esser, (2) Valley People DSP de-essers, Aphex Type B Aural Exciter, (2) Microphones: Neumann TLM170, Neumann U87, (3) AKG 414, (2) Crown PZM, (2) E-V RE20, AKG D-12, (2) Shure SM57, (6) Sennheiser 421, (4) AKG 451, (2) Beyer 500, AKG D-170E.

**Monitor Amplifiers:** Yamaha PC 2002.

**Monitor Speakers:** UREI 813, Yamaha NS-10.

**Musical Instruments:** Emulator II w/Macintosh 512/Digi-Sound Designer software, Korg DW-6000, Korg Poly 61, Memorymoog Plus w/MIDI, Roland Juno 60, (2) Yamaha DX7, Casio CZ-101, Roland 707, Roland MSQ 700, Oberheim DMX, Simmons Clap Trap, large selection vintage guitars, (1954 Gibson Les Paul, 1960 Fender Telecaster etc.), acoustic instruments and other electronics.

**Other MIDI Equipment:** SBX-80 SMPTE synchronizer, Opcode DX/TX programmer, Dr. Click 2 synchronizer.

**Video Equipment:** Sony Betacam editing system, 54-channel RGB mixing console, optical and electronic special effects.

**Other Equipment:** Large selection outboard equalization, large selection outboard compressors, large selection outboard noise gates.

**Extras & Direction:** The studio is exquisitely crafted and located in premium office space in the heart of Boston's Back Bay. Boston has the full range of supporting services and talent one would find in New York without the pressures and high prices one also finds in New York. With full mix-to-picture capabilities, state-of-the-art equipment and a talented, versatile staff, Mission Control is ready to accommodate you in any direction you wish to go.

[24+] **THE MIX PLACE, INC.**  
663 Fifth Ave.  
New York, NY 10022

(212) 759-8311

Owner: The Mix Place Corp.  
Studio Manager: Maureen Quinn

[24+] **MOBILE RECORDERS LTD.**

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400 Berkshire Rd.

Southbury, CT 06488

(203) 264-2659

(203) 264-9923

Studio Manager: G. Roth

[24+] **MODERN AUDIO PRODUCTIONS**

also **REMOTE RECORDING**

1600 Market St., 33rd Floor

Philadelphia, PA 19103

(215) 569-1600

Owner: Jeep Mason

Studio Manager: Barbara Montgomery

Engineers: Bob Schachner, Jack Dyke, Paul Byers, Marc Schiffman

Dimensions: Room 1: studio 18 x 23, control room 14 x 16.  
Room 2: studio 12 x 10, control room 10 x 14.

**Mixing Consoles:** Soundcraft TS24 28 x 24 w/Master Mix automation, Soundcraft TS24 8 x 8.

**Audio Recorders:** Sony JH-24 24-track, (2) Otari MTR-12TC 2-track w/center-track time code, (7) Otari MX5050 2-track, Tascam Model 58 8-track, Sony PCM-10 2-track digital, Sony PCM-1630 2-track digital.

**Cassette Recorders/Duplicators:** (4) Aiwa F-770.

**Noise Reduction Equipment:** (27) Dolby A channels, (8) dbx Type I channels.

**Synchronization Systems:** Alpha Audio "The Boss."

**Echo, Reverb, & Delay Systems:** Klark-Teknik DN780, Yamaha REV7, Lexicon Prime Time II, Eventide H969 Harmonizer, Lexicon PCM60, Yamaha SPX90.

**Other Outboard Equipment:** (4) dbx 160X limiters, (2) Gain Brains, (2) Kepex, Drawmer DS-201 dual gate, (2) Aphex Aural Exciters, (2) Orban de-essers.

**Microphones:** Neumann, B&K, Sennheiser, Shure, E-V.

**Monitor Amplifiers:** Hafler P125, Hafler P225.

**Monitor Speakers:** (2) Klein & Hummel 092, (2) Sony APM 66ES, (2) Yamaha NS-10, (2) ROR, (2) Foxtex RM765, (2) JBL 4411.

**Musical Instruments:** Fairlight IIX w/MIDI, Yamaha DX7, Tokai baby grand, Ensoniq ESQ-1, E-mu SP-12, Oberheim DMX, Minimog, Simmons SDS7, Yamaha recording drum set, various instrument amps.

**Video Equipment:** Sony 5850 3/4" VCR w/address track TC, NAD 20" color monitor, complete 1" editing facility w/two bays, Rank film-to-tape Bosch FSG-4000, Montage, ADO, DVE, etc.

[24+] **MONKEY HILL STUDIOS**

also **REMOTE RECORDING**

15-16 College Point Blvd.

College Point, NY 11356

(718) 886-5792

Owner: Dennis Lattmann

Studio Manager: Eva Pepe

[24+] **NEW ENGLAND MOBILE RECORDING**

also **REMOTE RECORDING**

PO Box 409

Stow, MA 01775

(617) 562-2111

Owner: Alan W. Goodrich

Studio Manager: Jay W. Goodrich

[24+] **NEW YORK POST PRODUCTION**

also **REMOTE RECORDING**

1 Artist Rd.

Saugerties, NY 12477

(914) 679-8848

Owner: Chris Andersen

Studio Manager: Annemarie Sullivan

[24+] **NEW YORK PROFESSIONAL DIGITAL**

also **REMOTE RECORDING**

203 W. 90th St., Ste. 5-D

New York, NY 10024

(212) 713-5331

Owner: Jonathan Rosch, John Mahoney

Studio Manager: Jonathan Rosch

Dimensions: Studio 22 x 12, control room 22 x 12

**Mixing Consoles:** Sound Workshop console.

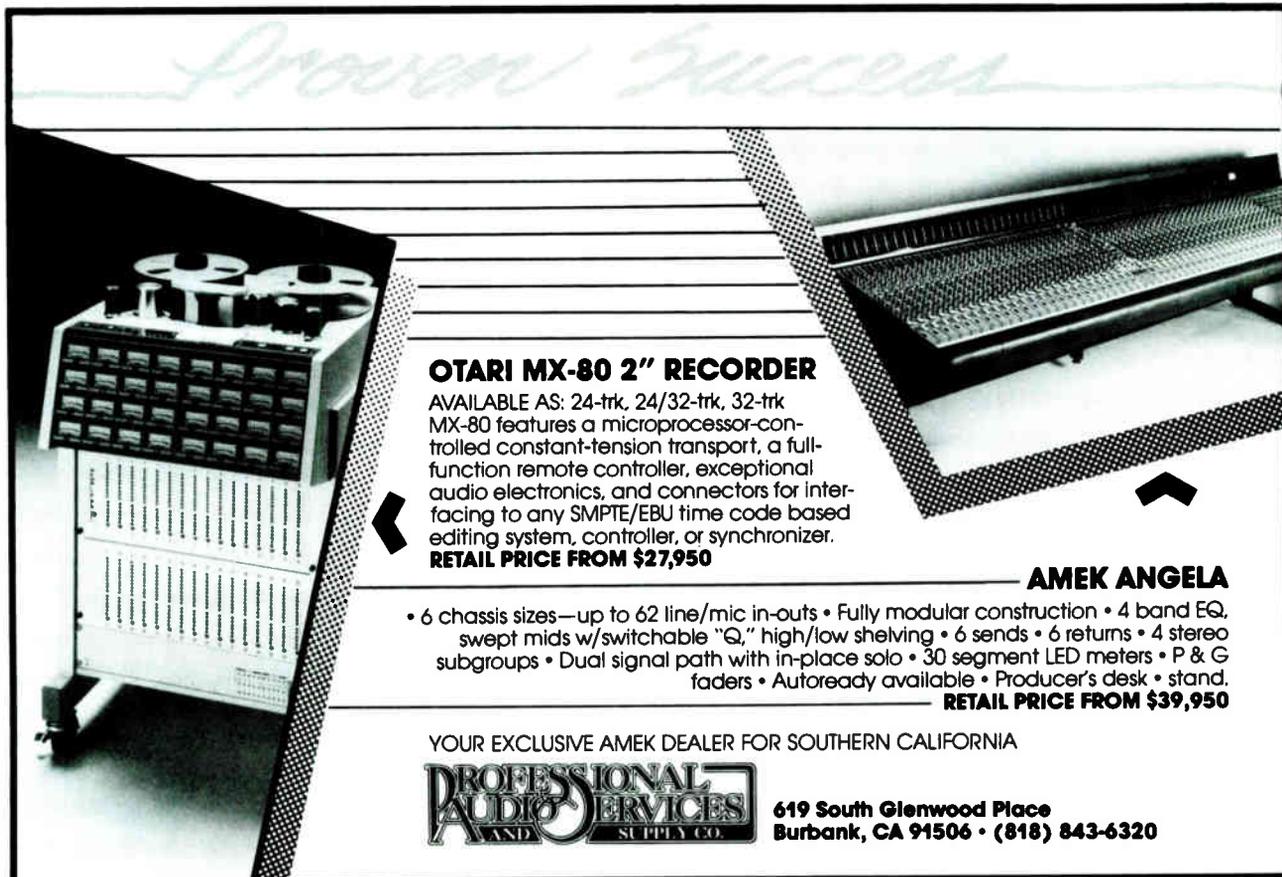
**Audio Recorders:** Various analog and digital recorders, Synclavier digital music system.

**Cassette Recorders/Duplicators:** Nakamichi, Tascam, Akai, Aiwa, TEAC, Denon.

**Synchronization Systems:** SMPTE, MIDI, NED, CIM.

**Echo, Reverb, & Delay Systems:** Lexicon Prime Time II,

—LISTING CONTINUED ON NEXT PAGE



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—LISTING CONTINUED FROM PAGE 169

Lexicon PCM70, Lexicon PCM60, Lexicon PCM42, Yamaha SPX90, (3) Yamaha REV7s, AKG BX-20, (3) DeltaLab DDLs, and more.

**Other Outboard Equipment:** (2) Drawmer noise gates, (2) dbx 160X compressor/limiters, (2) dbx 163s, (2) White EQs, Pultec EQ, Aphex Aural Exciter.

**Microphones:** Neumann U87, (4) AKG 414s, AKG D-12, AKG 451, (2) Sennheiser 421s, Audio-Technica, Shure SM57s, Shure SM58s, (4) RCA DX-77

**Monitor Amplifiers:** Crown Micro-Tech 1200, Crown DC 300A-II, (2) Crown D-60s, Phase Linear 700, BGW.

**Monitor Speakers:** UREI/Audiotechniques Time Aligned Big Red monitors, JBL 4311s, Yamaha NS-10s, Auratone CS5s.

**Musical Instruments:** Full Synclavier digital music system w/guitar and music printing options, sampling, SMPTE/MIDI etc, Steinway grand piano, Roland digital piano, Yamaha CS80, (2) Yamaha DX7s, Memorymoog, Akai sampler, Emulator SP-12 w/Turbo, (2) LinnDrums, ARP 2600 and Odyssey, Minimoog plus much more.

**Video Equipment:** Mitsubishi VHS, Sanyo VHS, Sony U-Matic 3/4".

**Rates:** Very reasonable. Call for rates.

**[24+] NEWBURY SOUND, INC.**

1260 Boylston St., Ste. 202

Boston, MA 02215

(617) 267-4095

Owner: Ken Kanavos

Studio Manager: Ken Kanavos, Lisa Breslin

Engineers: Paul Arnold, Michael Szakmeister, Bob Reardon, Dave Van Slyke

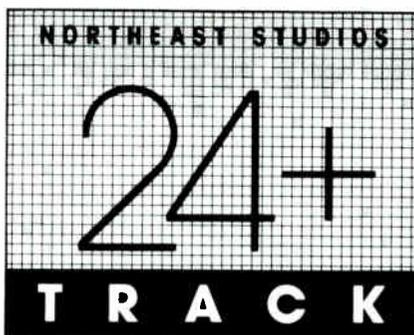
**Dimensions:** Studio 44 x 32, control room 22 x 20 w/6 QRD-1925 RPG Diffusers and three iso booths.

**Mixing Consoles:** Harrison MR-4 28 x 24 automated, Soundcraft Series 200 16 x 4.

**Audio Recorders:** Otari MTR-90 II 24-track w/autolocator, Studer A820 2-track 1/2", Otari MX5050B 2-track 1/4", TEAC 32-2B 2-track 1/4", Tascam 38 8-track 1/2", Sony 601 2-track digital.

**Cassette Recorders/Duplicators:** Tandberg 3014, Tascam 122B, (4) NAD 6040.

**Synchronization Systems:** Adams-Smith 2600 3-channel Echo, Reverb, & Delay Systems: Eventide SP2016 digital reverb/effects processor w/sampling, (3) Lexicon PCM70 digital reverb/effects processors w/MIDI interface, (3) Yamaha SPX90 digital reverb/effects processors, Lexicon Prime Time II digital delay, Lexicon PCM42 digital delay, (2) Lexicon PCM41 digital delay.



**Other Outboard Equipment:** (3) UREI LA-4 compressors, (2) UREI LA-3 compressors, UREI 1176-LN peak-limiter, (2) dbx 160 compressors, (2) Ashly SC-50 compressors, (2) Ashly SC-33 2-channel noise gates, Omni Craft GT-4 4-channel noise gate, (2) MXR 129 pitch-transposer w/digital display, MXR 174 pitch-shift/doubler, Aphex B Aural Exciter, EXR SP II exciter, Orban 622-B 2-channel parametric EQ, UREI 527A 1/3-octave EQ, Orban 536A de-esser, Master-Room XL 305 reverb, Valley People Dyna-Mite processor, Ashly SC66 1/3 parametric EQ, Drawmer DS 201X noise gate.

**Microphones:** (2) Neumann U87, Neumann U89, Neumann TLM-170, Neumann KM84, (2) Sennheiser MD 441s, Sennheiser MD 421, AKG 414-EB, AKG 451, AKG D-12, AKG D-222, (5) Shure SM57s, (2) E-V RE20s, Crown PXM-6LP, (2) Beyer M-300s, (2) Altec C71s.

**Monitor Amplifiers:** (2) Crown MT 100 Micro-Techs, (2) Crown DC-300s, (2) Crown D 150s.

**Monitor Speakers:** UREI 813 B w/IBL 5549 1/3-octave EQ, Altec 604-8K, Tannoy SRM 12B, JBL 4312, Yamaha NS-10, Auratone 5C.

**Musical Instruments:** TAMA five-piece drum kit w/Zildjian cymbals, Fender Twin reverb amp, Fender Rhodes "Stage 73" piano, Hammond L-100 organ w/Leslie 122 speaker, Hume 61" grand piano, Yamaha KX88 keyboard controller, Yamaha TX synth rack, Roland MKS-20 digital piano, E-mu SP-12 drum machine, LinnDrum machine w/MIDI, Memorymoog Plus w/MIDI and sequencer, Roland Juno 106 w/MIDI, assorted percussion.

**Other MIDI Equipment:** Macintosh computer sequencer, Akai S900 digital sampler, (2) JL Cooper MSB Plus MIDI switchers.

**Video Equipment:** NEC PM-2571A video monitors, JVC 8250 3/4" VCR, JVC HR-D1400 1/2" VCR.

**Other Equipment:** Countryman D.I. boxes, Sescam D.I. boxes, AKG headphones, Fostex headphones, Technics SL-B205 turntable, NAD 1020 pre-amp.

**Rates:** Call for rates.

**[24+] NEWFOUND SOUND RECORDING STUDIO**

10 Kersher Pl.

Fairlawn, NJ 07410

(201) 796-9175

Owner: Larry Gates

Studio Manager: Bob Montero

**[24+] NICKEL RECORDING also REMOTE RECORDING**

168 Buckingham St.

Hartford, CT 06106

(203) 524-5656

Owner: Jack Stang

Studio Manager: Rich Horan

**[24+] THE NINETEEN RECORDING STUDIO**

also REMOTE RECORDING

19 Water St.

South Glastonbury, CT 06073

(203) 633-8634

Owner: Jonathan Freed

Studio Manager: Robert Lancelfield

**[24+] NORMANDY SOUND, INC.**

25 Market St.

Warren, RI 02885

(401) 247-0218

Owner: Philip Greene, Ogden Fell, Ralph Petraria

Studio Manager: Fletcher

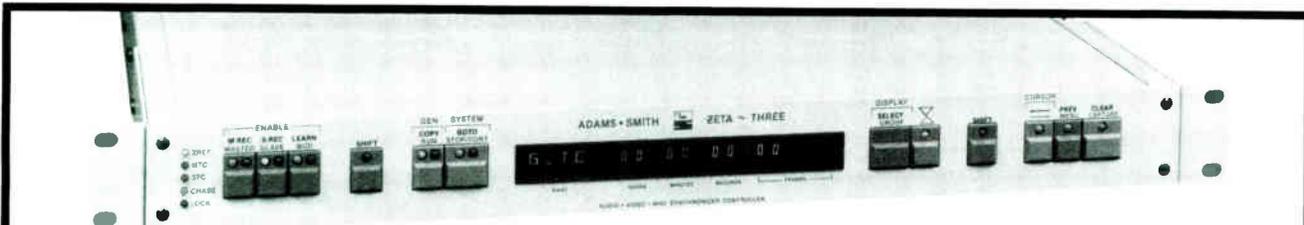
Engineers: Phil Greene, Bob Winsor, Tom Soares

**Dimensions:** Studio 40 x 25, control room 20 x 15.

**Mixing Consoles:** Solid State Logic 4000 E Series w/ Total Recall.

**Audio Recorders:** MCI JH-24 24-track, Studer A80 2-track 1/2", (2) Scully 280B 2-track 1/4".

**Cassette Recorders/Duplicators:** Tascam 122.



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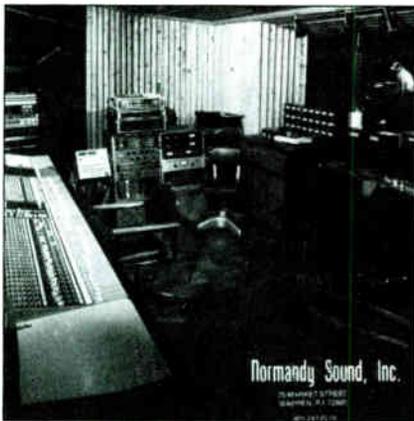
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**ADAMS-SMITH**

34 Tower St., Hudson, MA 01749 USA





**NORMANDY SOUND, INC.**  
Warren, RI

**Echo, Reverb, & Delay Systems:** AMS DMX 1580-S, acoustic chamber, Lexicon 224X, EMT 140S, Lexicon PCM60, ADR Pan Scan, (2) Yamaha SPX90, Lexicon PCM42, (2) Eventide 949H Harmonizer, (2) Loft delay line flangers, Lexicon Prime Time, Korg SD 3000.

**Other Outboard Equipment:** ADR Pan Scan, Teletronix LA-2A, (2) UREI 1176 LN, (2) UREI LA 4, (2) Pultec EQP-1A, (2) Ashly SC-50, Ashly SC-66 stereo parametric EQ, (2) Valley People Dyna-Mites, (40) SSL noise gate expanders, (40) SSL compressors.

**Microphones:** (8) Neumann M49 tube, U47 tube, U87, KM84, (6) AKG C12A tube, 414EB, C451, (3) Sony C500, C37, (2) Schoeps Telefunken CM65 tube, (11) Sennheiser MD441, MD421, MD211, (3) Beyr 160, 8E, (6) Shure SM56, SM57, SM58, SM53, SM81, (2) E-V RE11, (2) E-V D535, (3) PZMs.

**Monitor Amplifiers:** McIntosh, Ashly, Crown.  
**Monitor Speakers:** Custom UREI 813s, Yamaha NS-10Ms, Auratone supercubes.

**Musical Instruments:** Yamaha C-5 6'8" Conservatory grand piano, 1968 Fender Precision Bass, 1960 Fender Stratocaster, Oberheim OBSX polyphonic, Minimoog, Simmons SDS5 w/Brain and MX 1 trigger box, Oberheim DX drum machine.

**Rates:** On request.

**Extras & Direction:** Specializing in national and international multi-track recording and mixing for the record, film soundtrack, and live radio broadcast industry. Weekend retreat location near Providence, Newport and Boston. Complimentary accommodations for up to eight persons in full efficiency apartment.

**[24+] NORTH LAKE SOUND**

3 Lake View Dr.  
No. White Plains, NY 10603  
(914) 682-0842  
Owner: Chip Taylor  
Studio Manager: Tomy Mercadante

**[24+] NORTHEASTERN DIGITAL RECORDING, INC.**  
*only REMOTE RECORDING*

12 Sadler Ave.  
Shrewsbury, MA 01545  
(617) 753-1192  
Owner: Toby Mountain  
Studio Manager: Christine Lauriat  
Engineers: Toby Mountain  
**Mixing Consoles:** Troisi SA 20C custom 12 x 4.  
**Audio Recorders:** Sony PCM-2324 24-track digital (on request), Sony PCM-1610 2-track digital, Sony PCM-701 2-track digital (modified), Sony PCM-501 2-track digital, Sony PCM-F1 2-track digital, Sony APR 5002H 2-track 1/2" and 1/4" (analog).  
**Cassette Recorders/Duplicators:** (3) Denon.  
**Noise Reduction Equipment:** Dolby Type A, dbx Type I.  
**Synchronization Systems:** Sony DAE-100 digital editor.  
**Echo, Reverb, & Delay Systems:** Lexicon PCM70.  
**Microphones:** Sennheiser 421s, Schoeps, B&K, AKG 414s.  
**Monitor Speakers:** Snell Type "C".  
**Video Equipment:** (2) Sony BVU-800DB for digital and audio video.  
**Extras & Direction:** We offer primarily remote digital recording, digital editing, and LP or compact disc mastering. We specialize in transfers from different formats (analog and digital) to digital and offer complete CD services. Credits: Frank Zappa, Arko Guthrie, Richie Havens, Devo, Kingston Trio, A&M, Chrysalis, RCA, Rykodisc, Rounder, Folk Era, etc.

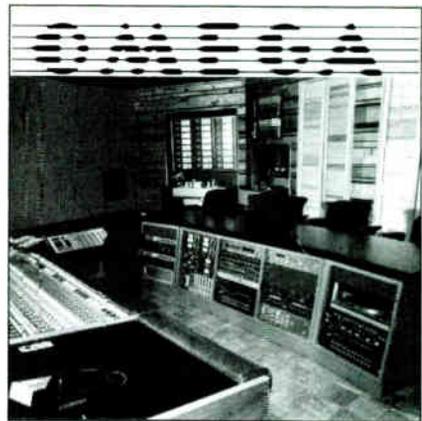
**[24+] NYU MUSIC TECHNOLOGY STUDIOS**

*also REMOTE RECORDING*  
35 W 4th St., Ste 777  
New York, NY 10003

(212) 598-3491  
(212) 598-3492  
Owner: New York University  
Studio Manager: Dr. Wayne J. Kirby

**[24+] OMEGA RECORDING STUDIOS**

*also REMOTE RECORDING*  
5609 Fishers Ln.  
Rockville, MD 20852  
(301) 946-4686  
Owner: Bob Yesbek  
Studio Manager: Bill Brady  
Engineers: Bob Yesbek, Bill Brady, Sharon Shapiro, Jack Knepley, Tom McCarthy, Brian Smith, Bill Harnson.  
**Dimensions:** Room 1: studio 50 x 40 x 18, control room 24 x 27. Room 2: studio 26 x 25 x 12, control room 23 x 19. Room 3: studio 22 x 20 x 9, control room 20 x 15.  
**Mixing Consoles:** API 2488 32 x 32, MCI JH-636 28 x 24, Audiotronics 110-B 24 x 8 x 16.  
**Audio Recorders:** (2) Studer A-80 MKIVs 24-track, (2) Studer A-80s 2-track 1/2", (6) Studer B-67s 2-track, (2) Studer A-810s 2-track, MCI JH-110B 4-track 1/2", Ampex A-800 4-track 1/2", MCI JH-24 16-, 24-track.  
**Echo, Reverb, & Delay Systems:** EMT-251, EMT-140ST, EMT 240, (2) Lexicon PCM70s, (2) Yamaha REV7s, (4) Lexicon Prime Times, (3) Eventide Harmonizers, DeltaLab DL1.



**OMEGA RECORDING STUDIOS**  
Rockville, MD

—LISTING CONTINUED ON NEXT PAGE



Recording Studios

723 7th AVE., NEW YORK CITY 10019 (212) 730-1035

Circle #121 on Reader Service Card

—LISTING CONTINUED FROM PAGE 171

DeltaLab Acousticcomputer, (4) DeltaLab Effectron IIs, Lexicon 224, (2) AKG BX-20E.

**Other Outboard Equipment:** (15) UREI limiter/compressors, Sonitec parametrics and compressors, Neve EQs and compressor/limiters, (8) Allison Kepexs, (8) Allison Gain Brains, Audioarts parametric, Panscon, Pultec EQs, Orban EQs and de-essers, 48 tracks of Dolby A, 24 tracks of dbx 216, Eventide phaser/flangers, API-550 As outboard, dbx 160s, dbx 162, Alembic preamps, various cassette machines, turntables, etc., (2) UREI digital metronome.

**Microphones:** (18) Neumann U87s, (4) Neumann FET47s, (8) Sennheiser 421s, (2) AKG 451s, Neumann KM85s, Neumann KM84s, Neumann KM83s, (4) Neumann KM86s, Neumann U47 tube, Neumann U67 tube, (11) Neumann RE20s, (4) Crown PZMs, Sony ECM-55ps, various Shure and E-V mics, (4) AKG 414s.

**Monitor Amplifiers:** Bryston, AB Systems, Crown.

**Monitor Speakers:** Westlake TM-1, UREI 813, UREI 811, Ed Long MDM-4, Yamaha NS-10, David 9000, Auratones.

**Musical Instruments:** Emulator II, DX7, MIDI bass, computer link to Emulator, Steinway B grand piano, Kawai grand piano, Hammond B-3 w/Leslie, Fender Rhodes piano, clavinet, (2) Yamaha drum sets, (2) sets of congas (LP and GonBop), Marshall guitar amps, Fender guitar amps, Music Men guitar amps, Yamaha marching drums (full set), Yamaha guitar amp, Fender Bandmaster amp, various and sundry percussion goodies, noisemakers, and stuff.

**Video Equipment:** Eclipse synchronizer, Sony 5850 3/4" video recorders, color monitors built-in to control rooms, video links between all studios and control rooms.

**Rates:** Room 1: \$120/hr., room 2: \$105/hr., room 3: \$75/hr. Package rates available. Video interlock in rooms 1 or 2: \$140/hr.

**Extras & Direction:** Each control room and each studio separately air cond. and heated. Electrostatic air cleaners in all rooms, 48-line building-wide tie line system for audio and video, various music and SFX records and tapes available in music library, two lounges including a video game lounge, cassette and reel-to-reel duplication (one-to-one), no charge for extras (synthesizers, extra machines, etc.) if booked in advance (except SMPTE, based on availability). Producer's office w/ phone in control room #1. Omega Studios' huge studio #1 is the room of choice for concert bands, marching bands, stage bands, choirs and orchestras of up to 100 pieces for scoring live to picture (video) or cutting tracks "head-on". Omega control #1 features a 10' long producer/client desk and a private producer's office. Capable of 48-inputs, #1 is equipped for up to 48-tracks. Studio #2 offers 24 tracks. Grand pianos are available in both studios, as well as Yamaha DX7s and Emulator II. Studio #3 offers 24-inputs and 2-, 4- and 8-track production. SFX and music libraries are available on CD, record and tape. Omega's Recording Engineering School, now in its 10th year, offers four levels of training and is approved by the Maryland State Board for higher education and veteran's training.

[24+] THE OUTLOOK

Star Route, Box 180  
Bethel, ME 04217  
(207) 824-3246

Owner: Ted & Connie St. Pierre  
Studio Manager: Connie St. Pierre

[24+] P&P STUDIOS, INC.

also REMOTE RECORDING

17 Viaduct Rd.  
Stamford, CT 06907  
(203) 359-9292

Owner: John Fishback

Studio Manager: Aldena Leonard

**Engineers:** Dan Pickenn, John Fishback, Dan Buckley  
**Dimensions:** Room 1: studio 1,000 sq. feet, control room 350 sq. feet Room 2: studio 100 sq. feet, control room 100 sq. feet

**Mixing Consoles:** Syncon 28 x 24, Allen & Heath 8 x 4.  
**Audio Recorders:** MCI JH-24 24-track, MCI JH-110 4-track, Ampex 440C 4 track, Ampex 440B 4-track, MCI JH-110TC3 2 track w/SMPTE, MCI JH-110 2-track, Ampex 440C 2-track, Ampex 440B 2-track, Tandberg 6000 7/4-track, TEAC 2340 4 track, MCI 1" layback.

**Cassette Recorders/Duplicators:** Nakamichi 480 cassette, Tascam 122 cassette.

**Synchronization Systems:** Adams-Smith

**Echo, Reverb, & Delay Systems:** MICMIX CSREQ-23 and M R III, Loft delay, Lexicon PCM70, Yamaha delay.

**Other Outboard Equipment:** dbx 160s, LA-3As, Orban parametric, multi-track parametric, Tapco graphic, SAE graphic, Eventide Omnipressor, Eventide Harmonizer, Valley People Dyna-Mite, Apex Aural Exciter, Dynaflex

**Microphones:** Neumann, AKG, Sennheiser, Beyer, Shure, E-V, Sony, PZM, etc

**Monitor Amplifiers:** PSE, McIntosh, HH, Dyna.

**Monitor Speakers:** Big Reds, Auratones, DAC 710s.

**Musical Instruments:** Yamaha grand, Rhodes 88, Gretsch kit w/ various small percussion, Oberheim drum machine, Roland Juno 60 synth, Fender twin reverb, Bassman amps (tube), Yamaha DX7, EMAX sampler.

**Video Equipment:** Video/audio lock-up via SMPTE for



sweetening and layback. Shooting stage on premises. All formats available 1/2", 3/4", 1" video editing w/CMX compatible list w/Sony 3/4", Betacam and 1" machines.

**Rates:** 24-, 8-track and sweetening: \$60-\$200/hr. Video: \$100-\$150/hr.

**Extras & Direction:** Music videos, video editing, sweetening, cassette duplication, multi-image programming w/AVL film-video stage, jingles and scoring for video, film, slide shows P&P Music library. P&P has evolved from an audio-only operation into a full-service media production company. We have the equipment to work in a variety of media. But, more importantly, we have the people who are not only competent and experienced, but take pride in doing the job right—the first time.

[24+] PARIS RECORDING

466 Hawkins Ave.  
Ronk, NY 11779  
(516) 467-5143

Owner: Brian Unger  
Studio Manager: John Francesconi

[24+] PEABODY RECORDING STUDIOS

also REMOTE RECORDING

1 E. Mt. Vernon Pl.  
Baltimore, MD 21202  
(301) 659-8136

Owner: Peabody Institute of the John Hopkins University  
Studio Manager: Alan P. Kefauver

**Dimensions:** Room 1: studio 20 x 32, control room 12 x 20. Room 2: 450-seat hall, control room 15 x 20.

**Mixing Consoles:** Sound Workshop 1600 w/VCA, Sound Workshop Series 30 w/VCA.

**Audio Recorders:** Ampex MM-1200 24-track, Ampex ATR-104 4-track, (2) Ampex ATR-102 2-track, (2) Ampex ATR-802 2-track, Sony PCM-701es/VO-5850 digital 2-track, Studer A820.

**Cassette Recorders/Duplicators:** Tascam 122 cassette.  
**Noise Reduction Equipment:** All tape recorders have dbx I noise reduction, 36 channels total

**Echo, Reverb, & Delay Systems:** Lexicon 224, Lexicon 200, DeltaLab DL-2, AKG BX-10E, Klark-Teknik DN780, Eventide Harmonizer.

**Other Outboard Equipment:** (4) UREI LA4 compressors, (2) UREI 1178 limiters, UREI 546 equalizer, UREI 565T filters, MICMIX Dynaflex, Lang PEQ-2A EQs, dbx noise reduction (36 channels), UREI EQs, Eventide Harmonizer, dbx EQs and compressors, Drawmer noise gates.

**Microphones:** Neumann KM84s, Neumann KM83s, Neumann KM86s, Neumann U87s, Neumann KM88s, Neumann U67s (tube), Neumann SM69s, AKG 414EB-48s, AKG 422s, Milab DC-63s, Sony C-37Ps, Beyer M-500s, Beyer M-160s, Beyer M 260s, Beyer M-101s, Beyer M-201s, Beyer M-69s, E V dynamics, Shure dynamics, AKG dynamics, UREI direct boxes, PZMs, (4) Sennheiser MKH40, and much more.

**Monitor Amplifiers:** UREI, JBL, SAE.

**Monitor Speakers:** JBL 4430, UREI 811, Tannoy Gold 10.

**Musical Instruments:** Steinway 9 concert grand, Steinway 7 concert grand, other instruments and devices on request

**Rates:** Call for rates.

**Extras & Direction:** Studio #1 is tied to a 750-seat concert hall with a stage suitable for a 100-piece orchestra, and is available for a nominal charge. A full duplicating facility is also on premises. The Peabody Recording Studios are classically oriented full service studio serving the needs of The Peabody Conservatory of Music and the surrounding community and are a laboratory for the students in Peabody's Bachelor of Recording Arts & Sciences degree program.

[24+] PENNISTONE RECORDING

PO Box E  
Northfield, MA 01300  
(413) 498-2184

Owner: Francis L. Bry  
Studio Manager: Laura Bry

[24+] PENNY LANE  
also REMOTE RECORDING  
1350 Avenue Of The Americas  
New York, NY 10019

(212) 687-4800

Owner: Harley Flaum

Studio Manager: Alan Verner

**Engineers:** Alan Varner, Edward Trabanco, Enc Levine, Carne Wassenaar

**Dimensions:** Room 1: studio 25 x 36, control room 18 x 10. Room 2: studio 10 x 12, control room 18 x 10.

**Mixing Consoles:** Trident TSM 32 x 24, Trident Series 80B 32 x 24

**Audio Recorders:** (2) Otan MTR-90 24-track, (3) Otan MTR-12 2-track, (2) Otan MTR-12 4-track.

**Cassette Recorders/Duplicators:** (5) Nakamichi; **Synchronization Systems:** Audio Kinetics Q-Lock 3.10.

**Echo, Reverb, & Delay Systems:** Lexicon PCM70, (2) Yamaha SPX90, EMT 140, BX 20, Eventide SP2016, Lexicon Prme Time, Lexicon Super Prme Time.

**Other Outboard Equipment:** UREI, Allison, Trident, Eventide, Pultec, etc.

**Microphones:** Full range of professional mics.

**Monitor Amplifiers:** McIntosh, Carver.

**Monitor Speakers:** Big Reds, E.M. Long, Visonik, JBL, Auratone, Yamaha.

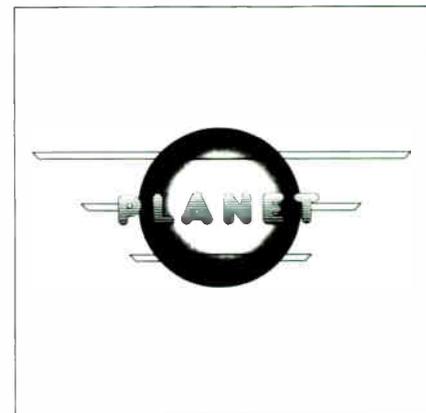
**Musical Instruments:** Drums, Rhodes, Steinway B, synthesizers

**Video Equipment:** Full audio-for-video, post-production w/Q Lock 3.10, JVC 6650 and JVC 6600 interlocked to 24 track and 2-track machines.

[24+] PHOTOMAGNETIC RECORDING STUDIO

222 E. 44 St.  
New York, NY 10017  
(212) 687-9030

Owner: Walter Tannenbaum  
Studio Manager: Beverly Dichter



PLANET AUDIO-VIDEO RECORDING STUDIOS  
New York, NY

[24+] PLANET AUDIO-VIDEO RECORDING STUDIOS

251 W 30th St.  
New York, NY 10001  
(212) 594-7554

Owner: Jon Grossbard, Mike Theodore, Gnome Prods.

Studio Manager: John Grossbard

**Engineers:** Mike Theodore, Bruce Nazanan, Julian Mc-Browne, Andy Heermans, Tim Cox, Tim Purvis, Steve Stabile

**Dimensions:** Room 1: control room 50 x 27 w/15 x 10 iso booth. Room 2: program/control room: 30 x 18 w/9 x 6 voiceover booth. Room 3: studio 24 x 45, control room 18 x 23 w/iso booths.

**Mixing Consoles:** MCI 500 w/automation, Soundcraft TS24 w/64 mic inputs.

**Audio Recorders:** Otan MTR-90 24-track, MCI 24 24-track, Studer 2-track 1/2", Otari 2-track 1/2", Ampex 4-track, Mitsubishi X-850 and X-80 32- and 2-track digital recorders.

**Cassette Recorders/Duplicators:** Tascam, TEAC, Hitachi.

**Synchronization Systems:** Shadow and Lynx

**Echo, Reverb, & Delay Systems:** Lexicon 224 XLI, Lexicon 200, Lexicon PCM70, Yamaha REV7, Yamaha SPX90, Roland SRV-2000, AMS DMX-15, AMS RMX-16, EMT stereo plate, Lexicon PCM42, DeltaLab delays and reverbs, Eventide Harmonizers, AKG BX-20.

**Other Outboard Equipment:** Panscons, dbx limiters, Kepex IIs, Gain Brain, Apex exciters and compeller, DynaMics.

**Microphones:** Neumann, AKG, Sennheiser, E-V, Beyer, vintage solid state and tube mics.

**Monitor Amplifiers:** Hafler, Crown.

**Monitor Speakers:** UREI 813, Yamaha NS-10, Tannoy.

**Musical Instruments:** Synclavier II (32-voice polyphonic)

—LISTING CONTINUED ON PAGE 174

# Auditory Perception

An Audio Training Course  
by F. Alton Everest



## LESSON TOPICS

1. **Loudness, Pitch, and Timbre**  
(The subjective correlates of sound level, frequency, and spectrum)
2. **How One Sound Masks Another**  
(The role of the critical band)
3. **How the Ear Analyzes Sound**  
(Auditory filters at work)
4. **Non-linearities in the Auditory System**  
(Distortions generated in the ear)
5. **The Perception of Delayed Sounds**  
(How we hear echoes and reflections)
6. **Why Some Sounds are More Pleasant than Others**  
(Consonance/dissonance and the critical band)
7. **How We Locate Sounds**  
(The head, the pinna, and an amazing computer)
8. **True Binaural Hearing**  
(The dummy head in binaural hearing)

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F. ALTON EVEREST is an internationally known acoustical consultant, engineer, and lecturer. He is a member of six professional audio and video societies and has authored seven books, two training courses and more than 50 professional papers.

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ISBN 0-9608352-1-0

—LISTING CONTINUED FROM PAGE 172

w/160 MByte, 200 track sequencing, Kurzweil 250, DX7, TX816, TX216, Mirage, E mu II + HD, E mu II, PPG Wave 2.3, Prophet T8, Akai sampler, Oberheim Xpanders, Roland Super Jupiter, Minimoog, ARP 2600, Linn 9000, E-mu SP-12, DMX MIDI, Voyetra, Korg EX-800

**Other MIDI Equipment:** Alan 1040ST computers w/Dr. T Sequencer, Mac and Performer Sequencer, JL Cooper 16/20 controller

**Video Equipment:** JVC 6650 1/4", 25" color monitor, full SMPTE lock up

**Other Equipment:** Numerous MIDI devices and digital toys Please call

**Rates:** Please call

**Extras & Direction:** CBS-TV mini series *At Mother's Request*, ABC TV series *All My Children*; Island Records artist Millie Scott LP, NBC mini series *In Love and War*; feature film *Long Lost Friend* starring Donald Sutherland; Atlantic Records artist Jimmy Lilton LP, Island Records artist Bernard Fowler LP, Polydor Records artist Gerry Woo 12" single; Island Records artist Tom Waits' 12" remix; Warner Bros. Pictures feature film *Lost Boys*' tune title "Cry Little Sister," artist Gerard McMahon, plus lots more.



**[24+] POWER HOUSE**  
413 Cooper St.  
Camden, NJ 08102  
(609) 963-3190  
Owner: Frank & Michael Nise  
Studio Manager: Richard R. Beeth

**[24+] POWER PLAY RECORDS**  
also **REMOTE RECORDING**  
198 Bloomfield Ave.  
Newark, NJ 07104  
(201) 481-0972  
(201) 484-9404  
Owner: Power Play Records, Inc.  
Studio Manager: Greg Furgason  
Engineers: Greg Furgason, Lou Nosti, Tom Terren, Kevin Furgason, John Terren, Chuck Russo, Dave Callahan  
Dimensions: Room 1 studio 390 sq.ft., control room 252 sq ft Room 2 studio 840 sq.ft., control room 200 sq.ft., plus two iso booths.

**Mixing Consoles:** Soundcraft 2400 40 x 24 x 2, NEOTEK Series IE 20 x 8 x 2, NEOTEK Series IE 12 x 4 x 2, Yamaha PM700 12 x 12 x 2, (2) Shure M67 4 x 1.

**Audio Recorders:** Sony PCM-3324 24-track digital, Tascam 85-16B 16-track, Otari MX-5050-8SD 8-track, (2) Otari MX-5050 III-22-track, (2) Nakamichi DMP-100 2-track, Sony SL 2000, Beta VCR, (2) Sony VO-5850 3/4" VCR, Pioneer RT 707 1/4 track, (2) Studer A80 Mark IV 24-track.

**Cassette Recorders/Duplicators:** (2) Tascam 122B cassette decks, Otari DP-4050 cassette duplicator (five slaves).  
**Echo, Reverb, & Delay Systems:** (2) Tascam 122B Star-gate, (2) Yamaha REV7, Klark-Teknik DN-780, (2) Lexicon PCM41, DeltaLab Time Line, Ursa Major Space Station.

**Other Outboard Equipment:** (2) Eventide Omnipressors, (3) Orban 516EC sibilance filters, (4) Valley People Dyna-Mites, (2) dbx 163, dbx 166, dbx 165A, (2) Audioarts 4200 parametric EQs, Eventide flanger, (2) Ashly SC-66 (26-channel), dbx Type I, dbx Type II 4-channel, BTX synchronizer

**Microphones:** Neumann U47s, Neumann U87s, Neumann U89s, Sennheiser MD441s, Sennheiser MD-421, Sennheiser MKE 2, E-V RE20s, E-V RE15s, E-V RE11s, E-V 664, E-V 666s, E-V 1777, Sony ECM-50PS, Shure SM81s, Shure SM58s, Shure SM57s, Shure SM60s, Countryman direct boxes.

**Monitor Amplifiers:** (2) Hafler DH-200, (2) Hafler P-500, Dynaco ST 150, (2) Dynaco ST-120, (2) Crown D-75.

**Monitor Speakers:** Big Reds, E-V Sentry 100A, Auratone 5C, Auratone T6, Bose 800

**Musical Instruments:** Knabe 1928 upright grand piano, Kimball grand piano, Yamaha DX7, Korg Poly-6, Roland Juno 106, LinnDrum LM-1, Simmons SDS7, Ludwig live-piece drum kit, Oberheim OBX-A, Music Man HD-130, Marshall 50, Marshall 100, Fender Vibroverb, Peavey Deuce, Yamaha 112.

**Video Equipment:** Betacam 1" and 3/4" production and post-production, (4) Ampex VPR-2B, Sony BVU 800, Paltex Espirit, Sony RM-440, Sony RM-580, Grass Valley I-L switcher, 3M D-5000, Tektronix 528 Waveform monitors, Tektronix 1420 Vectorscope

**Rates:** Upon request, block rates available, call for rate card

**[24+] POWER PLAY STUDIOS**  
38-12 30th St.  
Long Island City, NY 11101  
(718) 729-1780  
(718) 729-9609  
Owner: Tony Arli

**Studio Manager:** Gary Salzman  
Engineers: Patnick Adams, Julian Herzfeld, Frank D'Amato, Mike Nicoletti, Tim Meyer, Norberto Cotto  
Dimensions: Room 1 studio 25 x 30, control room 12 x 16, Room 2 studio 15 x 15, control room 16 x 20 Room 3 studio 25 x 35, control room 25 x 25.

**Mixing Consoles:** Solid State Logic 4000E 48 x 48 w/total recall, MCI 636 automated 32 x 24, Trident Series 70 28 x 24

**Audio Recorders:** Studer A80 24-track, (2) Sony JH-24s



**POWER PLAY STUDIOS**  
Long Island City, NY

24-track, MCI JH-24 24-track, Sony PCM-3202 2-track digital, (5) MCI JH-110s 2-track B's and C's, Tascam 80-8 8-track, TEAC 40-4 4-track.

**Cassette Recorders/Duplicators:** (7) JVC/KDU-6 cassettes, Hitachi D-W800.

**Noise Reduction Equipment:** (4) dbx 150.

**Synchronization Systems:** Adams-Smith.  
**Echo, Reverb, & Delay Systems:** Publison Internal Machine 90, Yamaha REV-1, AMS DXM-1580, (3) Yamaha REV7s, Lexicon 224XL, Lexicon 200, (3) Lexicon PCM60s, (6) Lexicon PCM42s, Ursa Major Space Station, (2) MXR O1s, (2) Eventide Harmonizers, AKG BX-10, (2) PCM41s, MXR 1500.

**Other Outboard Equipment:** (2) MXR flanger/doublers, (3) Tube Tech EQs, Orban parametric EQs, Panscan, (3) dbx 166s, (2) dbx 165As, (4) dbx 160Xs, (12) Dyna-Mites, Klark-Teknik EQs.

**Microphones:** AKG Gold Tube, Neumann U47, (4) AKG 414s, (2) Neumann U87s, (2) Neumann KM85s, (3) Sony C37Ps, (2) AKG 451s, (2) AKG 452s, AKG 535, Shure SM85, (2) Shure SM58s, (2) Shure SM57s, (2) E-V RE20s, Crown PZM, (7) Sennheiser MD 421s.

**Monitor Amplifiers:** Hafler P500, Hafler P225, Phase Linear 400, Bryston, DC 300A, Yamaha P2050, Crown DG-60, SAE 50.

**Monitor Speakers:** (2) UREI 813Bs, (2) Yamaha NS-10Ms (2) Auratones, JBL 4430s, Big Reds, JBL 4311s

**Musical Instruments:** E-mu Emulator II, E-mu Emulator I, PPG Wave 2.2, (2) Yamaha DX7s, Yamaha DX21, Yamaha TX816 rack eight modules, Roland Juno 60 w/MIDI, Roland Juno 106, Casio CZ101, Akai digital sampler w/disk drive, Linn 9000, LinnDrum, DMX, DSX, RX-11, Roland DDR-30 drum computer, MX-1 trigger, Mini Doc, Oberheim OBX-8, Simmons set of drums pads and Brain, E-mu SP-12, Roland 727, MSQ700, SBX-80, Yamaha grand piano, Yamaha stand up, Wurlitzer piano, Rhodes-88.

**Video Equipment:** Available upon request.

**Other Equipment:** Full percussion equipment, including congas, cowbells, tambourines, ago-go's, wood block, maracas, etc. Full drum set—acoustic or electronic.

**Rates:** Available upon request.

**Extras & Direction:** Our studios were acoustically designed by Vin Gizzi assuring our clientele the most accurate monitoring environment available. In 1986, we at Power Play had 27 Billboard charted hits, including two number ones. We have hosted such artists and record company's as: MCA, CBS, Atlantic, Chrysalis, A&M, Island, Manhattan, Warner Bros., Reggie Griffin, Heavy D & The Boyz, Skipworth & Turner, Shannon, Rainy Days, Stanley Turrentine, Hanson & David, Plateau Records, Sleeping Bag Records, Prolife Records, and many, many more.

**[24+] POWER STATION RECORDING STUDIOS**  
441 W 53rd St.  
New York, NY 10019  
(212) 246-2900

Owner: Bob Walters, Tony Bongiovi  
Studio Manager: Barry Bongiovi, Bari Kaye

**[24+] PREMIER RECORDING, INC.**  
2121 Wisconsin Ave. NW  
Washington, DC 20007  
(202) 333-5588

Owner: Demos Chnsso  
**Studio Manager:** Matthew Nicholl  
Engineers: Demo Chnsso, Matthew Nicholl  
Dimensions: Studio 14 x 11, control room 26 x 17.

**Mixing Consoles:** NEOTEK Elite 36 x 26.  
**Audio Recorders:** (2) Otari MTR-90 24-track, (2) Otari MTR-10 2-track, Otari MX-5050MKIII-2 2-track.

**Cassette Recorders/Duplicators:** Nakamichi BX-1 cassette, Nakamichi BX-100 cassette.

• **Platinum Factory Inc.** ◀

Recording Studio

(212) 636-1401

**PLATINUM FACTORY INC.**  
Brooklyn, NY

**[24+] PLATINUM FACTORY INC.**  
1368 Fulton St.  
Brooklyn, NY 11216  
(718) 636-1401

Owner: Derek P McDowell

**Studio Manager:** Derek McDowell

**Engineers:** Jon Evans, David Roberts English, Danny Miranda

Dimensions: Studio 35 x 25 x 15, control room 18 x 14.

**Mixing Consoles:** MCI JH636 automated 36 x 24

**Audio Recorders:** Studer A80 24-track, Studer A80 2 track, Ampex ATR102 2-track

**Cassette Recorders/Duplicators:** (2) Awa F700 cassette.

**Echo, Reverb, & Delay Systems:** Eventide 2016, (2) ART 01 A, Lexicon PCM70, Lexicon Prime Time II, Lexicon Prime Time I, DeltaLab Effectron ADM 1024, DeltaLab Echotron, Eventide 910 Harmonizer

**Other Outboard Equipment:** (4) dbx 160 compressor/limiters, Trident stereo compressor/limiter, Orban parametric EQ, (2) Ling tube parametrics, MXR graphic EQ, Kepex noise gates, Ensoniq Mirage, Drawmer gates

**Microphones:** AKG 451s, 414EBs, D222, RE20s, 635A, U47s U87s, MD 421s SM58

**Monitor Amplifiers:** Perreaux 5000B, (2) Crown DC300A, Crown D150, (2) Crown D75

**Monitor Speakers:** UREI 813, Yamaha NS-10, JBL 4312s, Auratones

**Musical Instruments:** Yamaha drum set, DSXs, LinnDrum, MIDI Doc, Fender Rhodes piano, Yamaha grand piano, SP 12 drum machine

**Rates:** \$85/hr

**[24+] PLUM STUDIO**  
also **REMOTE RECORDING**  
2 Washington St.  
Haverhill, MA 01830  
(617) 372-4236

Owner: Richard & Vivian Tiegen  
Studio Manager: Vivian Tiegen

**[24+] PMI**  
also **REMOTE RECORDING**  
321 First Ave.  
Pittsburgh, PA 15222  
(412) 281-8500

Owner: David Case  
Studio Manager: Sue Harger



**PREMIER RECORDING, INC.**  
Washington, DC

Echo, Reverb, & Delay Systems: Lexicon 2049, Lexicon PCM70, Eventide H 910, Yamaha SPX90 digital multi-effect processor

Other Outboard Equipment: Drawmer DS-210 stereo noise gate, Aphex 300 stereo compellor, Aphex Type-C Auto Exciter, (2) UREI LA-4 compressors, Symetrix TI-201 telephone interface, Technics SL-F2 compact disc player Music Man 210-HD amplifier, Dolby XP-24 24-track noise reduction, Orban 536A sibilance processor.

Microphones: Neumann U87s, AKG C414EB/P48s  
Monitor Amplifiers: UREI 6500, Crown D-75, Crown D-150A Series II (headphone amplifier)

Monitor Speakers: UREI 813-B, ROR E3 reference monitors.  
Musical Instruments: Kurzweil 250 w/advanced sampling, Yamaha DX7, Roland JZ-3P, Oberheim DMX drum machine, Roland 5BX-80 MIDI/SMPTE sync box, Roland MIDI Octapads, Yamaha TX216, (4) DX7 modules, Roland Super Jupiter (rack mounted), dedicated Macintosh Plus computer in the control room, Emulator SP-12 sampling percussion unit.

Rates: Upon request

Extras & Direction: More than 30 hours of sound effect on compact disc. Premier Recording is dedicated to the advertising/film community with emphasis on pre- and post-score original music, jingles, and spot/soundtrack assembly. Music production is produced on analog/digital MIDI keyboards and drum machines, synched to picture via MIDI/SMPTE computer inter-lock.

[24+] PRESENCE STUDIOS  
also REMOTE RECORDING  
461 Main St  
East Haven, CT 06512  
(203) 467-9038  
Owner: John Fusell  
Studio Manager: John Russell

[24+] PRINCE STUDIO  
251 W. 30th St.  
New York, NY 10001  
(212) 736-1724  
Owner: Igor Yahievich  
Studio Manager: Kenny Patnaude

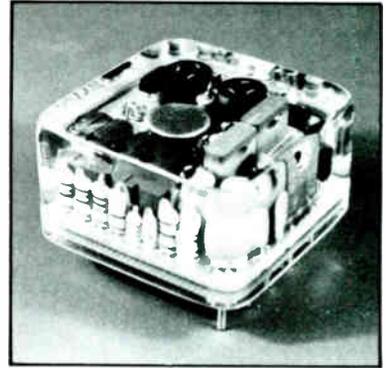
[24+] PRODUCTION MASTERS, INC.  
also REMOTE RECORDING  
321 First Ave  
Pittsburgh, PA 15222  
(412) 281-8500  
Owner: David Case  
Studio Manager: Susan H. Hartford

[24+] PUDDING STREET RECORDING  
also REMOTE RECORDING  
RD #2, Pudding St  
Carmel, NY 10512  
(914) 225-1837  
Owner: Reels On Wheels, Inc.  
Studio Manager: Chrs Cassone

[24+] PULSE WAVE UNDERGROUND SYNTH & RECORDING STUDIO  
19 Norwood Terr.  
Trumbull, CT 06611  
(203) 268-1018  
Owner: John P. Mozza  
Studio Manager: Ed McPadden  
Engineers: Ed McPadden, Jeff Smith  
Dimensions: Room 1: studio 22 x 25, control room 13 x 16.  
—LISTING CONTINUED ON NEXT PAGE

# 990

## Discrete Op-Amp



**Electronic Design by Deane Jensen**  
**Packaging & Production Design by John Hardy**

- **Fast:** 18V/ $\mu$ S @ 150 Ohms, 16V/ $\mu$ S @ 75 Ohms
- **Quiet:** -133.7 dBv E.I.N. (20—20kHz, shorted input, unweighted)
- **Powerful:** +24 dBv @ 75 Ohms (Ref: 0dBv = .775 V)

**AND IT SOUNDS GREAT !**

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**THE HARDY CO.** P.O. Box AA631, Evanston, IL 60204 USA  
**(312) 864-8060** Telex 910 380 4670 Answerback John Hardy Co.

**THE HARDY CO.** P.O. Box AA631, Evanston, IL 60204 USA  
**(312) 864-8060** Telex 910 380 4670 Answerback John Hardy Co.

Circle #122 on Reader Service Card

# 2 Ways To Duplicate Your Master Audio Tape For Demos Or Retail Sales

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## PRINTING & MAILING: \_\_\_\_\_

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**EVA-TONE**  
INCORPORATED

P.O. Box 7020-MX, Clearwater, Florida 33518-7020  
Toll-Free 1-800-EVA-TONE (In FL: 813-577-7000)

Circle #123 on Reader Service Card

—LISTING CONTINUED FROM PAGE 175

Room 2 studio 20 x 11

**Mixing Consoles:** Sony MPX 3000 36 x 24 w/automation.

**Audio Recorders:** Sony JH24 24-track, Otari MX5050 MKIII 2B 2 track, Nakamichi DMP-100 2-track.

**Cassette Recorders/Duplicators:** (2) TEAC 122s, Nakamichi BX150.

**Synchronization Systems:** Adams-Smith.

**Echo, Reverb, & Delay Systems:** Lexicon PCM70, Lexicon PCM60, ART DR 1, Korg DRV3000, Korg DRV2000, Korg SDD 3300, (3) Korg SDD 3000, Korg SDD 2000

**Other Outboard Equipment:** (2) dbx 160X, dbx 166 (2) Valley People Dyna-Mite, U.S. Audio Gatex, Valley People leveller, Audioarts 4200 A parametric EQ, (2) Korg DVP-1, Aphex Compellor, Aphex II Aural Exciter, Orban 622 B parametric EQ

**Microphones:** (2) AKG 414EBs, (2) AKG 535s, (2) Sennheiser 441s, (7) Sennheiser 421s, (2) Sennheiser 431s, Sennheiser MKE 2, Shure SM58s, Beyer M500N (c), (2) Crown PZM 31Ss, Crown PZM 30GP

**Monitor Amplifiers:** Yamaha P2200, Yamaha P2100, Rane MA 6

**Monitor Speakers:** UREI 809, JBL 4411, Yamaha NS-10M.

**Musical Instruments:** Korg DSS-1, Korg SGI-D, Korg Trident MK II, (3) Korg EX8000, Korg MP-4, Korg DDD-1, (2) Yamaha FB01s, Oberheim OBX, Schecter Mercury guitar, Marshall JCM 4212 amp

**Other MIDI Equipment:** Macintosh Plus w/hard disk, Mark of the Unicorn and Digidesign software, assorted MIDI accessories.

**Other Equipment:** Assorted percussion.

**Rates:** On request.

[24+] PYRAMID SOUND STUDIOS

also REMOTE RECORDING

105 E. Clinton St.

Ithaca, NY 14850

(607) 273-3931

Owner: Joh Penelas, Alex Penelas

[24+] QUADRASONIC SOUND

723 7th Ave.

New York, NY 10019

(212) 730-1035

Owner: Lou Gonzalez

Studio Manager: Laune Gonzalez

Engineers: Dave Ogrin, Matt Kasha, Steve Kahn, Alan



Meyerson, Bob Musso, Andy Wallace, Joe Barbana, Steve Stanley, Carl Beatty, Brian Max, Bruce Miller.

**Mixing Consoles:** SSL 4000E 48 x 48 w/Total Recall, SSL 4000E 56 x 56 w/Total Recall, SSL 6000E 40 x 40 w/Total Recall.

**Audio Recorders:** Otari MTR-90 24-track, (2) Studer A80 2-track, Otari 4-track, Studer 2", 1/2", 1/4".

**Synchronization Systems:** Adams-Smith 4 channels, BTX Shadow System.

**Echo, Reverb, & Delay Systems:** (3) AMS 6.4 w/harmonizer, (2) AMS reverb, Lexicon 224, Lexicon 224XL, Yamaha REV7, Yamaha R1000, and (7) EMT 140 plates, several PCM41, PCM42, DL1, DL4, Eventide and more

**Other Outboard Equipment:** Kepexes, flangers, phasers, API EQ, Pultec EQ, Dyna-Mites, Teletronix, dbx 160s, dbx 160Xs, UA1176s, Orban, Roland.

**Microphones:** Neumann 67, Neumann 87, Neumann M49B, Neumann KM84, Neumann KM86, AKG, E-V 414, RCA, Sennheiser, Shure.

**Monitor Amplifiers:** Crown PSA-2, Yamaha, McIntosh.

**Monitor Speakers:** UREI 813, UREI 813B, Yamaha, JBL.

**Musical Instruments:** Prophet-5, DX7, Moog, Linn, Dr. Click, Roland, Steinway L, Steinway B, Fender Rhodes, TAMA drums, Pearl drums, EMAX system.

**Video Equipment:** 1/2", and 3/4" playback, and 3/4" lockup w/stipping.

**Rates:** On request. (48-track lockup available.)

# QUANTUM SOUND STUDIOS

QUANTUM SOUND STUDIOS  
Jersey City, NJ

[24+] QUANTUM SOUND STUDIOS

512 Paterson Plank Rd.

Jersey City, NJ 07307

(201) 656-7023

Owner: Reggie Lucas

Studio Manager: Leslie Ballard

Dimensions: Room 1: studio 30 x 28, control room 18 x 21.

Room 2: studio 10 x 9, control room 16 x 21. Room 3: studio 13 x 11, control room 12 x 8.

**Mixing Consoles:** (2) SSL 4000-E 48-input w/Total Recall, Sound Workshop Series 34 32-input.

**Audio Recorders:** Studer A800 24-track, 3M M-79 24-track, Studer A80 2-track 1/2", Otari MX-5050 2-track 1/4", Nakamichi DMP-100 2-track digital, Canon VR-40 hi-fi VHS recorder.

**Cassette Recorders/Duplicators:** Nakamichi MR1, Technics.

**Synchronization Systems:** (2) Roland SBX80 sync boxes, Garfield Electronics MIDI Doc, JL Cooper MIDI Brain driver and more.

**Echo, Reverb, & Delay Systems:** Lexicon 224XL w/LARC, Lexicon PCM60 w/upgrade, EMT 140 plate, EMT 252 digital, Quantec QRS stereo digital, (2) AMS DMX 15-80 digital, (3) Lexicon PCM42s, (2) Yamaha SPX90s, (2) Yamaha REV7s.

**Other Outboard Equipment:** (3) Drawmer DS201 dual gates, (2) Orban 622B parametric equalizers, UREI 527-A graphic equalizer, (4) Valley People Maxi-Q equalizer, (3) Valley People gates/limiters, (2) dbx 165A Overeasy compressor/limiters, (2) UREI 1176 LN peak limiter, Symetrx 501 peak/RMS compressor/limiter, UREI 1178 dual peak limiter, Lang PEQ-4 MIDI range equalizer.

**Microphones:** Neumann KM84, Neumann U87, Neumann Fet 47, Beyer M88, Beyer M160, Beyer Soundstar MKII, E-V RE20, Sennheiser 421, AKG 451, AKG 414, Shure SM58, Shure SM57

**Monitor Amplifiers:** (4) Adcom GFA-555, (2) Haller Five Hundreds, BGW 750.

**Monitor Speakers:** (2) UREI 813Cs, (2) Yamaha NS-10Ms, (2) KEF 105s, (2) KEF 103.2s, (2) KEF 101s.

**Musical Instruments:** Synclavier digital music system, Oberheim Matrix-12, Voyetra VPK-5 w/two polyphonic synthesizer modules, Roland MKS-20 digital piano, Yamaha C-7 grand piano, Yamaha studio drum set, (2) Moog Minimoogs/MIDI modified, ARP 2600, Yamaha TX816 full rack, Simmons SDS7 digital/analog drum system, Yamaha RX11, LinnDrum, Roland JX10, Sequential Circuits VS synthesizer.

**Other MIDI Equipment:** Akai ME20A A, Synhance mix plus MIDI mixer, Octave plateau sequencer plus, DX Heaven DX7 patch editor/master click.

**Other Equipment:** IBM PC, Apple II Plus computer, custom-designed MIDI patch bay, Roland MPU-101 CV-MIDI interface, (2) Garfield FSK adaptors.

**Rates:** Per project, per room.

**Extras & Direction:** Plans include two spacious SSL rooms, Synclavier room with iso booth, control rooms equipped with custom MIDI patch bays, high ceiling live room with revolutionary acoustic panel design, and skylights for natural lighting, two private client lounges, all completely air conditioned. Located just five minutes from mid-town Manhattan and with the luxury of an entire building, Quantum offers both convenience and privacy. The studio's team of experts have designed rooms which combine the latest innovations with a creative yet functional atmosphere. The studio is easily accessible by subway, bus or car and visitors are welcomed. Call the studio manager for appointments.

**Rates:** Per project, per room.

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**Rates:** Per project, per room.

# "QUALITY SERVICE"

GREG HANKS

New York Technical Support, Ltd

35 HARDCRABBLE HILL, CHAPPAQUA, NY 10514  
(914) 238-4171

Circle #124 on Reader Service Card

[24+] **RBY RECORDING AND VIDEO**  
**also REMOTE RECORDING**  
 920 N Main St.  
 Southbury, CT 06488  
 (203) 264-3666  
 Owner: Jack Jones  
 Studio Manager: Marjorie Jones

[24+] **REAL TO REEL SOUND STUDIOS**  
 5045 Backlick Rd.  
 Annandale, VA 22003  
 (703) 821-6969  
 Owner: Jerome Alger, John Alger  
 Studio Manager: John Alger

[24+] **RECORD PLANT STUDIOS**  
**also REMOTE RECORDING**  
 321 W. 44th St.  
 New York, NY 10036  
 (212) 581-6505  
 Owner: Roy Cicala  
 Studio Manager: Nicki Schiralli

**Engineers:** Koster McAllister, Jay Messina, William Wittman, David Thoener, Tom Swift, Tim Bombay, Sam Ginsburg, Steve Marcantonio, Rod O'Brien, Jim Ball.  
**Dimensions:** Room 1: studio 39.5 x 24.5 x 11, control room 16 x 19 x 9. Room 2: studio 35 x 26 x 11, control room 14 x 17 x 8. Room 3: studio 19.5 x 29.5 x 9.5, control room 17 x 16 x 8. Mix room 16.5 x 10 x 8, 21 x 20.5 x 9.

**Mixing Consoles:** Spectra Sonics custom 30 x 16 x 24, API custom 40 x 16 x 24, API custom 32 x 16 x 24, Trident TSM 56 x 24 (custom), Massenburg automation (48-track capability).

**Audio Recorders:** Ampex MM-1200 24-track, Ampex ATR-104 4-track, Ampex ATR-102 2-track.

**Echo, Reverb, & Delay Systems:** (8) EMT echo plates, Space Stations, Publisons, Eventide DDLs, Audio Development delay, harmonizers.

**Other Outboard Equipment:** Extensive outboard inventory including vintage and newer equipment. Most requested limiters, equalizers, effects, and noise reduction.

**Microphones:** Large selection of Beyer, Shure, AKG, Neumann, Electro-Voice, PML, Sennheiser, RCA, Sony, various models.

**Monitor Amplifiers:** Bryston amps, Crown amps.

**Monitor Speakers:** Westlake monitors, JBL 4311s, Yamaha NS-10Ms, RORs E-3, Auratones, Burhoes.

**Musical Instruments:** Steinway grand pianos, Hammond organs, percussion kit, large selection of guitar amplifiers including Marshall, Fender and Gibson and Ampeg bass amplifiers.

**Video Equipment:** 3/4" video playback only, JVC CR 6600, RM 70U controller.

**Rates:** Available upon request.

[24+] **THE RECORDING ARTS 48 TRACK**  
 140 Hempstead  
 West Hempstead, NY  
 (516) 485-6301  
 (516) 485-6306

Owner: Joseph Tufanello, Bruce & Richard Zwelsky  
 Studio Manager: Joseph Estades

[24+] **REEL HITS RECORDING STUDIO**  
 15 Bridge Rd.  
 Weston, CT 06883  
 (203) 226-4200

Owner: Dean & Donane Elliott  
 Studio Manager: Bill Finnerty, Doraine Elliott

[24+] **REEL HITS RECORDING STUDIOS**  
 67 Park Ave.  
 New York, NY 10016  
 (212) 679-5670

Owner: Dean & Doraine Elliott  
 Studio Manager: Bill Finnerty, Doraine Elliott  
**Engineers:** Dean Elliott, Bill Finnerty, David Hart, Doug McRean

**Dimensions:** Room 1: studio 28 x 20, control room 18 x 20 x 10. Isolation booth 20 x 12, drum room 16 x 8.

**Mixing Consoles:** Allen & Heath Syncon A 28 x 24.

**Audio Recorders:** MCI JH-24 24-track, MCI JH-110 8-track, MCI JH-110 4-track, (2) MCI JH-110 2-track, Scully 280-S mono, (2) Nakamichi 582-2 cassette decks.

**Cassette Recorders/Duplicators:** Harman Kardon, Tandberg, Denon.

**Noise Reduction Equipment:** dbx, Dolby.  
**Synchronization Systems:** BTX Shadow System, Garfield Dr. Click II, Macintosh 512.

**Echo, Reverb, & Delay Systems:** (2) Yamaha REV7s, Yamaha SPX90, (2) EMT 140s, Lexicon PCM60, Alesis XT, Master Room reverb, Roland reverb, Lexicon PCM42, Roland SDD-3000 DDL, DeltaLab DDI.

**Other Outboard Equipment:** (2) Eventide 910 Harmonizers, (2) Eventide Omnipressors, Eventide Instant Flanger, (2) dbx 166 comp/lim, (5) dbx 904 noise gates, (3) dbx 905 parametric EQs, (2) dbx 903 comp/lim, (2) Orban 622B parametric EQs, (5) UREI LA-4 limiters, Marshall Time Mod-

ulator, MXR DDL, MXR flanger, MXR phase shifter.  
**Microphones:** (2) Neumann U67s, Neumann U47, (5) AKG 414 EBs, (4) AKG D1000E, (3) Sennheiser 441, (6) Shure SM57, (5) E-V RE20, (2) E-V RE16, (4) RCA 77-DX, (4) Sony 33f, (2) Sennheiser MKH-405, Beyer, Teledyne etc.  
**Monitor Amplifiers:** Hafler P-500, (2) BGW 250, (2) McIntosh 275.

**Monitor Speakers:** Altec Lansing Big Reds 604, Yamaha NS-10M, (4) Auratone cubes, AR-7.

**Musical Instruments:** Yamaha DX7, Roland JXP-3, Roland Jupiter, Minimoog w/MIDI, Baldwin 7' grand piano, Hammond B-3 w/Leslie tone cab, (2) Fender Rhodes, Yamaha YC30, Oberheim DMX w/MIDI, Korg DDD-1 drum machine, Korg DS-1 sampler, Ibanez pedal boxes, Roland DDR-30 drum kit, Roland TR-50S drum machine, Pearl nine-piece drum kit w/Zildjian cymbals, Deagan vibes and marimbas and other percussion instruments.

**Other MIDI Equipment:** Roland GR500 guitar synth, Roland Planet, Casio CZ1000 on request, E-mu Emulator II on request, assorted guitar and bass amps.

**Video Equipment:** Panasonic AG 6300 1/2" VHS, Panasonic NV-9300 3/4", Sony Betamax SL-8200, Sony Trinitron 19" monitor.

**Other Equipment:** Macintosh 512 w/MIDI hardware, Roland MSQ-700, UREI 964 digital metronome, Yamaha P-300 turntable, Wuritzer electric piano.

**Rates:** Upon request.



**REEL PLATINUM STUDIOS INC.**  
 Lodi, NJ

[24+] **REEL PLATINUM STUDIOS INC.**  
 259 Paterson Ave.  
 Lodi, NJ 07644  
 (201) 471-3464

Owner: Bob Allecca  
 Studio Manager: Bob Allecca, Julian Hernandez  
**Engineers:** Bob Allecca, Julian Hernandez  
**Mixing Consoles:** Trident Series 80 (automated) 32 x 24 x 24.

**Audio Recorders:** MCI JH 24 24-track w/Autolocator III, w/16-track head stack, TEAC 80-8 8-track w/DX8 N.R., TEAC A3440 4-track w/RX9 N.R., Technics 1500 2-track, Sony PCM-F1 2-track digital.

**Cassette Recorders/Duplicators:** (2) TEAC 122.

**Echo, Reverb, & Delay Systems:** Ecoplate III, Orban IIIB, (2) Lexicon Prime Time w/MEO, Lexicon PCM42/MEO, Eventide H949 harmonizer, Eventide instant flanger, (2) Yamaha D1500, (2) Yamaha REV7, Lexicon Model 200, Lexicon PCM70, Roland 2000, Ibanez 1000, (4) Yamaha SPX90s.

**Other Outboard Equipment:** dbx 26-channel noise reduction, Kexpex IIs, dbx 900 signal processing rack, gates, compressors, de-essers, (2) dbx 160 compressor/limiter, Orban 622B parametric EQ, TEAC GE-20 graphic EQ, Symetrx noise gates, White 1/3 room EQ, (2) Aphex Aural Exciters, (4) dbx 166 compressor/limiters.

**Microphones:** Neumann U87, AKG 414s, Sennheiser 441s, Sennheiser MD 421s, E-V RE20, E-V RE15s, E-V 635As, Beyer 201N, Shure SM57.

**Monitor Amplifiers:** Yamaha 2200s, Yamaha 2050s.

**Monitor Speakers:** JBL 4411s, JBL 4312s, Yamaha NS-10Ms, Auratones.

**Musical Instruments:** Yamaha acoustic piano, Fender Rhodes, Korg Poly-6, Yamaha DX7, Pro-One, Yamaha JX50B amp, TAMA full drum set, percussion, congas, wood blocks, cowbells, etc., Commodore 64, MIDI interface, Roland SBX-80, DMX digital drum machine, Yamaha RX11 digital drum machine, Roland MSQ-700, Apple IIe, DX-Pro (voice library), Akai S-612 sampler, Akai MD280 disk drive, Passport MIDI 8 Plus, music data, Korg super percussion, Mini Doc, Akai S900 sampler, E-mu SP-12 sampling drum machine, Oberheim Matrix 6.

**Rates:** Call (block rates available).

**Extras & Direction:** We offer in-house production, arranging, lead sheets, full keyboard and drum machine programming.

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**REGENT SOUND STUDIOS, INC.**  
New York, NY

**[24+] REGENT SOUND STUDIOS, INC.**  
1619 Broadway  
New York, NY 10019  
(212) 245-2630

Owner: Robert Liftin  
Studio Manager: Sandi Morrol  
Engineers: Jeffrey Peterson, Bob Liftin, David Browning, Jimmy Litten, Richard Fairbanks, Ralph Kelsey, Danny Lawrence, Karen Robben, Michael Ruschak, Gary Solomon, Maintenance Lew Whittier, Peter Fine, Larry Gilbert  
Dimensions: Room 1 studio 50 x 24, control room 21 x 19. Room 2 studio 28 x 30, control room 19 x 16. Room 3: studio 23 x 14, control room 20 x 21. Room 4: studio 17 x 19, control room 13 x 15

Mixing Consoles: SSL SL-6000 E 56 inputs, Sony 3000 MXP 3036 36 inputs, MCI JH-528 28 inputs, MCI JH-618 18 inputs

Audio Recorders: Sony 3324 24-track digital, (3) Ampex ATR 124, Ampex ATR 116, (5) MM1200 w/PURC and re-reverse functions, (3) ATR 104, (6) ATR 102, (4) ATR 700, 440 modified, mono Nagra, TEAC 40-4, Magna-Tech 16/35mm mag dubber

Cassette Recorders/Duplicators: Aiwa cassette decks, Nakamichi 500, (3) Nakamichi MRI.

Echo, Reverb, & Delay Systems: Audicon plate, (2) Lexicon 224, AKG BX 20, Master-Room MICMIX, Klark-Teknik DN780, Lexicon PCM70, Lexicon PCM42, Yamaha REV7.

Other Outboard Equipment: Lexicon DDLs, Lexicon Prime Time, Teletronix LA 2A, Pultec EQH2, 360 programmable EQ, UREI LA4, Aengus EQ, Kepex 2, Eventide Harmonizer, Audio Designs selective limiter, Orban parametric, UREI LA3A limiter, UREI Little Dipper, programmable Autolade, etc

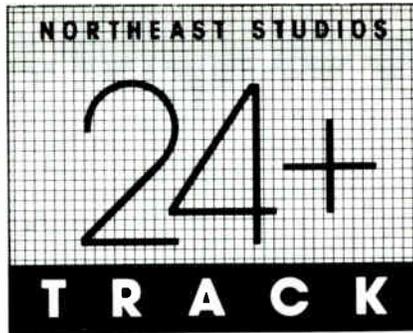
Microphones: Neumann U87s, Neumann U89s, Neumann M49s, Neumann KM84s, Neumann ATM21, RCA 77DXs, Sennheiser 421s, Sennheiser 441s, Shure SM7s, Shure SM57s, Shure D12, AKG 414s, AKG KM86, E-V RE15, E-V RE16s, E-V RE20, E-V RE55s, E-V CS15s, AKG 451, Sony ECM50s, etc

Musical Instruments: Fender Rhodes, Steinway and Yamaha grand pianos, Hammond B 3, drums (two sets), tympani, xylophone, vibes, celeste, congas, bongos, orchestra bells, misc percussion

Video Equipment: (5) EECO MQS 103A w/UART, Convergence 104, (3) BTX Shadow, VPR 80, (4) JVC 8250, (2) JVC 8200, BVU 800DB (2) 2860, Sony PCM1610 digital, Sony PCM10, Sony F1, EECO time code generator, time code reader, data metrics and ESSE character generators, Conrac video monitors, Sony video monitors, (2) Ampex sync lock, (2) Ampex VPR-6, (2) Sony BVW800 DB, (2) Tektronix waveform monitors and Vector scopes, (2) Lynx Time Line, CompuSonic DSP 2000, (2) VPR-60 1" VTRs.  
Rates: A/V computer controlled recording, mixing and sweetening \$225/hr., 8-, 16-, 24-track recording \$200/hr., 8-, 16-, 24-track mixing \$180/hr., 16/35mm mag \$65/hr., sound effects preparation and copy room \$50 ADR looping \$150/hr., digital 24-track and PCM 1630 upon request. Call for other rates

**[24+] REMOTE MEN VISUAL MUSIC ENT.**  
also REMOTE RECORDING  
PO Box 791  
Flushing, NY 11352  
(718) 886-6500  
Owner: Aura Sonic Ltd  
Studio Manager: Steven Remote

**[24+] REMOTE RECORDING SERVICES**  
only REMOTE RECORDING  
20 Kennedy Pkwy.  
Monsey, NY 10952  
(914) 425-8569  
Owner: David Hewitt



Studio Manager: Phil Gitomer  
Engineers: David Hewitt and friends  
Dimensions: Black Truck 24 x 8 x 9  
Mixing Consoles: API 44 x 44 factory custom w/560 EQ, Studer 962 14 x 4, Studer 961 10 x 2, (3) Yamaha PM180 6 x 2.

Audio Recorders: (2) Ampex 1200 24-track, (2) Sony 3324 24-track digital, Sony 1610 digital processor 2-track, Sony BVU 820 2-track VCR, Sony PCM-701ES 2-track digital processor, (2) Studer 810 2-track time code center channel.

Cassette Recorders/Duplicators: (3) Technics  
Synchronization Systems: (2) Lynx Systems.  
Echo, Reverb, & Delay Systems: Ursa Major 8X32, Lexicon PCM60, Yamaha REV7.

Other Outboard Equipment: (4) UREI 1176 limiters, (4) UREI LA-3A limiters, (8) dbx 903 limiters, (2) Dynalex noise filters, (4) Valley People Dyna-Mite noise gates.

Microphones: AKG D-12, AKG 414, AKG 451 (CK-5s, VR-1s, etc.), Beyer 88, Beyer 160, Beyer 500, Countryman DIs, E-V RE15, E-V RE16, E-V RE20, Neumann U87, Sennheiser 421, Sennheiser 441, Sennheiser 431, Shure SM17, Shure SM54, Shure SM57 I, Shure SM58, Shure SM77, Shure SM81, Shure SM85, Sony 535, Sony 536, Sony C-48, Sony ECM-50, Wahrenbrock PZMs.

Monitor Amplifiers: Bryston 4Bs.  
Monitor Speakers: (2) Westlake customs w/TAD drivers, (2) MDM 4s, (2) JBL 4411s, (2) Yamaha NS-10s, (2) Auratones, others available.

Video Equipment: Complete interfacing for live television production, V drive shaping, time code readers and distribution, Tektronics scope for sync monitoring, audio DAs, color and B&W cameras on stage, (2) 19" video monitors.

Other Equipment: Portable remote packages for live to 2 track, both analog and digital.  
Rates: Call for quotes.

**[24+] RESOLUTION**  
also REMOTE RECORDING  
1 Mill St.  
Burlington, VT 05401  
(802) 862-8881  
Owner: Bill Schubart  
Studio Manager: Jim Taylor

**[24+] RIGHT TRACK RECORDING**  
168 W. 48th St.  
New York, NY 10036  
(212) 944-5770  
Owner: Simon Andrews  
Studio Manager: Mark Harvey

**[24+] ROCKIN REEL RECORDING**  
636 Larkfield Rd.  
East Northport, NY 11731  
(516) 368-5689  
Owner: David Greenberg  
Studio Manager: David Greenberg  
Engineers: David Greenberg, Scott Kersey, Bob Lessick, Sal Chandon, Tom Schizzano  
Dimensions: Studio 25 x 30, control room 18 x 22.  
Mixing Consoles: Amek/TAC Matchless 36 x 24 w/sub-grouping  
Audio Recorders: Otari MTR-90 24-track, Ampex ATR-102 2-track 1/2", 1/4", 30 ips, Tascam 32 2-track.  
Cassette Recorders/Duplicators: (2) Tascam 122B cassette recorders, (2) Nakamichi 600 cassette recorders  
Noise Reduction Equipment: dbx 216 noise reduction (24 channels)  
Echo, Reverb, & Delay Systems: Lexicon 224, Lexicon PCM70, (2) Yamaha REV7s, Ecoplate II, (3) Lexicon PCM41s, (3) Efectron IIs, Lexicon Prime Time, Eventide 910 Harmonizer  
Other Outboard Equipment: Kepex Gain Brains, UREI 1178 stereo peak limiters, UREI 1176LN limiters, B&B Audio CX 1 compressor/noise gates, B&B parametric EQs, dbx 900 Series limiters, parametric EQs: de-essers, dbx 160X, UREI digital metronome, any and all other outboard gear

available upon request.  
Microphones: Neumann U47s FET, Neumann U87s, Neumann U89, Neumann KM84s, Neumann KM88, AKG 414s, AKG 451s, Sennheiser 421s, Sennheiser 441s, Beyer M160, Shure SM57s, Shure SM58s, E-V RE15s, E-V RE20s, E-V RE55s, E-V RE10s, RCA 77 DX, Sony C-37  
Monitor Amplifiers: UREI 6500 w/compensation Network, BGW 750, BGW 600, BGW 50, Carver M-1 ST, Phase Linear A-15.  
Monitor Speakers: UREI 813 Bs, JBL 4312s, JBL 4311s, Yamaha NS 10s, Auratones, Pyramid  
Musical Instruments: Steinway grand piano, Hammond B 3 w/910 Leslie, Fender Rhodes Dyno-My-Piano, Yamaha DX7, Emulator II, LinnDrum, SP-12, Mesa/Boogie guitar amps, Marshall guitar amps, Fender acoustic guitar amps, Roland JC120 acoustic guitar amps, Roland 505, Roland 808, Akai S900 sampler, any and all other keyboards available upon request  
Other MIDI Equipment: Mitsubishi 2-track digital mix down available, any other outboard gear available upon request

**[24+] RPM SOUND STUDIOS INC.**  
12 E. 12th St.  
New York, NY 10003  
(212) 242-2100  
Owner: Robert Paul Mason  
Studio Manager: Debra Sue Rebbun



**SABELLA RECORDING STUDIO**  
Roslyn Heights, NY

**[24+] SABELLA RECORDING STUDIO**  
49 Oakdale Rd.  
Roslyn Heights, NY 11577  
(516) 484-0862  
Owner: James Sabella  
Studio Manager: Linda Cass  
Engineers: Jim Sabella, Jon King  
Dimensions: Studio 17 x 22, control room: 14 x 16  
Mixing Consoles: Neve 8068 Mark II 32 x 32, VCA grouping automation ready.  
Audio Recorders: MCI JH 114 24 track, Ampex AG 350 2 track, 4 track, Technics M65 2-track cassette, MCI JH-110B 1/2" track mixdown 30ips.  
Echo, Reverb, & Delay Systems: Bel BD80, Bel BD240, Lexicon 200 w/new programs, Bel delay, EMT 140 modified by G Hanks, DeltaLab DDL I Prime Time Model M93, Da/Dad stereo taped delay, DeltaLab, EMT gold foil 240, Lexicon PCM70, REV7, Neumann limiters, (8) Drawmer gates  
Other Outboard Equipment: Roger Mayer guitar pre-amps, Neve II 2264X limiters/compressors, (8) Drawmer gates, Bel BD80, Bel BD 240 w/24/48 sec of sampling time, Universal Audio 1176s, Universal Audio 175Bs, tube limiting amplifiers, Pultec EQP 1Rs, Pultec EQ H2s, dbx 155s, dbx 160s, Roger Mayer noise gates, Eventide Ilanquer, Systems Design vocal pitch changer, EXR exciter  
Microphones: Neumann U67 tube, Neumann U87s, Neumann U47 tube, Neumann KM84s, Neumann KM86, Beyer M88s, Beyer M160s, Beyer Sound Star, AKG D12, AKG 452s, AKG 414s, Sony C37As tube, Sennheiser 421s, Shure SM57s, Shure SM58s, E-V RE20s, E-V U67s, E-V M49s, E-V KM86s.  
Monitor Amplifiers: David Haller 500, Crest power amps  
Monitor Speakers: Big Reds w/special construction, design, and Master Lab crossovers, Auratone 5C, KEF.  
Musical Instruments: Drums, keyboards, OB-Xa, guitar amps, Fender, Hiwatt, Marshall, Fender Strat, Gibson Les Paul, Fender bass Rickenbacker guitar, DX7, OB-8, programming for all keyboards, LinnDrum, DX drums, complete line of keyboards, drum machines  
Video Equipment: JVC 1/2"



**SADDLE RIVER MUSIC, INC.**  
Paramus, NJ

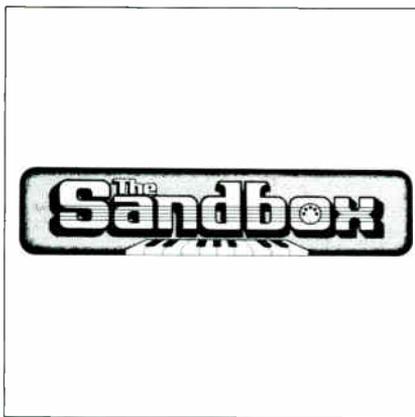
[24+] SADDLE RIVER MUSIC, INC.  
5-105 Farview Ave.  
Paramus, NJ 07652  
(201) 843-3880

Owner: Neil Fishman, Harvey Edelman  
Studio Manager: Ken Pine

Extras & Direction: A dual-Synclavier based music production facility, with an experienced staff capable of realizing the many potentials of digital music technology. Two Synclavier digital music systems, including: 32 voices of FM-synthesis, 16 voices of polyphonic sampling, MIDI, music printing, SMPTE, and extensive catalogues of samples and sampled sounds. Saddle River Music is ideal for pre-production sequencing, video post-production, soundtracks, MIDI-data dumps, and all your other musical needs.

[24-] THE SANDBOX, FAIRFIELD COUNTY, CT.  
c/o Spectral Music Corp.  
250 W. 57, Ste. 1212  
New York, NY 10019  
(212) 757-0110

Owner: Spencer Taylor  
Studio Manager: Spencer Taylor  
Engineers: Ron Bach, Ron Skies



**THE SANDBOX, FAIRFIELD COUNTY, CT**  
New York, NY



**THE SANDBOX, FAIRFIELD COUNTY, CT**  
New York, NY

Dimensions: Room 1: control room 22 x 36. Room 2: vocal iso booth 8 x 12. Room 3: studio 20 x 20.

Mixing Consoles: Neve V-Series 48 x 48, w/Necam 96 automation.

Audio Recorders: (2) Otari MTR-90s 48-track, Studer A820 2-track 1/2", 1/4", Sony Betamax SL 2001 2-track for Nakamichi DMP-100 (digital mastering processor), Studer Revox PR-99 2-track 1/4".

Cassette Recorders/Duplicators: (2) Studer Revox B-215, Yamaha CD2000M.

Synchronization Systems: Roland SBX-80, (2) Lynx time code modules, (3) Adams-Smith modules.

Echo, Reverb, & Delay Systems: Lexicon 224, Lexicon 200, (2) Lexicon PCM70, Lexicon Prime Time, Yamaha REV7, Yamaha SPX90, Roland SDE-2500 digital delay, Korg digital delay, EMT plate.

Other Outboard Equipment: Publison 90 infernal machine, Rockman guitar modules, Drawmer gates, dbx 160 limiter/compressors, Audio & Design Panscan, Aphex Compellor compressors, Eventide 910 Harmonizer, Tube Tech equalizers, UREI 1176N limiter/compressor, dbx 900 Series, Audio & Design Vocal Stresser.

Microphones: (6) Sennheiser MD-421, (2) Crown PZM31s, E-V RE20, Sony C-37A, (3) Shure SMS7, (2) Neumann U87s, AKG 414 EB, (4) AKG 451 EB, Neumann U67.

Monitor Amplifiers: Yamaha PC2002M, Yamaha PM2075, Haller 500, Haller DH220, Crown Micro Tech 1000.

Monitor Speakers: JBL 4435, Tannoy NFM-8, Sentry 100A, Yamaha NS-10M.

Musical Instruments: (2) Yamaha TX816, Kurzweil 250, E mu SP 12, Roland Super Jupiter, Oberheim OB8, Oberheim Matrix 12, Emulator II, Yamaha KX88, Roland Octapads, Fairlight Series III.

Other MIDI Equipment: Simmons MTM, MSB 16/20, MSB Plus, MIDI Mapper, The Jam Box-4, Kurzweil quick load system, Mark of the Unicorn Composer and Performer, Drumfile for SP-12, Digidesign's Sound Designer and Soft-synth, Opcode libraries w/TX editor, Southworth's Total Music, Optical Media's CD-ROM program.

Other Equipment: (2) Macintosh Plus customized computer, w/hard disk and AST 4000 hard drive totalling over 100 megabytes of power, uninterruptible power supply.

Rates: Introductory rates: \$135/hr. 24-track, \$165/hr. 48-track. No surcharges for staff or equipment.

Extras & Direction: The Sandbox is the most technologically advanced MIDI studio in the country. All computers, tape machines, samplers, synths, drum machines, and the console, are interlaced at all times. Our goal has been to incorporate current state-of-the-art equipment with no compromise spared in integrating the systems, the technical side of which is transparent to the client.

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**[24+] HOWARD SCHWARTZ RECORDING**

also REMOTE RECORDING  
420 Lexington Ave., Ste 1934  
New York, NY 10170  
(212) 687-4180  
(800) EAR-SRUS

Owner: Howard M. Schwartz  
Studio Manager: Michael D. Laskow  
Engineers: Howard Schwartz, Roy Latham, Richie Becker,  
Joe Vagnoni, Michael Laskow, Larry Frank, Michael Ungar,  
John Alberts

Dimensions: Too numerous to mention  
Mixing Consoles: Solid State Logic SL 6000E 48 x 32,  
MCI 556 56 x 24, MCI 428 28 x 24, Sony MXP 3000 28 x  
32

Audio Recorders: Sony 3324 24-track digital, (6) MCI  
JH-24 24 track, (15) MCI JH110 4-track, 2-track, mono, (3)  
Scully 112 4-track, 2-track, mono, (2) Studer B20 2-track  
time code

Echo, Reverb, & Delay Systems: EMT 140s, EMT 250,  
EMT 240, Lexicon 224, Lexicon PCM70, Lexicon PCM60,  
Lexicon PCM42, Lexicon Prime Time, Lexicon Delta T, AKG  
BX20, Marshall Time Modulator, (2) Yamaha REV7, (3) Ya-  
maha SPX90.

Other Outboard Equipment: Pultec EQ, Orban EQ, Tru-  
dent EQ, Valley People EQ and gates, dbx 160x, dbx 165,  
Teletronix LA2A, Eventide Harmonizer, Eventide flanger,  
EXR Exciter, UREI 1176, Valley People Dyna-Mites

Microphones: Neumann U87, Neumann U47, Neumann  
KM86, Neumann KM84, AKG C414, AKG D-12, Sennheiser  
441, Sennheiser 421, Shure SM81, Shure SM57, RCA 77,  
RCA 44

Monitor Amplifiers: Crown Delta Omega, Crown PSA-2,  
Crown DC-300, Crown D150A, Hafler M500, McIntosh  
2300, Sound 80

Monitor Speakers: UREI 813, Altec 604E, JBL 4311, Visonik  
803, Auratone

Musical Instruments: Steinway grand piano, Fender  
Rhodes, Yamaha drum kit, Roland, Fender amps.

Video Equipment: 1" video, 3/4" video interlock w/NEC  
TT8000 1" machines, Sony BVU870 3/4", JVC B250, Adams-  
Smith, EECO synchronizers, Videotek monitors, EECO and  
Sony time code generators, extensive custom interface ca-  
pabilities with all formats of time code, video and sync.  
Magna Tech film dubbers, Nagra IVS TC.

**[24+] SECRET SOUND STUDIO**

also REMOTE RECORDING  
147 W. 24th St., 7th floor  
New York, NY 10025  
(212) 691-7674

Owner: David Wilkes, Danny Weiss

**[24+] SELECT SOUND RECORDING STUDIO**

2315 Elmwood Ave.  
Kenmore, NY 14217  
(716) 873-2717

Owner: Bill & Peggy Kothen  
Studio Manager: Chuck Mandrell, Dick Bauerle

**[24+] SERVISOUND**

35 W. 45th St.  
New York, NY 10036  
(212) 921-0555

Owner: Michael Shapiro, Christopher Nelson, Diane Ehr-  
lichman

Studio Manager: David Teig  
Engineers: Daryl Bornstein, Ralph Jones, Kim Stanley, Rob  
Hunter, mgmt

Mixing Consoles: MCI 618 18 x 8, Syncon 28 x 28, Audio-  
tronics 24 x 8, Quantum 6 x 4, (2) Allen & Heath MOD III  
Audio Recorders: Otari MTR-90 24-, 16-track w/dbx 24-  
tracks, (2) Otari 7800 8-track, Otari MX 5050 4-track, Otari  
MX 5050 8 track, Otari CBX 90, (2) Sony APR-5000 2-track,  
Ampex MM 1000 16-track, Ampex 2-track

Noise Reduction Equipment: Dolby A, Dolby C  
Echo, Reverb, & Delay Systems: Ursa Major Star Gates/  
Space Station, Eventide Harmonizer

Other Outboard Equipment: dbx 160 compressors, dbx  
160X compressors, Orban de-essers, dbx noise reduction,  
Kepex, Sony PCM-501ES, Dolby A, Gentner phone patch  
system, Symetrix 511S, PCM-F1, Pultec, Orban parametric  
CD players tech

Microphones: Neumann U47s, Neumann U87s, AKG 414s,  
AKG 140Es, AKG C451s, Sennheiser 441s, Sennheiser  
421s, E V RE20s, E V RE10s.

Monitor Amplifiers: Crown, McIntosh  
Monitor Speakers: JBL 4311s, JBL 4401s, JBL 4430s, JBL  
4312s, E V Sentry 10Cs, Tannoy, Auratones

Musical Instruments: Yamaha DX7, Roland JP3/Jupiter 8,  
CMI Fairlight, LinnDrum, Emulator drum, Steinway grand  
piano, Kurzweil 250, IP3, Korg GD1, Korg Poly-800.

Video Equipment: (4) BTX video interlocks, (4) JVC CR-  
8250U machines, JVC/Sony monitors, (4) video sweeten-  
ing rooms and voice-to-picture, 8-, 16-, 24-track-to-video,  
layback to Studer 1" video layback

Extras & Direction: ServiSound is a one-stop post-produc-  
tion recording facility featuring video-sync scoring and mix-



ing, original composition, including a fully equipped digital  
composition studio with Fairlight CMI and synthesizers, per-  
formance and dubbing to picture, with a full complement of  
24-, 16-, and 8-track mixing studios for the production mul-  
timedia, film and video soundtracks. ServiSound also has  
the latest and one of the most complete music and sound  
effects libraries available, as well as the award-winning  
talents of film and video score composer Michael J. Shapiro.  
ServiSound handles all post-production sound requirements,  
from narration and editing, to scoring, mixing and duplica-  
tion in the final medium.

**[24+] SHAKEDOWN SOUND**

222 W. 37th St.  
New York, NY 10018  
(212) 947-9170

Owner: Arthur Baker  
Studio Manager: Rhonda F. Gebel  
Engineers: Jay Burnett, Rob Paustian, Hugo Dwyer, Dave  
Sussman

Mixing Consoles: SSL 4000E Series 56 x 56, Trident Ser-  
ies 80 32 x 32.

Audio Recorders: (2) Otari MTR-90 24-track, (2) MCI 24-  
track, (2) Ampex ATR 2-track 1/2", MCI JH-110A 2-track 1/2",  
Studer A820 2-track.

Cassette Recorders/Duplicators: Tascam 122, Onkyo.  
Synchronization Systems: SBX-80.

Echo, Reverb, & Delay Systems: Lexicon 224XL, Sony  
DRE 2000, EMT 240 plate, (2) Yamaha REV7, MXR digital  
reverb, Eventide Harmonizer, AMS, MXR, (15) Lexicon and  
Bel digital delays, (3) SBX90s.

Other Outboard Equipment: Neve 8-channel EQ, (12)  
Kepex Gain Brain and Dyna-Mites, (2) Pultec EQs, PCM70s,  
(2) LA-2As, (4) dbx 160x, Drawmer compressors and gates,  
Aphex Compellor, MXR EQs, White EQs, Orban EQs, Pan-  
scan, Dimension D.

Microphones: Neumann, AKG, Shure.  
Monitor Amplifiers: Bryston, Crown  
Monitor Speakers: UREI 813Bs, E-V Sentry 100s, Yamaha  
NS-10s.

Musical Instruments: Yamaha 6'6" grand piano, Emulator  
II, DX7, TX 816, Prophet T-8, Juno 60, Oberheim OB8, Prophe-  
t Pro-1, Casio CZ-101, Memorymoog, Oberheim DMX, DSX  
sequencer, Roland TR707, Roland TR 808, Dr. Click, Yama-  
ha QX-1 sequencer

Other MIDI Equipment: Yamaha MIDI rack.  
Rates: Call for information.



SHEFFIELD AUDIO/VIDEO PRODUCTIONS  
Baltimore, MD

[24+] SHEFFIELD AUDIO/VIDEO PRODUCTIONS  
also REMOTE RECORDING  
13816 Sunnybrook Rd.

Baltimore, MD 21131

(301) 628-7260

Owner: John J. Anosa, Jr.

Studio Manager: Richard Van Horn

Engineers: Bill Mueller, Betsy Harmatz, Victor Giordano,  
Rick Larmore

Mixing Consoles: Solid State Logic 40 inputs, Trident Ser-  
ies 80 32 inputs, NEOTEK 3C 36 inputs, Sontec 24 inputs,  
Neve 8068 32 inputs.

Audio Recorders: (2) Sony PCM3324 24-track digital mul-  
ti-track, (2) Otari MTR90 24-track, (2) Studer A80 24-track,  
Sony 3202 2-track digital, Studer A80 2-track, Studer A80  
2-track 1/2", (6) Studer B67 2-track.

Noise Reduction Equipment: Dolby A.  
Synchronization Systems: BTX Softouch System.

Echo, Reverb, & Delay Systems: AMS DMX 150-80S,  
AMS RMX-16, Lexicon 224XL 8.2 software, EMT 140S stereo  
echo chamber, Lexicon 200, Lexicon Prime Time IIs,  
Yamaha SPX90s, Yamaha D1500s.

Other Outboard Equipment: Sontec parametric EQ, Son-  
tec limiter/compressor, Valley People Kepex II, Eventide  
911 Harmonizer, UREI 1176, UREI LA3A, dbx 160x, dbx 162.  
Microphones: Shure, Neumann, AKG, Sony, Sennheiser,  
Crown PZM.

Monitor Amplifiers: UREI 6500, Crown, Crest  
Monitor Speakers: UREI 813B, UREI 811B, Yamaha NS-10,  
Auratone.

Musical Instruments: Kurzweil 250 advanced sampling  
keyboard w/Sound Block A, B, C, Mac Plus computer and  
Kurzweil disk library, Sonor drums, Yamaha C7 grand piano,  
Hammond B3.

Video Equipment: (5) Ampex 1" VTRs, Ampex ACE editor,  
Ampex Digital Optics (ADO), NEC System 10, Chyron RGU-  
2, Chyron Scribe.

Other Equipment: Ampex 4100L switcher, Ampex VPR-5  
portable 1" recorder, Thompson 601A broadcast cameras,  
Sony BVU-100 3/4" portable video recorder, 16-track 1" audio  
recorder with BTX synchronizer.

Rates: Call for information.  
Extras & Direction: We specialize in multi-track digital  
remote recording using a custom-built 30' Mack truck with  
NEVE console and Sony 3324 recorders. We also specialize  
in audio for video work. 1986 credits include: Jean-Michel  
Jarre—Live In Houston, Thelonus Monk Tribute with Dizzy  
Gillespie, Herbie Hancock, and Wynton Marsalis, PBS  
Windham Hill Special, Rick Derringer, Krokus, Barry  
Manilow.

**[24+] SIGMA SOUND STUDIOS, INC.**

also REMOTE RECORDING  
212 N. 12th St.  
Philadelphia, PA 19107  
(215) 561-3660

Owner: Joseph D. Tarsia  
Studio Manager: Marge Dixon  
Engineers: John Anthony, Taylor Abercrombie, Arthur  
Stoppe, Mike Tarsia, Peter Humphreys, Gene Leone, Joe  
Tarsia.

Dimensions: Room 1: studio 46 x 28, control room 20 x 17.  
Room 2: studio 27 x 24, control room 16 x 16. Room 3: studio  
10 x 7, control room 16 x 20. Room 4: studio 11 x 8.5, control  
room 11 x 9.

Mixing Consoles: Neve 8078 52 x 24 w/GML moving  
ladder automation, MCI JH-636 32 x 32 w/JH-50 automa-  
tion, MCI 32 x 32 custom w/Fadex automation, Sound  
Workshop Series 30 12 x 8.

Audio Recorders: (3) Otari MTR-90-II 24-track, (2) Otari  
MX-5050 MKIII 8-track, Ampex ATR-100 4-track, (4) Ampex  
ATR-100 2-track, (2) Sony PCM-3202 2-track DASH digital,  
Otari MTR-10 2-track

Cassette Recorders/Duplicators: Aiwa F770, Infonics  
System 200A.

Noise Reduction Equipment: Dolby M24, Dolby 361, dbx  
K9-22 26 channels.  
Synchronization Systems: BTX Shadow, Audio Kinetics  
Q.Lock 3.10

Echo, Reverb, & Delay Systems: (4) EMT 140 stereo, (2)  
Lexicon 224, Yamaha REV7, Lexicon PCM70, (4) Yamaha  
SPX90, (2) Eventide H910 Harmonizer, Eventide H949 Har-  
monizer, (2) Lexicon Prime Time, Bel BD-80, Lexicon PCM42  
and many more.

Other Outboard Equipment: UREI LA-4A, UREI 1176LN,  
Gain Brain II, dbx 160, Kepex II, Drawmer DS-201, Pultec  
EQP-1A, Audio & Design Panascan, Orban 622B paramet-  
ric EQ and many more.

Microphones: Altec, AKG, Beyer, B&K, Crown PZM, E-V,  
Neumann, RCA, Sennheiser, Shure, Sony.  
Monitor Amplifiers: Crown PSA-2, Crown DC-300A,  
Crown D-150.

Monitor Speakers: UREI 813, JBL 4301, JBL 4311, JBL 4312,  
Tannoy SRM-12B, Yamaha NS-10, ROR E3, others available  
on request.

Musical Instruments: Steinway grand piano, Yamaha  
grand piano, Hayman drums, Tama drums, stereo Rhodes  
electric piano, Hammond B-3 organ w/Leslie, Yamaha DX7,  
Prophet-5, Oberheim DMX, Simmons SDS5, Yamaha CP30,  
Hohner D6 clavinet, Ampeg instrument amplifiers, Fender  
instrument amplifiers, Mesa instrument amplifiers, Acoustic  
instrument amplifiers, various percussion.

Video Equipment: Sony BVH-2000 1" VTR, Sony VO-

5850 3/4" VCR, JVC CR-825OU 3/4" VCR, VHS and Beta VCRs.

**Other Equipment:** Multi-track Magnetics R104B/DCS mag film dubber, 35mm 1-, 3-, or 4-track, 16mm 1-track.

**Rates:** Available on request.

**[24+] SIGMA SOUND STUDIOS OF NEW YORK**

1697 Broadway  
New York, NY 10019  
(212) 582-5055

Owner: Joe Taysia

Studio Manager: Hank Meyer

Engineers: Glenn Rosenstein, James Dougherty, John Convertino

Dimensions: 5: studio 40 x 28, control room 20 x 23. 7: studio 30 x 20, control room 20 x 20. 8: studio 15 x 15, control room 20 x 25.

**Mixing Consoles:** Solid State Logic 6000 Series E 40 x 40 w/Total Recall, Solid State Logic 6000 Series E 64 x 48 w/Total Recall, MCI custom console 32 x 24 w/ARMS automation.

**Audio Recorders:** (4) Studer A800 Mark III 24-track w/ Dolby NR, (4) Studer A820 2-track, (7) Ampex ATR-100 2-track, (2) Ampex ATR-100 4-track, Nakamichi DMP-100 2-track digital.

**Cassette Recorders/Duplicators:** (8) Nakamichi MR-1 cassette decks, (8) Aiwa F990 cassette decks.

**Noise Reduction Equipment:** Dolby SR 4-track, Dolby A 96-track, dbx 24-track.

**Synchronization Systems:** (8) Lynx Timeline synchronizers.

**Echo, Reverb, & Delay Systems:** EMT 250, (2) Lexicon 224XL w/LARC, (2) AMS DMX, AMS RMX, Lexicon PCM70, (4) Yamaha SPX90, (3) EMT 240, (3) EMT 140 stereo, (3) EMT 140 mono, (3) Lexicon 200.

**Other Outboard Equipment:** Publison, (4) 1176 LN, (4) dbx 165, Yamaha REV7, Lexicon Prime Time II, (8) Lexicon PCM42, Bel DB-80, Roland Dimension D, Castle Model III stereo phaser, MXR O1A.

**Microphones:** (3) Neumann U47 tube, Telefunken U47 tube, large assortment of U87s, SM57, 414, 451, 421, KM84, U47 FET, D-12E.

**Monitor Amplifiers:** (6) Crown PSA-2.

**Monitor Speakers:** (3) Yamaha NS-10, (3) E-V Sentry 100A, (3) ROR E3, MDM-4, Big Reds, (2) Fostex JS-3D.

**Musical Instruments:** (2) Yamaha Custom Recording Series drums w/Zildjian and Paiste cymbals, Yamaha grand piano, Steinway piano, (2) Fender Rhodes, LinnDrum, Hammond C3 organ w/Leslie tone cabinet.

**Other MIDI Equipment:** Mini Dr. Click, (2) MIDVerb, (2) MIDIfx, Roland SBX80.

**Video Equipment:** (2) JVC 8250 U-Matic video playback deck, Sony Beta video deck, (2) Sony CVM 1900 video monitor, (2) Barco video monitor.

**Other Equipment:** (2) Roland JC-120 guitar amps, (2) Mesa/Boogie guitar amps, Fender Twin guitar amp, Fender Concert guitar amp.

**Rates:** Available upon request.

**[24+] SKYLINE STUDIOS, INC.**

36 W. 37th St.  
New York, NY 10018  
(212) 594-7484

Owner: Paul Wickliffe III, Lloyd P. Donnelly

Studio Manager: Jimmy English

Engineers: Paul Wickliffe III, Roger Moutenot, Scott Ansell, Knut Bohn, Francis Manzeila, Mark Genlan, Barbara DeMauro, Tom Durack

Dimensions: Studio 30 x 30 x 13 plus two iso booths, control room 25 x 20 x 10.

**Mixing Consoles:** Solid State Logic SL4000E 56-channel main frame w/48-channel Total Recall.

**Audio Recorders:** Otari MTR-90 II 24-track, Studer A80 MKIII 2-track 1/4", 1/2", Studer B-67 2-track and full-track mono, Ampex ATR-102 2-track 1/4", Ampex 440-B 4-track 1/2", Technics 1500 2-track 1/4", (4) TEAC CC-3RX cassette recorders.

**Echo, Reverb, & Delay Systems:** (2) EMT 140 plates, Lexicon 224XL digital reverb, Delays: Lexicon Prime Time II, Lexicon PCM41, (2) Lexicon PCM42, Marshall Time Modulator, Marshall Tape Eliminator, Effectron II, Cooper Time Cube, Roland RE-501, (2) Eventide 949 Harmonizers, Eventide Instant Flanger, CompuEffectron, reverbs, EMT 240 Gold Foil, Yamaha REV7, AMS RMX 16, Quantec QRS, Delays: AMS DMX 15-80S.

**Other Outboard Equipment:** Dolby A 28 channels, (5) Neve three-band EQ, (2) Pultec EQ-P1s, Pultec MEQ-5, (2) API 550As, (4) API 560s, (2) Neve LA-2 compressor/limiters, (2) UREI 1176s, (2) dbx 160Xs 2-channel, (4) Kexep IIs, (2) Drawmer noise gates, (2) Valley People Trans-amps, UREI digital metronome.

**Microphones:** Neumann: (2) U67s, (2) U47 tubes, (2) U47 FETs, M49, (2) KM84s, (4) U87s, AKG: (4) 451s, (4) 414s, (2) D12s, (2) 202s, Sennheiser: (4) 421s, 441, 815 shotgun; Shure: SM81, (3) SM57s, (3) SM58s, SM54s; Sony: ECM22P, ECM 33, C37P, 37A tube; E-V: RE20, RE15, (2) 666s; Beyer: (2) M88s, (2) M160s; RCA: (2) 77 DXs, 44; Altec: 688B, (2) "salt-shakers."

—LISTING CONTINUED ON NEXT PAGE

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—LISTING CONTINUED FROM PAGE 181

**Monitor Amplifiers:** (2) Yamaha 2200, McIntosh 2100.  
**Monitor Speakers:** UREI 813 (custom enclosures), Yamaha NS 10s, Celestion 100s, E V Sentry 100s, AR 18s, Auratone, ROR cubes  
**Musical Instruments:** Steinway B grand piano C 1896 (rebuilt), Fender Rhodes suitcase 73, Hammond C-3 w/ Leslie speaker, Yamaha recording series drum kit w/ three snares and five toms plus K Zildjian cymbals, LinnDrum, Fender, Marshall and Ampeg guitar and bass amps, Roland JC 120 amp, Synclavier II  
**Video Equipment:** JVC ¼" VTR w/ 26" monitor  
**Rates:** Available upon request  
**Extras & Direction:** Our 5,000 sq. ft. facility includes a large comfortable lounge and producer's office. Digital recording and Synclavier pre production are readily available to our clients. Our clients include Nile Rodgers, Duran Duran, Al Jarreau, Miles Davis, Jennifer Rush, Thompson Twins, Sheena Easton, Philip Bailey, Laurie Anderson, Rick Derringer, Mason Ruffner, Ahmad Jamal, Lou Reed, Grandmaster Flash, Bonnie Tyler, Michael Franks, The Spinners, Shannon, Barry Manilow, Bronski Beat, Judy Collins, Steve Forbert, Air Supply, John Cale, The Bongo's, Burning Spear, Steps Ahead, The Manhattans, Special FX, Dizzy Gillespie, Lillo Thomas, Mark Egan, Joe Piscopo, Robert Duvall, Ray Goodman and Brown

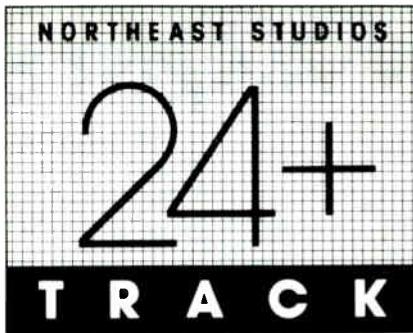
**[24+] SLEEPY HOLLOW SOUND, INC.**  
also REMOTE RECORDING  
39 Cedar St.  
Dobbs Ferry, NY 10522  
(914) 693-8537  
Owner: Mark Friedman  
Studio Manager: Mark Friedman

**[24+] SOLAR STUDIOS, INC.**  
292 Fort Plains Cntr., Rte. 9  
Howell, NJ 07731  
(201) 780-8732  
Owner: Jon Mayes  
Studio Manager: Ken Glover



**SONIC IMAGES PRODUCTIONS, INC.**  
Washington, DC

**[24+] SONIC IMAGES PRODUCTIONS, INC.**  
also REMOTE RECORDING  
4590 MacArthur Blvd. NW  
Washington, DC 20007  
(202) 333-1063  
Owner: John Ramo, Jolie Barbieri, Zenon Slawinski  
Studio Manager: Zenon Slawinski  
Engineers: Zenon Slawinski, John Ramo, Dave Mackin, Malcolm Peplow  
**Dimensions:** Room 1: studio 16 x 14, control room 22 x 14, Room 2: studio 12 x 12, control room 12 x 9  
**Mixing Consoles:** NEOTEK Series II 28 x 24, Sound Work shop Logex Series 20 x 16  
**Audio Recorders:** MCI JH 24 24-track, Otari 5050 8 track, Sony PCM F1 2-track digital, Otari MTR-12 3 track, Otari MKIII 5050 2-track, (2) Otari 5050B 2 track  
**Cassette Recorders/Duplicators:** (2) NAD 6050C, Technics M222  
**Noise Reduction Equipment:** (4) dbx 150X  
**Synchronization Systems:** Audio Kinetics Q Lock Eclipse.  
**Echo, Reverb, & Delay Systems:** (2) Yamaha REV7, Yamaha SPX90, MXR digital delay, others upon request  
**Other Outboard Equipment:** dbx 166 compressor/limiter w/ noise gates, (2) Symetrix compressor/limiters, others upon request  
**Microphones:** (2) Neumann U87, (4) Sennheiser 421, (2) AKG 460B w/CK61 Cardioid head, Shure SM58, Shure SM57, Shure SM56, (2) E V RE20, AKG 451  
**Monitor Amplifiers:** Yamaha M60, Yamaha M40, (2) Ya-



maha P2075C  
**Monitor Speakers:** (2) KEF 104 2, (4) KEF 103 2, (4) Auratone  
**Musical Instruments:** Kurzweil 250 Music System w/ 50k sampling and extensive sounds stored on Macintosh disks, Ibanez MIDI guitar controller, Yamaha DX7 w/ extensive library, Roland Planet P MIDI module, Roland Juno 6 synthesizer  
**Other MIDI Equipment:** Roland MSQ 700 digital recorder.  
**Video Equipment:** Sony VO 5850 ¼" VCR, Sony VO 5800 TC ¼" VCR, Sony 5600 ¼" VCR, Sony RM 440 editor  
**Other Equipment:** Pyxis digital video effects generator, Laird character generator, Laird 1030 color encoder, EECO time code reader, (2) Sony SLO-383 ¼" VCRs w/ Sony editor  
**Rates:** 24 track A/V Q Lock: \$120/hr 24 track mix \$90/hr 8 track \$60/hr ¼" off line editing \$60/hr, ½" \$55/hr  
**Extras & Direction:** Sonic Images specializes in award winning music productions for all A/V presentations. All styles and techniques are used from solo instruments to orchestral instruments to orchestral scores. Working in a LEDE controlled environment designed by Neil Muncy insures you the most accurate audio image available today. With the latest audio/ video synchronization tools on hand, we can offer your show the highest quality audio production at affordable prices. Our award-winning video team produces a wide range of programs from TV spots and PSAs to art films and documentaries. Call us for a bid on your next project whether it be music, a script, talent or the complete presentation. Ask us about our current CD I developments. You'll like what you hear.



**SONIC SOUND RECORDING STUDIOS**  
Freeport, LI, NY

**[24+] SONIC SOUND RECORDING STUDIOS**  
292 Locust Ave.  
Freeport, LI, NY 11520  
(516) 223-2788

Owner: Gerry Comito  
Studio Manager: Alan Scott Plotkin  
Engineers: Gerry Comito, Alan Scott Plotkin, Artie Ware III, Al Fak'on, Denny McNeerney  
**Dimensions:** Room 1: studio 25 x 14, control room 18 x 14, Live room studio 22 x 14.  
**Mixing Consoles:** Trident Series 80B 32 x 24 (60 input on mixdown) w/ 40 input Megamix computer automation w/ hard disk storage and cut and paste features  
**Audio Recorders:** Studer A 80VU Mark IV 24-track, TEAC/Tascam 80 88 track, (2) Ampex ATR 1022 track ½" and ¼", Technics 1500 US 2 track  
**Cassette Recorders/Duplicators:** Otari DP 40 50 OCF hi speed duplicator/stereo, (2) Nakamichi MR I cassette decks  
**Echo, Reverb, & Delay Systems:** Lexicon 224X w/LARC,

Quad 8 System 5, Lexicon PCM60, EMT 140 stereo tube plate, Ecoplate, Lexicon Prime Time I and II delays, MasterRoom Super C reverb, DeltaLab DL4, (2) Loft 440s, Roland 3000 and 1000 digital delays, Lexicon Delta 92.  
**Other Outboard Equipment:** (2) dbx 9000 Series racks compressor/limiters, parametric EQs, noise gates, de-essers, flangers, (2) LA-2A tube limiters, Tubeteach and Pultec EQs, (4) Ashly noise gates, (4) Drawmer noise gates, (2) MXR pitch transposers, Orban 526A de-esser, EXR Exciter, UREI LA 4s, UREI 532 graphic EQ, (6) Omni Craft gates  
**Microphones:** 70 different mics including; Neumann, AKG, E V, Sennheiser, Audio Technica, Shure, Telefunken U47 tube, Sony tube, PZM, etc.  
**Monitor Amplifiers:** (2) Carver PM 1 5S w/ JBL 5234 crossover, UREI 6500, Crown 175, Crown 150, (2) AB 105s, Technics 9060  
**Monitor Speakers:** JBL 4430, JBL 4401, JBL 4301, Yamaha NS 10, Auratone, Fostex RN 780s, AR 18b  
**Musical Instruments:** Kawai grand piano, Simmons drums, Ludwig, LinnDrum, Fender Rhodes, Hammond, Marshall, Mesa/Boogie, Gallien-Krueger, HH, Moog Source.  
**Other MIDI Equipment:** Ensoniq Mirage, Emulator SP-12 sampling, percussion, Yamaha DX7, Akai digital sampler, Roland MSQ-700 sequencer, SPX 80 sync box, Mini Doc, Oberheim OB-8  
**Rates:** Call for rates

**[24+] SORCERER SOUND**  
19 Mercer St.  
New York, NY 10013  
(212) 226-0480  
Owner: Acoustilog, Inc.  
Studio Manager: Vera Beren  
Engineers: Dave Avidor, Mario Salvati, Robert Derby, Jim Goatley  
**Dimensions:** Room 1: studio 17 x 27 Room 2: studio BIG, control room 18 x 22, Room 3: control room 15 x 12  
**Mixing Consoles:** Acoustilog GB-1, Neve GML, Acoustilog GB-2  
**Audio Recorders:** Studer A800 24 track, Studer A80 MKIII 24 track, MCI JH 114 24-track, (2) Studer A80 2-track, MCI JH 110B 2-track, (6) Technics 1500 2 track, (2) Tascam 80-8 8 track, Ampex 440B 4 track  
**Cassette Recorders/Duplicators:** (5) Onkyo, (3) Hitachi.  
**Noise Reduction Equipment:** Dolby and dbx for all machines.  
**Synchronization Systems:** Studer TLS-4000 synchronizer.  
**Echo, Reverb, & Delay Systems:** Lexicon 224X w/LARC, Lexicon 224, EMT 251, (2) EMT 140 stereo plate, (3) Lexicon PCM60, (3) Lexicon PCM42, Lexicon PCM70, Yamaha REV7, Yamaha SPX90, (2) Publison DHM 89, (2) Harmonizer 949, Lexicon Prime Time II, Lexicon Prime Time I, (2) DeltaLab DL1.  
**Other Outboard Equipment:** UREI graphic and parametric EQs, ROR EQs, Valley People Kepex IIs and Gain Brain IIs, Pultec EQs, Teletronix LA-2As, Panscan, API EQs, dbx 162, dbx 164, Phase Linear autocorrelator  
**Microphones:** AKG: 414, 461, 535, 224, D160, D12, D112, D310, D320, D330, C33, C34, C422, Sony C22, Sony C37, Neumann U87, Neumann U47 tube, Neumann KM84, Beyerdynamic M160, Sennheiser 421, Sennheiser 441, Shure SM57, Shure SM58, Shure 545, RCA 77DX, RCA 44BX, E-V RE15, RE16, RE20, DS35 664, PZM  
**Monitor Amplifiers:** SAE, Ramsa, BGW  
**Monitor Speakers:** Gauss, Altec, Yamaha NS-10, E V Sentry 100, ROR B, C, D, E.  
**Musical Instruments:** Steinway B 7', Yamaha DX7, Yamaha TX 816, Yamaha CX5M, Yamaha RX-11, Roland JX-8P, Roland MX 80, Roland SBX 80, Casio CZ 101, LinnDrum, E mu SP 12, Prophet 2000, Prophet 5, Tama drums, Slingerland drums, Mesa/Boogie amps, and many Fender amps, Hammond organ and Leslie, Clavinet D6  
**Other MIDI Equipment:** Dr. Click, Commodore 128 w/ Syn-tech software, Roland SBX 80.  
**Video Equipment:** Sony BVU 200-A w/ lock-up.  
**Rates:** Call for rates

**[24+] SOUND HEIGHTS RECORDING STUDIOS**  
124 Montague St.  
Brooklyn, NY 11201  
(718) 237-0250  
Owner: Sounds Heights Recording Studios, Ltd.  
Studio Manager: Louis Lolredo

**[24+] SOUND INVESTMENTS RECORDING STUDIO**  
also REMOTE RECORDING  
315 Atherton St.  
Duryea, PA 18642  
(717) 346-4299  
Owner: Tom Borthwick  
Studio Manager: Tom Borthwick  
Engineers: Tom Borthwick  
**Dimensions:** Room 1: studio 11 x 18 Room 2: control room 11 x 13 Room 3: studio 8 x 10.  
**Mixing Consoles:** Tascam Model 15 24 x 8, Studiomaster 16 x 2  
**Audio Recorders:** Ampex MM 1200 24 track 2", Ampex



**SOUND INVESTMENTS RECORDING STUDIO**  
Duryea, PA

MM 1000 16 track 2" or 8-track 1", Sony F1 2-track digital processor w/S1900 Beta, Tandberg TD 20 2-track 1/4" 1/2-track.

**Cassette Recorders/Duplicators:** TEAC cx3 cassette w/HX Pro, Harman Kardon cd 301 cassette w/HX Pro, Harman Kardon cd 401 cassette w/HX Pro.

**Echo, Reverb, & Delay Systems:** Yamaha R1000, Korg SDD #3000 delay, custom built plate reverb, tape echo.

**Other Outboard Equipment:** Orban 414 stereo compressor/limiter, Orban stereo synth, Orban de-esser, UREI digital metronome, Moog parametric EQ, Moog 12 stage phaser, Tapco EQ, Roland vocoder.

**Microphones:** (3) Sennheiser 441, (3) Sennheiser 421, AKG 414, Beyer M500, (3) Audio Tech, (2) Shure SM57, (2) E-V.

**Monitor Amplifiers:** Phase Linear 400, Peavey CS400, Peavey M2600.

**Monitor Speakers:** UREI 811B, JBL 4313B, custom JBL.

**Musical Instruments:** Baldwin grand piano, Oberheim Stretch DX, Korg DW 8000, Korg Poly 61, Multimoog, Clavinet E7, Leslie 147.

**Rates:** 24-track recording and mixing \$35/hr. 2-track location recording: \$50/hr.

**Monitor Amplifiers:** (3) Crown DC 300As, Crown D75, Crown D60, QSC-31.

**Monitor Speakers:** Big Reds (w/new Gauss 3588 speakers), Yamaha NS-10M, RORs.

**Musical Instruments:** IBM Octave Plateau 64-track sequencer, LinnDrum, DMX drum machines, Yamaha grand piano, Prophet 5, Korg CX3, D6 clavinet, Fender Dyno-My Rhodes, Fender Twin, Music Man, Marshall amplifiers, Yamaha DX7, Kurzweil 250, Mirage, Yamaha power drums, Seymour-Duncan amp.

**Extras & Direction:** Probably the most unique feature of Sound Lab Studios is their service of custom recording and duplication of digital drum machine sound chips. Unlike Linn, for example, which requires sounds for chips on analog tape that has already suffered analog degeneration, Sound Lab permits you to record your favorite drum or dog bark direct from mic to chips. Every producer's dream come true. Sound Lab will be upgrading their track capability to 48-tracks in the near future. Sound Lab is upgrading to full MIDI capabilities.

[24+] **SOUND ON SOUND RECORDING, INC.**  
322 W. 45th St.  
New York, NY 10036  
(212) 757-5300

Owner: Sound On Sound Recording, Inc.  
Studio Manager: David Amien

**Engineers:** Michael McMadden, David Amien, Wesley Derbyshire

**Dimensions:** Room 1: studio 30 x 25, control room 20 x 18. Iso room 1: 15 x 12. Iso room 2: 10 x 6.

**Mixing Consoles:** NEOTEK Elite 40 x 26.

**Audio Recorders:** MCI JH24 24-track, Tascam MS-16 16-track 1", Otari MTR-12 4-track and 2-track 1/2", Otari MX-5050-BII 2-track 1/4", Sony PCM-F1 2-track digital.

**Cassette Recorders/Duplicators:** Tascam 122, (2) Nakamichi MR2.

**Noise Reduction Equipment:** dbx for 16-track and 1/4".

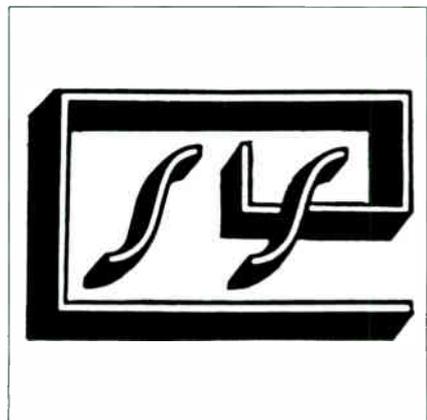
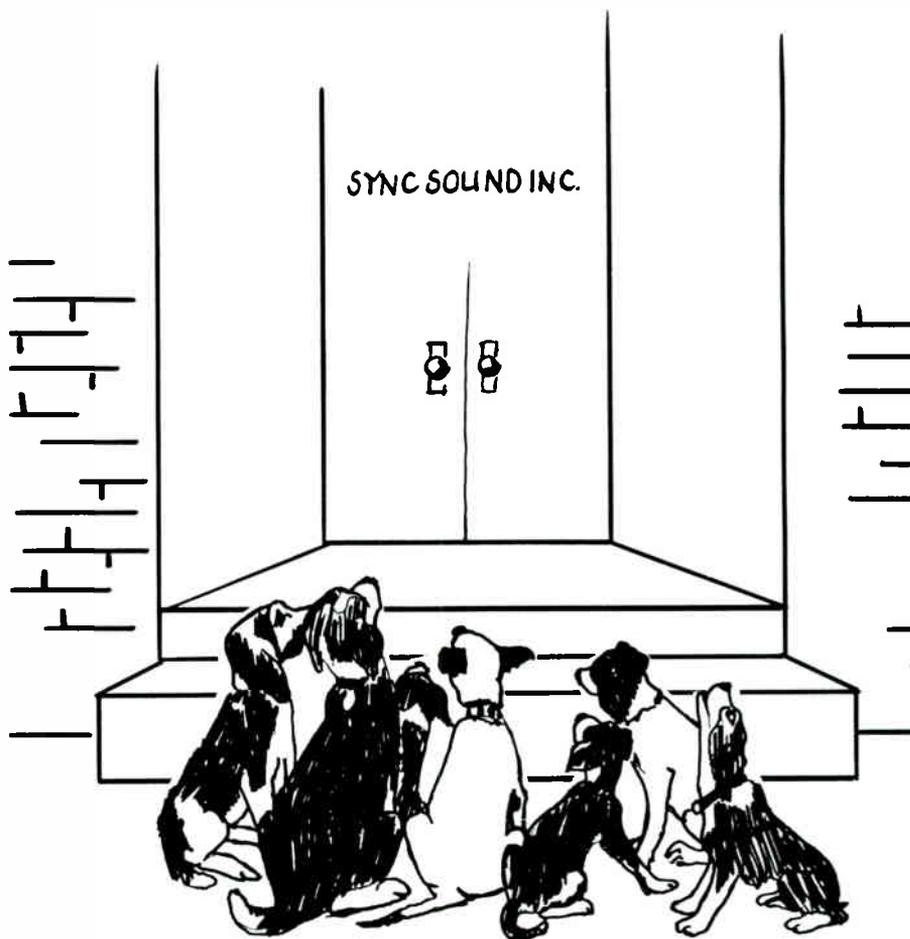
**Synchronization Systems:** Adams-Smith Zeta III, Roland SBX 80.

**Echo, Reverb, & Delay Systems:** Lexicon 480L, Lexicon PCM70, Lexicon Prime Time II, (2) Lexicon PCM42, (2) Roland SRV-2000, Yamaha REV7, ART DR-1, (2) Korg SDD-2000, (2) DeltaLab CompuElectron.

**Other Outboard Equipment:** Eventide H949, (2) Tube-tech PE1B, (2) UREI 1176, (2) UREI LA4, Teletronix LA2A, (2) dbx 166, (2) Drawmer dual gates, Valley People Dyna-Mite, dbx 165A, Aphex Type C.

**Microphones:** (2) Neumann U87, Neumann U47 FET, (2) Neumann U89, Neumann U67, Neumann U47 tube, (4)

—LISTING CONTINUED ON NEXT PAGE



**SOUND LAB STUDIOS LTD.**  
Brooklyn, NY

[24+] **SOUND LAB STUDIOS LTD.**  
2687 E. 14th St.  
Brooklyn, NY 11235  
(718) 934-8585

Owner: Peter C. Diono

Studio Manager: Michael Potash

Engineers: Peter Diono, Michael Potash, Manor Salvati

Dimensions: Studio 30 x 20 x 10, control room 20 x 14 x 10.

Mixing Consoles: Hamson 4832 48 x 96 (full computerization).

Audio Recorders: MCI JH-24 24-track, MCI JH 110B 2-track (1/4" or 1/2" format), Studer A80 24-track.

Echo, Reverb, & Delay Systems: Lexicon 224-X, Lexicon 200 digital reverb, Lexicon SDR-1000, Lexicon Prime Time, Lexicon DDL-2 digital delays, Lexicon Super Prime Time, tape delays, AMS digital delay.

Other Outboard Equipment: (10) Kepex, (6) Gain Brains, (2) Orban parametric EQs, UREI 1176 limiters, dbx 161 comp/lim., Eventide H949 Harmonizer, MXR doubler/flanger.

Microphones: Neumann U89, Neumann U87, Neumann U46, Neumann KM84, AKG 414, AKG 451EBs, AKG D244, Tube, Sennheiser 441s, (5) Sennheiser 421s, E-V RE20, Shure SM57s, Shure SMS8s.

(212) 246-5580

**SYNC SOUND**  
AUDIO POST-PRODUCTION  
450 West 56 St., NY, NY 10019

Circle #130 on Reader Service Card

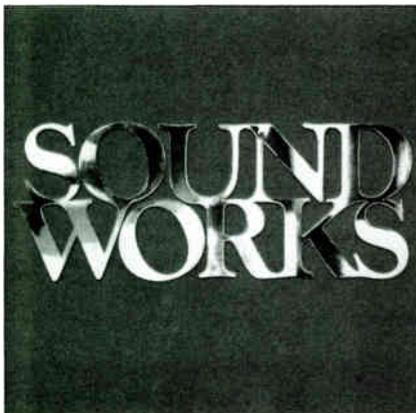
—LISTING CONTINUED FROM PAGE 183

AKG 414, (2) AKG 451, (6) Sennheiser 421, Sennheiser 441, (2) E-V RE20, E-V PL10, (2) Shure SM81, (4) Shure SM57, Shure SM58, Beyer M500, Beyer M201.  
**Monitor Amplifiers:** (3) Bryston 4B, (2) Yamaha PC2002.  
**Monitor Speakers:** UREI 813B, JBL 4430, JBL 4401, Yamaha NS-10M.  
**Musical Instruments:** Steinway B 1898, Hammond B3 w/Leslie 147, Yamaha DX7, Yamaha CP70B, Gretsch five-piece drum kit w/Zildjian cymbals and Yamaha hardware, Prophet 600, Oberheim DX w/stretch, Chroma Polaris, Fender Rhodes 73.  
**Other MIDI Equipment:** Yamaha QX-7 MIDI sequencer.  
**Video Equipment:** Sony SL-HF450 Beta VCR, JVC CR-8250U ¾" VCR, Sony 27" stereo monitor.  
**Other Equipment:** (2) Carvin guitar amps, Carvin bass amp.  
**Rates:** Contact studio manager for details and block packages.

**[24+] SOUND SELLER PRODUCTIONS**  
 Rt. 49  
 Pittsfield, MA 01201  
 (413) 499-3899  
 Owner: Steven Schwarz

**[24+] THE SOUND SHOP**  
 321 W. 44th St.  
 New York, NY 10036  
 (212) 757-5837  
 Owner: Christopher Weaver

**[24+] THE SOUND WORKS**  
 also REMOTE RECORDING  
 69 Washington St.  
 Newburyport, MA 01950  
 (617) 465-2602  
 Owner: Phillip A. Walker  
 Studio Manager: Phillip A. Walker



SOUND WORKS DIGITAL STUDIOS, LTD.  
 MUSIC/PICTURES  
 New York, NY

**[24+] SOUND WORKS DIGITAL STUDIOS, LTD.**  
**MUSIC/PICTURES**  
 254 W. 54th St.  
 New York, NY 10019  
 (212) 247-3690  
 Owner: Charles Benanty  
**Studio Manager:** Christine Sabia  
**Engineers:** Eric Stark, Dennis Mitchell, Alan Gregorie, Ron Saint Germaine, Steve Peck, Ed Krupski  
**Dimensions:** Room 1: Stage A 25 x 32, control room 20 x 20. Room 2: Stage B 60 x 60 x 40  
**Mixing Consoles:** SSL 6000E 48 x 48 w/total recall, Soundcraft 200B outboard mixer.  
**Audio Recorders:** Sony 24-track digital, Mitsubishi X80 2-track digital, Mitsubishi X800 32-track digital, 3M 32-track digital, 3M 4-track digital, (2) Studer A-80, Otari MTR-90 Mark II 24-track, Otari MTR-12 2-track, Sony 1610, (2) Sony PCM-F1.  
**Synchronization Systems:** Adams-Smith SMPTE lock-up to Sony BVU 800, Sony BVH 2000.  
**Echo, Reverb, & Delay Systems:** Lexicon, AKG, Eventide, live chambers, AMS RMS 16, AMS DMS 15, (4) EMT plates, Lexicon 480, Yamaha REV7, Yamaha SPX90, Lexicon PCM70  
**Other Outboard Equipment:** Neve EQ rack, API EQ rack, Pultec rack, GM1 EQs, Teletronix rack, dbx 160s, dbx 902s, Drawmer gates, Lexicon PCM42s, Lexicon 224, 224XL, Prime Time, Eventide 2016, Eventide 949, Eventide 910, Quantec Scamp Rack, Publison Internal 90, Yamaha 2600,



Wendel Jr., Kepex rack, Focusrite rack, Tube-Tech PE1A, PC Electronics 2290, MXR O1A, Burwin 1000, Panscan, dbx 160X, Marshall time modulator, Eventide flanger and phaser, Roland Dim. D, UREI 1176 comp., Roger Meyer comp., Complex comp.  
**Microphones:** AKG, Sennheiser, Neumann, E-V, and others.  
**Monitor Amplifiers:** McIntosh, Crown, Bryston  
**Monitor Speakers:** UREI 813s, Yamaha, Visoniks, JBLs.  
**Musical Instruments:** Wendel, DX7, Linn, Roland, B-3, Yamaha grand, drums, ARP, OB-Xa, Synergy, Kurzweil 250, Emulator II w/programming, assorted keyboards.  
**Video Equipment:** EditDroid/SoundDroid suite, off-line/on-line ½", ¾", 1". Complete camera and soundstage package. Shooting Stage A (insert), 25 x 25 x 12. Stage B 60 x 60 x 40. Complete digital audio for video in-studio or location. Pre-production and post  
**Rates:** Half-day, full-day, week, month or year. On request according to project requirement.  
**Extras & Direction:** Clients include: Steely Dan, Stevie Wonder, John Denver, Donald Fagen, Diana Ross, Robert Palmer, Joan Jett, Joe Cocker, Kiss, Ruben Blades, Steel Pulse, Channel, Harry Belafonte, Chaka Khan, Aerosmith, Scorpions, Lene Lovich, Lou Reed, Talking Heads, Kashif, Eddie Murphy, Nina Hagen, Camero, Krokus, Motohara Sana, Whitney Houston, Laurie Anderson, Duran Duran, Thompson Twins, Barry Manilow, Bronski Beat, Tarumasa Hino, MTV, ABC-TV, HBO, George Benson, Freddie Jackson, Communards, Daryl Hall, Cindy Lauper, Big Audio Dynamite, Loose Ends, Lionel Richie, Pseudo Echo, and others.

**[24+] SOUNDESIGN**  
 Main Street Gallery, Main St.  
 Brattleboro, VT 05301  
 (802) 257-1555  
 Owner: Billy Shaw, Simon Challouf  
**Studio Manager:** Simon Challouf  
**Engineers:** Billy Shaw, Joe Podlesny, Steve Gamelin, Sherman Rhodes  
**Dimensions:** Studio 28 x 30 w/separate iso room, control room 28 x 18  
**Mixing Consoles:** Sound Workshop 28 x 32.  
**Audio Recorders:** Sony/MCI JH24-24 24-, 16-, 8-track, Sony/MCI JH 2-track, Otari MX5050-8 8-track, Otari MX5050 2-track, Revox A-77 2-track, Audiotronics AV132B 2-track reel-to-reel duplicator hi-speed.  
**Cassette Recorders/Duplicators:** (10) Akai FX71, Otari DP 4050 hi-speed.  
**Noise Reduction Equipment:** (24) dbx  
**Echo, Reverb, & Delay Systems:** Yamaha REV7 digital reverb, (2) Yamaha SPX90 digital reverb, Lexicon digital reverb, Master-Room XL-210 stereo reverb, Korg sampling digital delay, Effectron DDL, (2) MXR DDL, Sound Workshop stereo reverb.  
**Other Outboard Equipment:** (2) MXR flanger/doublers, (8) Valley People Kepex, (4) Ashly limiters, (2) Teletronix LA-2A tube compressors, (2) dbx Over Easy compressors, EXR exciter, (2) Ashly stereo parametric EQ, (4) Omni Craft noise gates, Altec-Voicette 27-band graphic EQ, MXR 15-band stereo EQ.  
**Microphones:** (4) Neumann U87, Neumann KM84, Neumann KM85, AKG C414, AKG 451E, (8) Sennheiser 421, (2) Sennheiser 441, (2) Sennheiser 403, (2) E-V RE20, (2) E-V RE15, (12) AKG SE-SE-10.  
**Monitor Amplifiers:** Crown DC 300A, BGW, Soundcraft  
**Monitor Speakers:** JBL 4311, custom air suspension system, (2) Auratones.  
**Musical Instruments:** Yamaha 6'6" grand piano, Ludwig drum set, Oberheim DMX drum machine, Fender Twin reverb, Fender Pnnceton, (2) Crate amplifiers, Ampeg B-15, Yamaha DX7, Roland JX-3P  
**Rates:** 24-track \$45/hr; 16-track \$35/hr; 8-track \$25/hr. Block book and prepay discounts available.

**[24+] SOUNDESCAPE**  
 284 Ashland Ave.  
 Buffalo, NY 14222

(716) 884-3576  
 Owner: James V. Calabrese  
 Studio Manager: James V. Calabrese

**[24+] SOUNDTRACK**  
 23 E 21st St.  
 New York, NY 10010  
 (212) 420-6010  
 Owner: Rob Cavicchio  
**Studio Manager:** Chris Rich  
**Engineers:** Tony Volante, Tim Reppert, Carol CaFiero, Tom Vercillo, Mark Paris, Bob Brookmann  
**Dimensions:** Room 1: studio 20 x 20, control room 17 x 19. Room 2: studio 12 x 9, control room 15 x 18. Room 3: studio 12 x 9, control room 15 x 15.  
**Mixing Consoles:** SSL 6000 40-input, SSL 6000 56-input, MCI 600 2-track.  
**Audio Recorders:** (4) Otari MTR-90 24-track, (2) Studer A820 2-track ½", (2) Otari MTR-10 4- or 2-track ½", (2) Studer A810 2-track ¼", (4) Otari MTR-10 2-track.  
**Cassette Recorders/Duplicators:** (3) Tascam, (3) Nikko, Nakamichi.  
**Noise Reduction Equipment:** Dolby stereo pair units.  
**Synchronization Systems:** (5) Lynx units.  
**Echo, Reverb, & Delay Systems:** (2) EMT plates, Ecoplate II, (2) Lexicon 224XL, (2) AMS RMX, (2) Yamaha REV7, PCM70, (2) SPX90, Publison Internal 90, Roland 2000, (3) Roland 3000, (4) Lexicon PCM42.  
**Other Outboard Equipment:** Prime Time II, Eventide 949, (4) Drawmer gates, Pan Scan, (8) Neve EQs, (4) Pultec EQs, (2) UREI 1176, (2) UREI LA-4, (4) dbx 160X, (2) dbx 165, (2) Scamp effects racks.  
**Microphones:** (2) Neumann U87, (4) AKG 414, (4) Shure SM57, Shure SM58, (5) Sennheiser 421, Sennheiser 441, (2) AKG 460, (2) Neumann KM84  
**Monitor Amplifiers:** (4) Bryston 4-B, (6) Crown D-75, (2) BGW 750.  
**Monitor Speakers:** (4) UREI 813B, (4) Yamaha NS-10, (2) E-V Sentry 100s, (4) Auratones, (2) Toa 312ME.  
**Musical Instruments:** Yamaha C7 acoustic piano, Yamaha drum kit, Roland JC 120 amplifier.  
**Video Equipment:** Sony 1" VTR, (2) JVC ¾" VCR.  
**Other Equipment:** Magna-Tech dubber.



SOUNDWAVE INC.  
 Washington, DC

**[24+] SOUNDWAVE INC.**  
 also REMOTE RECORDING  
 2000 P St. NW, #210  
 Washington, DC 20036  
 (202) 861-0560  
 Owner: Jim Harmon  
**Studio Manager:** Sabina Coronato  
**Engineers:** Jim Bloch, Monica Peterschmidt, Pamela Putnam, Jim Harmon  
**Dimensions:** Room 1: studio 20 x 20, control room 10 x 20. Room 2: studio 10 x 11, control room 12 x 18. Room 3: studio 9 x 10, control room 14 x 19. Room 4: studio 10 x 20, control room 11 x 13.  
**Mixing Consoles:** NEOTEK Series II 28 x 24 w/Mastermix automation, TAC Scorpion 16 x 8, NEOTEK Series II 20 x 16 w/automation, Soundcraft 200B 8 x 4  
**Audio Recorders:** 3M 79 24-track, 3M 79 16-track, (3) 3M 79 2-track, Otari 7800 8-track, (6) Otari 5050 2-track, Studer 810 2-track w/time code.  
**Cassette Recorders/Duplicators:** Technics M-65, Telex duplicator, Tascam 122B.  
**Noise Reduction Equipment:** (8) dbx Type I, (24) Dolby SR.  
**Synchronization Systems:** Audio Kinetics Q.Lock.  
**Echo, Reverb, & Delay Systems:** Lexicon 224, (2) Lexicon PCM60, Roland SRV-1000, Lexicon Prime Time.  
**Other Outboard Equipment:** (6) dbx 160X, (6) Valley Peo—  
 LISTING CONTINUED ON NEXT PAGE

# BACK ISSUES

- 1985 January, Northwest Studios. Superbowl Sound. Springsteen on Stage. Ray Parker Jr. Leon Russell.
- 1985 February, Independent Engineers & Producers. Brian Eno. The Art of Touring. Roger Powell on MIDI. Les Paul.
- 1985 March, Southeast Studios. Loudspeaker Technology. Martin Rushent. Cotton Club Sound. John Fogerty.
- 1985 April, Video Production Supplement with Facilities Listings. Compact Power Amps. Radio Recorders' Harry Bryant. Eurythmics.
- 1985 May, Northeast Studios. Digital Reverb. Flo & Eddie. Holophonics. Emmylou Harris. Humberto Gatica.
- 1985 June, Sound Reinforcement & Remote Recording Listings. Location Recording Tutorial. Grateful Dead Sound. Weird Al Yankovic. Synthesizer Oriented Studios. David Sanborn.
- 1985 July, Recording School Listings and Southwest Studios. Mixing Consoles. Dr. Demento. Kashif's Studio. Roger Nichols and John Denver.
- 1985 August, Studio Design Issue: Listings of Designers & Suppliers. Control Room Acoustics. Thomas Dolby. Orchestral Recording. On the Road with Prince. Neil Young.
- 1985 September, Southern California Studios. Film & TV Sound. Frank Zappa. Digital '86 Supplement. Mishima Sound. David Foster.
- 1985 October, New Products for AES. Maintenance & Testing. Abbey Road Studios. Ambisonics. Ben Burtt on Imax. Nile Rogers.
- 1985 November, North Central & Canadian Studios. George Massenburg. Video Supplement. Alligator Records. Women in Media Production.
- 1985 December, Tape-to-Disc Listings. Mastering, Pressing & Duplication. TEC Award Winners. Sound for the Twilight Zone. Tom Waits.
- 1986 January, Northwest Studios. Equipping Home Studios. Paul Winter. SMPTE-MIDI Connection. Yoko Ono.
- 1986 February, Independent Engineers & Producers. Microphone Special Report. Laurie Spiegel. Budgeting for Sessions. Joni Mitchell.
- 1986 March — SOLD OUT
- 1986 April, Video Production & Post Production Facilities. Video Supplement. Al Kooper. Wireless Mics. Alan Parsons.
- 1986 May, Northeast Studios. Digital Supplement. Sampling Primer. CD Facilities. Future of Console Design. Steve Lillywhite.
- 1986 June, Remote Recording & Sound Reinforcement Listings. Roadability. Russ Titelman. CD-ROM & CD-I. Ry Cooder.
- 1986 July, Recording School Directory and Southwest Studios. CD Pre-mastering. Britain's Live Aid. Producer Rick Rubin. Christian Rock. Stevie Wonder.
- 1986 August — SOLD OUT
- 1986 September, Southern California Studios. Film Sound Telecommunications. Production Music Libraries. David Byrne's True Stories.
- 1986 October, North Central and Canadian Studios. Television Sound. Fred Catero. John Entwistle's Studio. Backstage at Late Night.
- 1986 November, New Products Directory. CD-I Supplement. Kenny Loggins Tour Sound. Daryl Hall. Grounding Primer. Rupert Neve.
- 1986 December, Tape-to-Disc Issue: Mastering, Pressing & Duplication Facilities. CD Manufacturing. Mastering Engineers' Forum. Lee Ritenour's Studio. Casey Kasem.
- 1987 January — SOLD OUT
- 1987 February, Independent Engineers & Producers. International Recording Supplement. APRS Studio Directory. Bruce Lundvall. DMM for CD. Kitaro.
- 1987 March, Southeast Studios. Digital Recording Supplement. Tom Jung. CD Mastering Forum. Richard Thompson.
- 1987 April, Video Production & Post-Production Facilities. Location Mic Techniques. Adrian Belew. Synchronizer Survey. Pee-wee's Playhouse.

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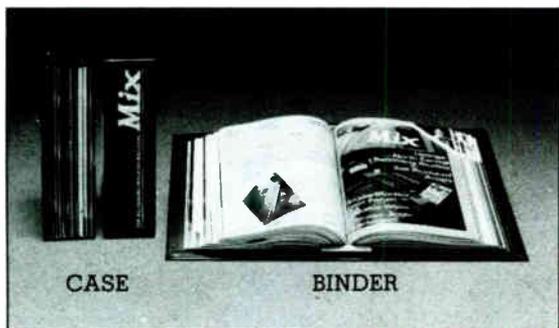
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—LISTING CONTINUED FROM PAGE 184

ple Dyna-Mites, Sontec EQ, (2) Pultec EQ  
Microphones: Neumann, AKG, Sennheiser, Philips, E-V, Shure  
Monitor Amplifiers: (3) Crown MT 1200, Crown PSA-2, Crown D 150A.  
Monitor Speakers: (6) UREI 809, (4) JBL 4311  
Musical Instruments: Ensoniq Mirage sampling keyboard, Ensoniq ESQ-1 digital synthesizer, Ensoniq SXQ-1 sequencer expander, Korg AT-12 chromatic tuner, Roland TR-909 rhythm composer, Korg Polysix analog synthesizer, Yamaha C3 grand piano, Ludwig full drum set, Fender amplifier.  
Video Equipment: Sony VO-5800 U-matic ¾", JVC 8250 U-matic ¾", (2) Sony monitors, RCA monitor.  
Other Equipment: Technics SL-P1200 CD player, Satellite uplink interface, Symetrix phoner.  
Rates: Available upon request.

Extras & Direction: Since its inception in 1979, Soundwave Inc., of Washington, DC, has provided audio services for commercial and non-broadcast film, slide, and tape presentations. Soundwave has recently completed major studio renovation and expansion headed by Chips Davis' LEDE Designs, Inc. The facility features a fully automated synchronization system for video sweetening, dialog replacement, mixing and scoring to picture. Five separate studios include the following capabilities: 4-, 8-, 16-, and 24-track recording, quadrophonic monitoring and mixing, slideshow pulsing, radio production, time compression, casting and music/sound effects search, A/V soundtracks, time code and video prep, duplication and high-speed dubbing. Wave-works, a subsidiary of Soundwave, composes, arranges, and produces original music for client projects. Soundwave is also a member of a national satellite and fiber-optics system which allows full spectrum, live recording between Soundwave and any other studio on the network.

**[24+] SOUNTEC STUDIOS**  
also REMOTE RECORDING  
25 Van Zant St.  
E. Norwalk, CT 06855  
(203) 853-3433  
Owner: Richard Hodgson  
Studio Manager: Melissa Cooper

**[24+] SPECTRA COMMUNICATIONS**  
also REMOTE RECORDING  
Box 621  
Port Washington, NY 11050  
(516) 883-3395  
Owner: Lee Kalinsky  
Studio Manager: Tom Thomas

**[24+] SPECTRUM RECORDERS**  
151 S Main St.  
Lanesboro, MA 01237  
(413) 499-1818  
Owner: Spectrum Recorders, Inc.  
Studio Manager: Peter Seplow  
Engineers: Peter Seplow, Lon Wadsworth, David Fowle  
Dimensions: Studio 25 x 30 x 15, control room 16 x 20, plus vocal booth and drum booth.  
Mixing Consoles: AFSI 3000 Rev. 2 32 x 32 Automute, four-band EQ all inputs, six sends.  
Audio Recorders: MCI JH-24 24-, 16-track, Tascam 48 8-track, Mitsubishi X80 2-track available, Scully 280B 2-track, Technics RS1500 2-track.  
Cassette Recorders/Duplicators: Technics RSM63 recorder, Pioneer CT599WR recorder, Alpha 42 high speed dupe  
Echo, Reverb, & Delay Systems: Lexicon 224X, The Plate (B) L.P. 140.  
Other Outboard Equipment: (3) UREI LA-4, (2) dbx 160, Omnicraft GT-4, Loft 440, Loft 450, DeltaLab DL-2, Burwin transient noise eliminator. Dual turntable.  
Microphones: (2) Neumann U87, (4) AKG 451, (2) AKG D200, Sony ECM-23, Sony C-37, (2) Sennheiser 421, Sennheiser D12, E-V RE20, AKG D222, P2M.  
Monitor Amplifiers: Carver, SAE, Pioneer, Sherwood.  
Monitor Speakers: UREI Time Align, Altec 604E, Yamaha NS-10, Auratone cube.  
Musical Instruments: 1926 Heintzman grand piano, DX7, Ensoniq Mirage, LinnDrum, Roland 707, others available.  
Video Equipment: ½" and ¾" videotaping available w/three camera switching.  
Rates: Rates are low and negotiable but always include use of lounge, shower, and kitchen.

**[24+] SPECTRUM STUDIOS**  
701 A Moore Station Industrial Park  
Prospect Park, PA 19076  
(215) 522-1177  
Owner: Bob Szczepkowski  
Studio Manager: Bob Szczepkowski  
Engineers: Vince Warsavage, Bob Szczepkowski  
Dimensions: Studio 25 x 22, control room 16 x 15  
Mixing Consoles: Scorpion 28 x 24  
Audio Recorders: Otari MX-80 24-track, Tascam 85-16B



16-track, Otari 5050BII 2-track.  
Cassette Recorders/Duplicators: Nakamichi MR2B, Technics, Hitachi.  
Noise Reduction Equipment: (16) dbx  
Echo, Reverb, & Delay Systems: Lexicon digital reverb, Lexicon Prime Time, Ecoplate III stereo reverb, Yamaha SPX90, DeltaLab Super Time Line, DeltaLab ADM 64, Mu-tron digital delay.  
Other Outboard Equipment: Aphex Aural Exciter, dbx 166 stereo gate/comp, dbx 160 comp/limiter, Omni Craft GT4 A noise gate, Ibanez stereo 2/3 octave EQ, BSR EQ 3000/spectrum analyzer and EQ, (2) BSR EQ-110X, Korg digital tuner  
Microphones: (2) Neumann U87, (4) Shure, (2) Sennheiser 421, (2) Sennheiser 441, (5) Audio-Technica, (2) AKG, (2) E-V  
Monitor Amplifiers: Crown DC300, Harman Kardon Citation 16, Altec, Technics  
Monitor Speakers: Altec Big Reds, JBL 4311, Yamaha NS 10M, Auratone cubes.  
Musical Instruments: Tama Techstar electronic drums, Sequential Prophet-600, Hammond B-3 w/Leslie, Fender Precision Bass, Hohner clavinet, Marshall, Acoustic, Lab, Ampeg and Sound City amps  
Rates: 24 track \$395/10 hrs. (\$39.50) 16 track \$295/10 hrs. (\$29.50)

**[24+] SQUIRES PRODUCTIONS, INC.**  
also REMOTE RECORDING  
196 Maple Ave.  
White Plains, NY 10601  
(914) 997-1603  
Owner: Greg Squires  
Studio Manager: Bob Pincchbeck



STAR MIX STUDIOS, LTD.  
Massapequa, NY

**[24+] STAR MIX STUDIOS, LTD.**  
4160 Merrick Rd.  
Massapequa, NY 11758  
(516) 541-1222  
Owner: Al DeGregoris  
Studio Manager: Susan Faber  
Engineers: Al DeGregoris  
Dimensions: Studio 24 x 20 w/large iso room, control room 19 x 16  
Mixing Consoles: Trident Series 80B 30 x 24 w/54-track mixdown capability.  
Audio Recorders: Sony/MCI JH24-24 24-track 2", Studer Revox 2 track ¼", Nakamichi DMP-100 2-track digital mastering processor, Tascam 38 8-track ½", Tascam 32 2-track ¼"  
Cassette Recorders/Duplicators: (2) Nakamichi MR-1B

three head.  
Noise Reduction Equipment: dbx 180 2-channel dbx type I, DX-2D 2-channel dbx Type I, (2) DX-4D 4-channel dbx Type I  
Synchronization Systems: Garfield Mini Doc.  
Echo, Reverb, & Delay Systems: Lexicon 200 stereo digital reverberator, Lexicon PCM70, Lexicon Prime Time II delay, Yamaha R1000 reverb, Yamaha D1500 delay, Delta-Lab delay.  
Other Outboard Equipment: Aphex Systems Aural Exciter, Audio & Design Pan-Scan automatic panner, (5) Kepex II gates, (4) Gain Brain II compressors, (2) Symetrix 501 compressor/limiters, Valley People DSP-1 de-esser, Valley People Maxi Q parametric EQ, UREI 535 EQ, Yamaha Q2031 EQ.  
Microphones: Neumann U87A, Neumann KM84, AKG C414, Beyer M-88, Sennheiser 421, Shure SM58, Shure SM57, E-V RE20.  
Monitor Amplifiers: Hafler P225, Hafler P125, Crown Micro-tech 1200, BGW 550.  
Monitor Speakers: UREI 813C Time Aligned monitor system, Tannoy NFM-8, JBL 4312, Auratone 5 C.  
Musical Instruments: Kawai acoustic grand piano, Yamaha DX7, E-niu SP-12 Turbo Sampling Percussion, Roland TR-707, E-mu drumulator, Ensoniq Mirage multi-sampler.  
Other MIDI Equipment: Complete "Under the Floor", separate dedicated MIDI patch system between control room, main effects rack and studio.  
Other Equipment: Photo studio, Nikon, Norman, Shik.  
Rates: Please call for rates  
Extras & Direction: Star Mix Studios, Ltd., located in the Coventry Professional Plaza, is one of the only 24-track studios on Long Island that is situated in a professional, commercial space. The facility is completely acoustically designed (consultants Benchmark Associates of Manhattan) and features all non-parallel surfaces (walls, floors, and ceilings) and completely floating floors. The over-size control room yields the maximum in acoustical tracking and spatial separation. The facility also houses an on site full professional photography studio. Star Mix's objective is to maintain the utmost in professionalism, traditionally found only in Manhattan-based studios in the NY region. The discerning professional will find Star Mix superior in services, equipment, environment and personnel

**[24+] STARDUST RECORDING STUDIO**  
615 Valley Rd.  
Upper Montclair, NJ 07043  
(201) 746-2359  
Owner: George Louvis  
Studio Manager: George Louvis

**[24+] STARMAKER INC.**  
12 Willard Dr.  
Pittsburgh, PA 15236  
(412) 653-6423  
Owner: Terry & Randy Lako  
Studio Manager: Terry Lako

**[24+] STUDIO 4 RECORDING**  
444 N 3rd St.  
Philadelphia, PA 19123  
(215) 923-4443  
Owner: David Johnson, Phil Nicolo, Joe Nicolo  
Studio Manager: David Johnson

**[24+] STUDIO NORTH**  
also REMOTE RECORDING  
PO Box 404  
Fallston, MD 21047  
(301) 879-8054  
Owner: Northern Recording Service  
Studio Manager: Stephen Palmieri

**[24+] SUPER HIT PRODUCTIONS**  
138-48 87th Ave.  
Briarwood, NY 11435  
(718) 297-8225  
Owner: Ricardo Alcaraz, Gail Arnett  
Studio Manager: Alan Gamboa

**[24+] SURE SOUNDS**  
Silver Spring, MD  
(301) 460-4200  
Owner: Henry H Bartlett  
Studio Manager: Pamela Smith

**[24+] SYNC SOUND, INC.**  
450 W. 56th St.  
New York, NY 10019  
(212) 246-5580  
Owner: William Manno, Kenneth Hahn  
Studio Manager: Sherr Tantleff  
Engineers: Ken Hahn, Grant Maxwell, Tom Fritze, Pam

Bartella, Regina Mullen

Dimensions: Room 1: studio 11 x 14, control room 23 x 22.  
Room 2: studio 10 x 16, control room 16 x 14.

**Mixing Consoles:** Solid State Logic 6000 Series automated console w/ stereo modules, Soundcraft 2400, Soundcraft 200B, Soundcraft 200.

**Audio Recorders:** (3) Otari MTR-90 II w/24-, 16-, 8-track headstacks, Otari MTR-20 4-track, (4) MTR-12 2-track w/ center channel time code, mono and stereo Nagra, capability, cart machines, Magnetics 106 multi-track 16/36mm mag recorder and Sony 701. Also available: Sony 3324, Sony 1610, Sony PCM-3324, Sony PCM-1610.

**Synchronization Systems:** Proprietary Edit System allowing lock-up, edit rehearsal and editing to subframe accuracy of all standard audio, digital and video tape machines. **Echo, Reverb, & Delay Systems:** Lexicon 224x w/LARC, Lexicon PCM60, Lexicon PCM42, Lexicon Prime Time II, EMT 140 stereo tube plate.

**Other Outboard Equipment:** Aphex Aural Exciter, Dynaflex DX1, Dynaflex DX2, Dolby SP-24, Dolby cat 43, (6) TTM NR frames w/cat 22 cards, UREI 1176, Sony 1610 and F1 digital audio processors, Dolby Surround mixing.

**Microphones:** Neumann U89s, Neumann U87s, E-V RE20. **Monitor Amplifiers:** Ashly FET 500s, Ashly FET 200s, Crown D150, Crown D75, Symetrix A-220s.

**Monitor Speakers:** UREI 813s, Auratones, JBL 4411s.

**Musical Instruments:** Synclavier, Kurzweil, DX7, E-mu SP-12, Synthaxe

**Video Equipment:** Sony 1" VTR w/Dolby BVH-2000, (3) JVC 8250s. Full interface capability and available upon request: BVU-800, Betacam and VHS Hi-fi. Video Monitors: Panasonic PT-101 video projection system w/100" diagonal soundscreen, Sony PVM-1220, Sony 25" and 19" monitors. Switchers/editors: monitor switches in all production areas to facilitate multi-video source operations.

**Rates:** Call for information.

**Extras & Direction:** Sync Sound is a full-service audio post-production house, ready to meet your audio needs with experience and enthusiasm. Our facilities are specifically designed to accommodate editing and mixing to picture (digital or analog), dialogue replacement, overdubs to picture, sound effects design, electronic composition, audience sweetening, and Dolby Surround Sound mixing for film. Sync Sound also provides ancillary functions such as: technical consultation, Nagra and mag dubs, SFX library, and video tape laybacks.

#### [24+] SYSTEMS TWO RECORDING STUDIO

also **REMOTE RECORDING**

2949 Avenue U  
Brooklyn, NY 11229

(718) 332-5429

Owner: Joseph Marciano

Studio Manager: Nancy Goll

#### [24+] 39TH STREET MUSIC PROD.

260 W. 39th St., 17th floor

New York, NY 10018

(212) 840-3285

Owner: Michael Karp

Studio Manager: Roxanne Schramm



**TIKI RECORDING STUDIOS, INC.**  
Glen Cove, NY

#### [24+] TIKI RECORDING STUDIOS, INC.

186 Glen Cove Ave.

Glen Cove, NY 11542

(516) 671-4555

Owner: Fred Guanno Jr. Fred Guanno Sr.

Studio Manager: Jenna Kern

Engineers: Bob Spencer, Fred Guanno, Jim Cremmins

Dimensions: Studio 40 x 25 x 13, control rooms: A: 21 x 16,

—LISTING CONTINUED ON NEXT PAGE

## A Superb State-of-the-Art Recording Complex

**CONTROL ROOM:** Solid State Logic SL4000E  
automated console

- 48-Track Studer analog
- 32-Track Mitsubishi digital
- Full complement of mics and outboard
- Fully-equipped Mac MIDI studio

**STUDIO:** 14' to 27' acoustically adjustable  
cathedral ceilings in a 100-year-old stone  
barn just minutes from midtown Manhattan.



278 Haverstraw Road • Suffern, New York 10901  
(914) 362-1620

Circle #131 on Reader Service Card

### COMING IN AUGUST!

## FACILITY DESIGNERS and SUPPLIERS DIRECTORY

If you're involved in the fields of design, acoustics and/or equipment supply/installation, your *Mix* directory is coming in August, 1987. To be included in this year's directory, call or write:

**MIX DIRECTORIES DEPT., 2608 Ninth Street  
Berkeley, CA 94710, (415) 843-7901**

**DEADLINE: May 14th**

Special 2-for-1! If you elect to run an extended listing (services offered, credits) at a nominal charge, you'll receive the same listing FREE in *Mix's* 1988 Annual Directory!

—LISTING CONTINUED FROM PAGE 187

B: 15 x 15, C: 15 x 15.

**Mixing Consoles:** Trident TSM 40 x 32 w/Megamax SMPTE/Disk-based automation.

**Audio Recorders:** Studer A80 MKIII 24-track, Studer A80 MKIII 2-track 1/2", Studer A80 MKII 2-track 1/4", Otari MTR-10 2-track 1/4", 3M M79 2-track, TEAC 8-track, TEAC 4-track, (3) TEAC 2-track copy decks, (4) Onkyo cassette decks, (4) Sony cassette decks.

**Echo, Reverb, & Delay Systems:** Lexicon 200 digital reverb, Ecoplate II, Yamaha REV7 digital reverb, Yamaha SPX90 digital reverb, Lexicon Prime Time II MEO DDL, (2) Lexicon PCM42 MEO DDL, (2) Eventide Harmonizers, (3) DeltaLab 1024 Effectron DDL, Korg SD-2000 sampling DDL.

**Other Outboard Equipment:** (4) Kepex IIs, (7) Kepex Is, (2) Gain Brain IIs, (2) UREI 1176 LN, (2) UREI LA3A comp/lim, (2) dbx 160 comp/lim, Trident stereo comp/lim, (2) Ashly SC-50 comp/lim, (2) Symetrix CL-100 comp., (2) Aphex Aural Exciters, Eventide 201 flanger, Orban 516EC de-esser, Orban 622 EQ, (25) IsoMix HP-4 4-channel head-phone systems, Ashly SC-66A EQ, Roland 830 phaser.

**Microphones:** Neumann, AKG, Milab, Sennheiser, Beyer, E-V, Shure, Audio-Technica, Sony (all popular models including tube), AKG K240 phones, Fostex T-20 phones, Koss Pro 4X phones.

**Monitor Amplifiers:** UREI 6300, Yamaha P2100, Yamaha P2050, Crown DC-150 A, (4) McMartin MS752.

**Monitor Speakers:** UREI 813A, Yamaha NS-10M, JBL 4311, Auratone 5C, Tannoy NFM-8, JBL 216.

**Musical Instruments:** Yamaha C-5 6'6" grand piano, Slingerland drums, LinnDrum machine (extra chips), Kaypro PC20 meg computer (IBM comp.), Korg Poly-6, Hammond organ w/Leslie, Roland, Marshall, Ampeg, Fender amps, (2) Yamaha DX7s, Yamaha TX7, Roland JX8P w/PGM-800, Oberheim Matrix-6, LinnDrum w/JL Cooper MIDI, Roland 707 drums.

**Other MIDI Equipment:** (2) Macintosh 512 computers w/all types of software and libraries, Kaypro (IBM comp.) computer w/640K, and 20 meg. hard disk, Roland SBX-80 SMPTE/MIDI box, Akai S-900 sampler w/full library.

**Video Equipment:** Closed circuit monitors of all rooms.

**Rates:** Please call Fred Guarino or Jenna Kern. Block rates and day rates available.

**Extras & Direction:** Conveniently located 35 minutes out of NYC on Long Island's scenic north shore, minutes from beaches. Comfortable lounge w/TV, video game and full kitchen. Studio B: dubbing, editing room. Studio C: MIDI computer programming room, full art and graphics dept. extensive music library. Tiki is a professional, efficient recording facility where clients such as Brian Setzer, Don Gehman (EMI-Capitol), Tim Moore, Rob Freeman (Electra), Duke Jupiter, Glen Kolotkin (Motown), Melanie, Nils Lofgren, D.J. Romeo (Lifestream), Chappell Music, etc. got what they came for—great sound and service.

[24+] RIK TINORY PRODUCTIONS

also REMOTE RECORDING

180 Pond St., Box 311

Cohasset, MA 02025

(617) 383-9494

[24+] TRACK RECORDERS, INCORPORATED

also REMOTE RECORDING

8226 Georgia Ave., Ste. 207

Silver Spring, MD 20910

(301) 589-4349

Owner: ISAGE, Inc

Studio Manager: Mark Greenhouse

**Extras & Direction:** After years at the forefront of Washington, D.C. studios, Track has come under new ownership. The staff at the studio will not change; so clients can rest assured that Track's tradition of quality and congeniality will continue unabated. What will change is the facility itself. The staff at Track along with the new owners plan a major refurbishing of the facility. An upgrade of this type will necessitate that the studio "go dark" for the first few months of 1987; so we must bank on your patience for that time. We at Track are very excited about these changes and are looking forward to placing a glowing announcement of our re-opening in the pages of *Mix* mid-1987.

[24+] TRACKMASTER AUDIO, INC.

also REMOTE RECORDING

One Franklin Park N.

Buffalo, NY 14202

(716) 886-6300

Owner: Alan Baumgardner

Studio Manager: Rose Grucela

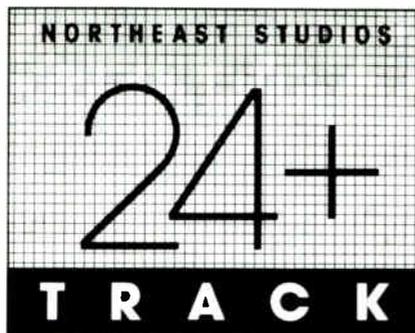
Engineers: David M. Bellanca, Alan Baumgardner, Kim Ferullo, Mike Sak

Dimensions: Room 1 studio 28 x 32, control room 23 x 18.

Room 2 studio 15 x 8, control room 14 x 12. Room 3 studio 8 x 10. Room 4 studio 12 x 11, control room 15 x 12.

**Mixing Consoles:** Audiotronics 532 32 x 32 16 aux returns, fully automated, MCI JH-416 (customized) 18 x 16, Audio Technica 1220 12 x 8, Soundcraft 1600 Prod Series 24 x 24, 48 channel remix.

**Audio Recorders:** Otari MTR-90 II 24- and 16-track, Otari



MTR 10 master 2-track 1/4" and 1/2", MCI JH-110B 14" and 1/2" 2-track, Otari MTR-10 1/4" and 1/2" 2-track, Technics RS 1500 US 2-track, TEAC 2300 1/4", MCI JH110A 2-, or 4-track 1/4" and 1/2", Otari MX5050 MKIII 8-track, Scully 280-14 2-track, Akai GX 400D 1/4" track, Otari MX5050 MKIII 2-track, Otari MX5050 MDIII 8-track, TEAC 25-2 2-track, Akai GX 4000 1/4", Wollensak reel-to-reel, ICM cart. machines, Otari MX5050 2 track, Otari MX5050 1/4-track.

**Cassette Recorders/Duplicators:** (2) Aiwa M 700 cassette, (3) Wollensak Sync cassette, Denon DRM 20 cassette decks, Yamaha K 1020 cassette deck, TEAC 124 AV cassette, Technics RSM 85 cassette.

**Echo, Reverb, & Delay Systems:** Lexicon M-200 digital reverb, EMT 140 tube, Ecoplate II, customized 5 x 9 stereo tube plate, (2) Yamaha REV7, (3) Yamaha R1000, Ursula Major 8 x 32 MKII, Orban 105 reverb, Lexicon PCM60 dig. rev., AKG BX20E, Lexicon PCM42, (3) Lexicon PCM41, (2) Yamaha D1500, Lexicon Prime Time M-93, Lexicon Prime Time II, Korg sample-delay, Eventide 949 Harmonizer, MXR pitch transposer w/display, (4) Yamaha SPX90, TC Electronic 2290 sampler, Roland S-900 sampler.

**Other Outboard Equipment:** ADR Complex limiter/gates, Drawmer gates, Audioarts parametrics, Ashly parametrics, Pultec EQs, Teletronix LA2A limiters, TEAC parametrics, Aphex exciters, MXR EQs, Gate gates, Orban 245 F stereo synth, Technics SP-10 (w/SME) turntables, (2) Technics SLP1200 CD scanners, Audioarts limiters.

**Microphones:** Neumann U87, Neumann U47, Neumann KM84, AKG 414, AKG 451, AKG 224, Beyer M160, Beyer M500, Sennheiser MD421, Shure: SM81, SM57, SM58, SM53, 545, E-V RE20, Sony C-500, Altec M-49, Crown PZM, Countryman, Jensen and Westlake direct boxes (tube mics available).

**Monitor Amplifiers:** Crest, Crown, Yamaha, SAE, McIntosh

**Monitor Speakers:** Custom four-way UREI/JBL, JBL 4311, JBL 4401, Westlake BBSM-10. All rooms have: Yamaha NS-10, ADS 470, JBL 4401, Auratone 5C.

**Musical Instruments:** Baldwin 9' concert grand, Hammond B-3 organ, Yamaha DX7, Yamaha DX9, Yamaha DX21, Yamaha RX11, Memorymoog Plus, Minimoog, Roland SH101, Roland Juno 60, Roland Juno 106, Korg Lambda, Korg EX 800, Emulator II, Ludwig drum kit, Simmons, and just about every other, drum machine or synth you could want.

**Video Equipment:** All studios have Pro-Feel, monitors, Sony 3/4-inch decks, Sony one-inch deck, 1/2-inch Beta and VHS dubbing (Hi-Fi), full SMPTE, synchronization, dubbing and layback.

**Rates:** A \$70/hr., \$80/hr. w/automation (2/hr min.) B, C and D: \$100/hr (1/2/hr. min.). Layback to video \$100/hr. (1/hr min.).

**Extras & Direction:** Designed by Sugarloaf View/John Storyk, Robert Walsh: six independent production companies and musicians, vocalists, composers, arrangers, orchestrators, producers, kitchen, shower. Packages w/air service, limousines, hotels, car rental, catering and chef prepared meals. Five complete music and EFX libraries on CD. Clients include: Liberty Silver, Philip Michael Thomas, Miki Howard, Mei Humes, Goo Goo Dolls, Rick James, Yes, Bobby Militello & RPM, Melanie, Elvin Bishop, Charlie Byrd, Robert Klein, John Sebastian, Gabe Kaplan, Rite Aid, Hoover, Dads' Pet Food, Agway, Philco TV, Kodak Dunlop, Rich Products, Sylvania, film scoring for Vamping, etc. Our goal is the ultimate in services at prices below national industry average. Artist and group recordings, records, ref acetates, multimedia presentation, film scoring, TV and radio spot production, custom jingles, music beds, narrations, tape duplication, music law, audio for video, layback production services.

[24+] TRACKS STUDIOS

309 Main St.

Port Washington, NY 11050

(516) 944-5316

Owner: Tom DiCandia

Studio Manager: Tom DiCandia

[24+] TROD NOSSEL RECORDING

also REMOTE RECORDING

Box 57, 10 George St.

Wallington, CT 06492

(203) 269-4465

Owner: TNA

Studio Manager: Richard P. Robinson

[24+] TWAIN RECORDING

18 Hiawatha Pass

West Milford, NJ 07480

(201) 697-7540

Owner: Robert Both

Studio Manager: Robert Both

Engineers: Robert Both, Bob Nicholson, Karen Koehler

Dimensions: Studio 20 x 25, control room 13 x 14, isolation booth 10 x 12.

**Mixing Consoles:** Speck Electronics 800C, 28 x 28.

**Audio Recorders:** MCI JH-100 24-track, Ampex ATR-102 2 track, Sony 854 4-track, TEAC 3300S 2-track, Nakamichi: DMP-100 2-track digital.

**Cassette Recorders/Duplicators:** (5) Hitachi E44.

**Noise Reduction Equipment:** (30) dbx.

**Echo, Reverb, & Delay Systems:** Lexicon 200 digital reverb, Lexicon PCM42 digital delay, Lexicon Prime Time 93 digital delay, MICMIX XL305 reverb, Yamaha D1500 digital delay, Eventide 910 Harmonizer.

**Other Outboard Equipment:** (4) Gatec noise gates, (3) Roger Mayer noise gates, Orban stereo parametric EQ, EXR II exciter, (4) dbx 160 limiters, Eventide flanger, Eventide phaser, Digitech stereo chorus/flanger, Soundcraft 2012 graphic EQ.

**Microphones:** Neumann U87, Neumann KM86, (2) AKG 414, (2) AKG 452, (2) Sennheiser 421, (2) Sennheiser 441, (3) Shure SM57, (2) Shure SM56, E-V RE20, E-V RE10, E-V 635A, E-V RE16, E-V DOS4, AKG D-12E, Sony C122.

**Monitor Amplifiers:** Hitachi, SAE, Sansui.

**Monitor Speakers:** JBL 4411, JBL 4312, Braun L 200, Auratones.

**Musical Instruments:** Kawai K62 grand piano, stereo Fender Rhodes, Roland Juno 106 synth, Roland MSQ 700 sequencer, Roland TR 7070 drum machine, Roland Planet P piano brain, Akai 612 digital sampler, Korg DVP vocoder, Korg Poly 6 synth, Simmons SDS9 electronic drums, percussion, Slingerland ten-piece wood drum set, Remo toms, MXR effects pedal, Korg II synth monophonic, Rockman Sustainer, organ w/Leslie.

**Video Equipment:** Hitachi V16 VCR w/color monitor.

**Rates:** 24-track: \$60/hr.; 16-track: \$40/hr.; block rates available.

[24+] U.C.A. RECORDING

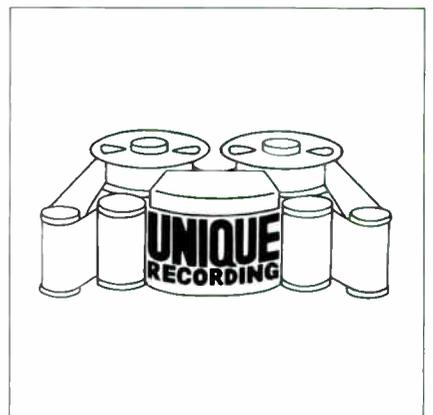
1310 Lenox Ave.

Utica, NY 13502

(305) 733-7237

Owner: Bob Yauger

Studio Manager: Bob Yauger



UNIQUE RECORDING STUDIO

New York, NY

[24+] UNIQUE RECORDING STUDIO

701 Seventh Ave., 8th & 10th floors

New York, NY 10036

(212) 921-1711

Owner: Joanne & Bobby Nathan

Studio Manager: Joanne Nathan

Engineers: Michael Finlayson, Chns Lord Alge, Tom Lord Alge, Peter Robbins, Bob Rosa, Steve Pecorella, Roey Shamir, Jeff Lord Alge, Acar Key, Kennan Keating.

Dimensions: Studio A 12 x 15, control room 30 x 15; Studio B 40 x 20, MIDI City 6 x 12, control room 30 x 20.

**Mixing Consoles:** Studio A: Solid State Logic 4000E 64-channel w/Total Recall, (16) Neve 1077 Mic Pre and EQ, (4) API 550a, (4) API 560a, Studio B: Solid State Logic 4000E 48-channel w/Total Recall, (16) Neve 1077 Mic Pre and EQ,



**UNIQUE RECORDING STUDIO**  
New York, NY

(4) API 550a, (4) API 560a, Midi City: Neve 8068 MKII 32-channel, (4) API 550a, (4) API 560a.  
**Audio Recorders:** (4) Studer A800 MKIII 24-track, (3) Studer A820 2-track 1/2", (2) Studer A80 2-track 1/2", (3) Studer B-67 2-track 1/4", (2) Otari MTR-12 2-track 1/2", Sony BVU-800D 2-track digital w/PCM-701, Otari MTR-90 MKII 24-track.  
**Cassette Recorders/Duplicators:** (6) Nakamichi MR-1.  
**Noise Reduction Equipment:** 48-channel Dolby A or dbx (TMM Frame), (4) Dolby 361.  
**Synchronization Systems:** (3) Adams-Smith systems w/2600 remotes.  
**Echo, Reverb, & Delay Systems:** (2) Publison Internal 90, (2) Sony DRE 2000A, (2) Yamaha REV-1, (2) Lexicon 480L, (2) Lexicon 224XL, Lexicon 224, (2) AMS DMX 1580s, (4) AMS RMX16, (3) Quantec QRS, (2) Klark-Teknik DN780, (5) Lexicon PCM70, Lexicon PCM60, (6) Yamaha REV7, (6) Yamaha SPX90, (3) Ursa Space Station, (2) Ecoplate, Bel BD80, (6) Lexicon PCM41s, (4) Lexicon PCM42s, (3) Eventide 910, Eventide 949, (4) Yamaha D1500.  
**Other Outboard Equipment:** Studio A: UREI LA-3A, UREI LA-2A, dbx 165a, dbx 160, dbx 160X, (7) Kepex II, (2) Draw-

mer Ds-201 and 1960 tube comp., (3) Gain Brain II, (6) Dyna-Mites, (4) dbx 904 gates, (2) dbx 902 de-esser, Pultec EQH-2, Pultec EQP-1A, Pultec MEQ-5, (2) MXR 15-band stereo EQ, MXR flanger/doubler, MXR instant flanger and phaser, Dyno-My-Piano CS-5, Panscan, Studio B: UREI LA-2A, UREI LA-3A, UREI LA-4, dbx 165, dbx 160, dbx 160x, (8) Dyna-Mites, (4) Kepex II, (4) Gain Brain II, (2) Drawmer Ds-201, Pultec EQH-2, Pultec EQP-1a, Pultec MEQ-5, Midi City: dbx 165, dbx 160X, dbx 160, UREI LA-4a, dbx 166s, Kepex IIs, Gain Brains, (8) Dyna-Mites, (4) Pultec EQP 1a.  
**Microphones:** Neumann: M49s, U47s, U48s, U67s, U87s, KM84s, KM64, KM54, AKG: C-12s, C-12as, C-28s, 414s, 414EBs, 451s, D-12 Telefunken 251, Sennheiser MD421s, MD441s, 406, E-V RE20, Shure SM57, Shure SM81, RCA 77DX, RCA BK-5, Sony C-500, Sony C-37As.  
**Monitor Amplifiers:** Yamaha PC5002Ms, Crown DC300s, Crown DC150s, Crown DC60s.  
**Monitor Speakers:** UREI 813, Yamaha NS-10M, Founner 8, E-V Sentry 100, Auratones.  
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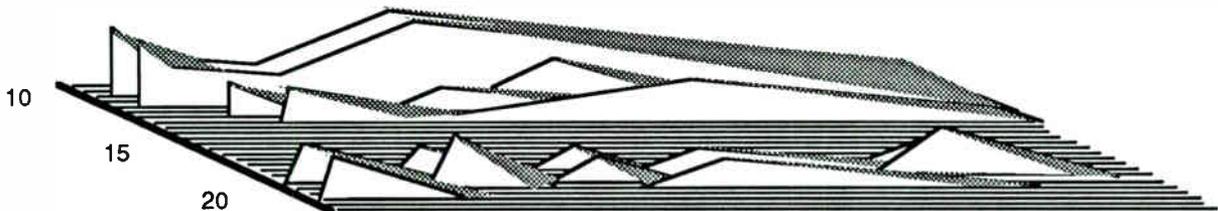
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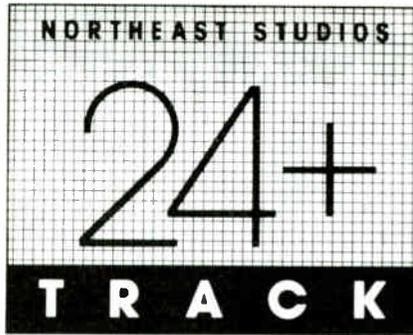
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**—FROM PAGE 110, NORTHEAST FOCUS**

Right now we're constructing a new room to handle complete audio-to-video picture mix and digital video editing." Recording Arts is currently building a MIDI room/tapeless studio. Estades envisions a future investment in producing audio-visual projects. "I'd like to build an entire audio/video complex. We've gotten into some video production already, a three-minute video commercial for the studio done all in-house. But the studio was built to record music, so it will be music first. I come from a cut-and-dried video background, which I don't mind leaving for a little while, and eventually we might have to get into that to sustain ourselves. But the owners don't really want to see that happen."

Business really got going for producer Reggie Lucas back in the '70s, after his first big success with "The Closer I Get To You," with Roberta Flack and Donny Hathaway. More gold and platinum records followed with his work on Madonna's first LP and four Stephanie Mills albums. Along the way he built his own studio, which is now a facility that celebrated its grand opening in January, in Jersey City, NJ, about 15 minutes from NYC.

"It wasn't totally planned out," Lucas says. "I originally got into a studio at home just to lay down some drum machine tracks, then I got automation, then it just spiralled into being a place other people wanted to use. Now we've got two rooms going, with a 56-input SSL-4056, the Synclavier, a couple of PCs with the Sequencer Plus program, tons of MIDI and outboard gear. We'll be setting up the front room as a live room with the SSL, and the second room as a MIDI/mix room for making records.

"Since I'm a record producer," he continues, "I'm trying to keep the atmosphere pretty consistent with what I like to do. We've got a lot of room, a first-class facility, so we're emphasizing records. We haven't gotten into video or even the singles market—which isn't to say one day we might not do it."

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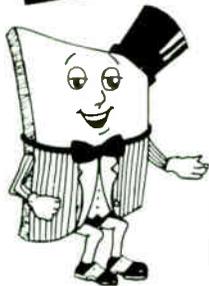
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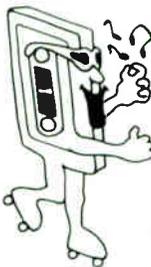
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—FROM PAGE 99, PLAYBACK

up totally remixing *Help* and *Rubber Soul* for CD, but I haven't changed anything. I've regarded the task as rather like looking at some old master paintings—it's really mainly a matter of carefully cleaning off all the old varnish and layers of dirt until you're left with that bright, glowing original color.

*And how have the tracks held up in your opinion?*

Amazingly well. Of course, I would have done a lot of things very differently if I'd had today's technology, but I'm really very pleased with the overall quality of the recordings. They have tremendous energy and drive, and it's a very *alive* sound. You can instantly hear and feel what was so appealing about The Beatles and their music. It's very *immediate*, and as primitive as the records were, they hit you right away.

*Has it been a traumatic trip down memory lane as well?*

Very much so, both traumatic and exciting, particularly going back over the master tapes and listening to all the outtakes and then hearing John's voice joking and chatting with me as we're playing piano together. It's a little bit unnerving, but also thrilling to go back in time and appreciate the rawness and sheer power of those early recordings, as well as clinically appraise the tapes.

*What tape machines did you record on originally?*

The first two albums were recorded on BTR2s which were made by EMI themselves, and which we used to call "Green Monsters." The subsequent albums were recorded on the first 4-track machines I ever laid my hands on—Studer machines—which were incredibly good at that time, too. They recorded four tracks on one-inch tape, so that gave you 1/4-inch for each track, which is pretty generous really. So *A Hard Day's Night*, *Beatles For Sale*, *Rubber Soul* and *Revolver* all used the Studer machines, and in fact right through *Pepper* we still used those same machines.

*You mentioned Please Please Me was done in a day. How long did the other albums take to record?*

Well, the reason I did *Please Please Me* so quickly was that very little of the material was The Beatles' own, so it was more a case of just letting them run through their repertoire that they knew backwards, and picking the tracks that worked the best as records. And of course, I wanted to get that first album out in a hurry. Naturally, as

they became increasingly aware of the technical side of recording and what all was possible, the other albums began to take longer and longer as we all began to experiment. But in the early days, we still worked very fast. For instance, the second album, *With The Beatles*, took longer because they were writing more new songs, and that was in 1963. But even two years later, with the *Help* album, we'd still finish a complete song in one afternoon.

*Can you give a specific example?*

Well, take "The Night Before," which Paul sang on *Help*. According to my studio notes for that session, we started recording the track at 2:30 in the afternoon, by 4:40 p.m. we were overdubbing the vocals, and by 6 p.m. I'd started mixing on the 4-track. So you can see we certainly didn't waste a minute.

*Where were all the albums recorded?*

We pretty much did everything at Abbey Road—Studio 2 was our home, and we practically lived there at times. But occasionally we'd use other studios. "All You Need Is Love" was recorded in Studio 1, and of course in later years we began to go outside more. For instance, we did "Hey Jude" at Trident, and then some work at Olympic Studios—"Baby You're a Rich Man" from the *Pepper* period of psychedelia, with all its speeded-up trumpet obbligatos, was recorded there. Later of course, we equipped Apple for *Let It Be* and other projects.

*Were there problems in remixing the later albums for CD format?*

Well, the only problem is that CD gives you so much more, and you hear a far wider spectrum of sound than you've ever heard before. The thing to bear in mind is that when I made those records almost a quarter century ago now, I was specifically making records for the market of the day, in which the records themselves weren't very good, and the record players were a damn sight worse. The average deck in the average home was a pretty inferior machine, and if you *did* have stereo—which most people didn't—the speakers were about one foot apart! And it gave the listener a very foggy sound. So I'd produce records that would cut through all that fog.

Now, if you're going to take those tracks the way I produced them and play them on CD, they're going to sound a lot harsher than they should. So, in order to compensate, you have to slightly alter the original sound for CD, which is what I've tried to do on *Help* and *Rubber Soul* and the others.

Obviously, the recordings got better in stereo, although looking back I suppose that some of the experimental stuff I did on *Rubber Soul* was a bit weird. But I was very conscious then of people listening to stereo on mono players and hearing whatever was in the middle coming up 4dB louder. I guess that's one of the main reasons why I put a hole in the middle and then sounds on either side. It was a very experimental time, and as we tried out various methods, we became more and more sophisticated in the studio. I think *Revolver* was pretty good, and by the time we got to *Pepper*, it was technically getting very good. So I don't really want to change anything, or remix all those tracks again—just make sure the EQ is right. From the *Pepper* album on, they should be virtually foolproof.

*Are you happy with the CD releases so far?*

Pretty much. I have some slight criticisms. I think the EQ situation could possibly have been a bit better, but we may go back and modify that. It's like I said—producing a record in '62 or '63 is for the equipment of the era, and when you start transferring to CD in 1987, it's a whole different thing. I've tried to mix them as I think they would have sounded back then. It's

really very subtle indeed, but very satisfying to me.

*Have you consulted with the rest of The Beatles on the CDs?*

I've talked to Paul, who hadn't been involved, but who's as pleased as I am. And I tried to get hold of George, but he's been in L.A. working on his new album, which I'm glad about. The thing is, I can understand EMI asking me rather than them—it's no skin off their noses because in the early days, they didn't have anything to do with the technical side, and I'm not changing the artistic side, so it's no problem. But they're all pleased about the CDs. Paul said he's especially pleased they're finally available on CD because he loves the format as much as I do.

*So you're a big CD fan?*

Absolutely, *very big!* I think it's tremendous and I want to hear everything I've ever recorded on CD, if possible. Really, it's the ultimate sound.

*What about CD critics who say it picks up every fault?*

Well, yes, it does. But it also picks up every virtue too. It's a totally honest medium, and all you should do is make sure your recording is *right* for CD. I think most critics of CD have been

those people who've listened to records which were made for another medium—that's why I stress the EQ of the old Beatles recordings being rather horny in character. If you make a record for CD, you don't need to sound cold and clinical and nasty. You can get the warmth.

*After you've finished all The Beatles' albums, are there plans to issue their solo projects on CD?*

I'm sure they'll all be released on CD eventually, but I won't be involved in that, as I didn't have any jurisdiction over them in the first place, nor do I want to get involved. But they'll obviously have to put out a CD compilation of singles as well.

*What were your first impressions on meeting The Beatles?*

To be honest, it was no big deal. I was running a record company as head of Parlophone, and responsible for signing everyone and cutting their records, so when Brian Epstein played me this acetate—of course there were no cassettes back then—of a group called The Beatles (which I thought was a silly name) I listened and didn't think much of it. But there was something there, raucous and different, that I couldn't quite put my finger on, so I agreed to meet them. So Brian brought

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them down from Liverpool and I spent an afternoon with them at Abbey Road, and I fell in love with them—simple as that. They had great charisma, and were instantly appealing as characters even though musically they were very raw indeed.

*Is that how you became involved in playing with them as well as arranging their material?*

Yes, because I could play keyboards moderately well and they couldn't really play at that point. So I'd fill in if I wanted a particular sound. For instance, I doubled the guitar solo line on "A Hard Day's Night," and played the piano track on "Money."

*Were they keen to experiment even in the early days?*

Very much so. They were intensely curious about everything to do with recording techniques. Of course, when we started, it was virtually a live broadcast. I'd just set up the mics, EQ, get a balance and do it. But very quickly we started experimenting with all kinds of effects and sounds. George got his 12-string Rickenbacker for "A Hard Day's Night," and I started playing a lot of "wound-up" piano, or double-speed piano, to get a real twangy harpsichord effect. Then I started doing backwards tape things, like George's guitar solo on "I'm Only Sleeping" on the *Revolver* album. In

the end, it was difficult to keep up with them as they learned so fast.

*Going back over all these old tracks, have you chanced across any new outtakes hidden in the vaults?*

Unfortunately no, although I've discovered a few interesting things. For instance, I found something while I was listening to "Yesterday." There was a bit of double-tracked voice of Paul in the chorus that in my memory of 20 years ago I thought was double-tracked. But it wasn't. It turned out to be where I'd actually overdubbed another take from Paul to get a better performance and improve what I already had, and I used that overdub for one line only. But the one line where I used it, Paul hadn't used headphones to sing it, and so the pick-up from the studio monitor of the original vocal track is still there—so much so that it sounds like double-tracking. And that remained on the master of the original album, but I never realized what it was until I uncovered it with the multi-track machine.

*You mentioned earlier that you're treating the task like the restoration of an old master. Have you made any changes to the original tracks out of choice?*

Not really, apart from one alteration I made on "Dizzy Miss Lizzy," where I added some echo to John's voice which hadn't been there before. I just felt it demanded it. Otherwise, I've been extremely faithful and true to the record.

*Finally, has working on The Beatles again after so many years made you nostalgic for the past?*

Absolutely, because today's rock and roll just doesn't excite me anymore. The fun's gone out of it, to be honest. So I look back very fondly to all these sessions and listening to all the tapes again is like reliving my youth. And I'm very happy that so many people are still listening to this music, and that it's now going to happen all over again for a whole new generation, thanks to CD. To me, The Beatles always were and always will be the biggest, most influential and most important group of all time. What more can you say? ■

*"Count" Iain Blair, British writer, musician, and author, was an original cast member of the Rocky Horror Show and the film version for 20th Century Fox. He's currently writing screenplays in Los Angeles.*

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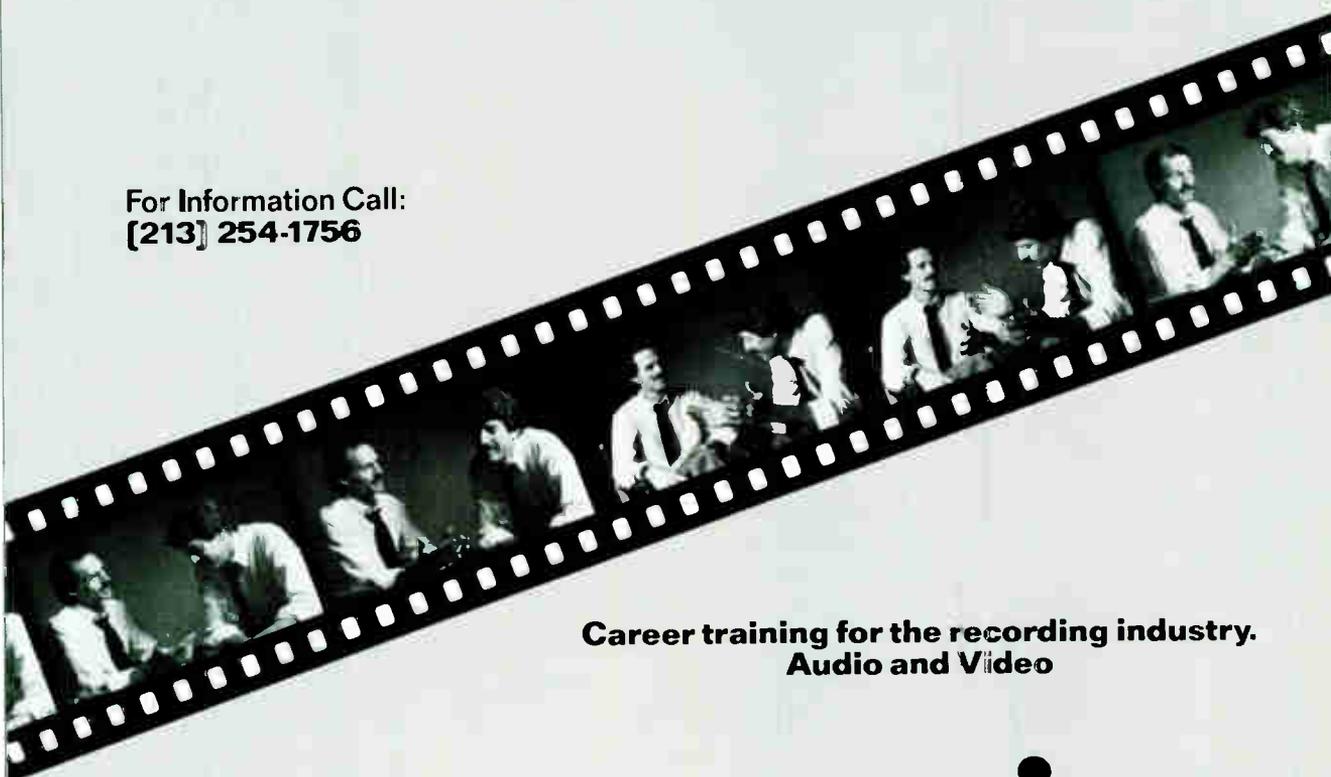


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# MUSIC NOTES



PHOTO: MICHAEL JANG

## The Neville Brothers Go Uptown

by Rip Rense

There comes a time when musicians and groups don't have to explain themselves anymore. When they don't need critics and writers to explain them anymore. When all the cleverest descriptions of their music become incidental and silly. It's a time when all that need be done to sell out a concert or promote an LP is merely to announce that the concert or LP is due.

Such a time, it seems, has arrived for the Neville Brothers.

"You're right," says Art Neville. "There's no doubt in my mind. We can feel it. The time is right. We're playin'

some cold-blooded music."

Now if you don't know who these Neville Brothers are, or if you have some vague notion of them being cajun or otherwise *ethnic*, it is gently suggested that you investigate further. To discover the Neville Brothers (and New Orleans music, for that matter) is to experience some of the most joyous and infectious music extant. Critics and writers generally rave about how the Nevilles' music "pulses like a steaming cauldron of gumbo" or some other clumsy simile. That the brothers "contrapuntally syncopate like a minor orchestra of funk." Or how they are a burbling R&B-funk-calypso-cajun-rock-blues-soul stew (or some such hyphenated monstrosity).

Well, it is true that the Brothers' music draws (by osmosis, not design) from many musics—the above named among them. But to say they are in-

fluenced by blues is like saying Van Gogh was influenced by blue paint. It was one of his *tools*. To call them "New Orleans musicians" is like saying Beethoven was a "German composer." The music industry, forever hung up on marketing, has buried the Nevilles under such categories as "soul/R&B"—categories that don't always get a lot of mainstream radio play.

"My little brother, Cyril," says Art, "likes to call it 'roots of American music.'"

And that's as good a description as any, as long as it is understood that these roots have grown into a new species of tree—for the Nevilles' synthesis of different influences is unique. Not all that surprising, really, when you consider the fact that they've been playing together on and off for the last 30 or so years....

"We knew we had something to do,"

Photo above: The brothers Neville are (L-R) Art, Aaron, Cyril (front) and Charles.

Art says, sitting at home "in the gumbo" in New Orleans (just down the street from famed Tipitina's). "We knew we could do it, and there was no reason not to do it. And if we *didn't* do it, we'd have been feelin' pretty stupid for the rest of our lives. It just wasn't in the cards for us to give up."

Their careers sometimes took individual brothers in individual directions....

"Everything finally came back around, full circle," Art continues. "All the brothers' heads are on straight; we just doin' what we got to do, and we thank the Lord we are here. 'Cause that's who's behind all of it, you know."

Lest all this sound melodramatic, consider the fact that Art's first single, "Mardi Gras Mambo," was done (as a teenager) in 1954 with his high school group, "the Hawkettes"; that Aaron's biggest hit was "Tell It Like It Is" in 1966; that the Neville Brothers were the Meters and the Wild Tchoupitoulas for about 13 years before incarnating as the Neville Brothers Band in 1977. (Final line-up: Art [keyboards]; Aaron ["golden voice"]; Charles, a saxophonist/percussionist with Bobby "Blue" Bland and B.B. King in the '60s; and youngest brother, vocalist/percussionist Cyril—formerly with the Meters—plus guitarist Brian Stoltz, bass player Darryl Johnson, and drummer Willie Green.) Indeed, the Meters once opened a tour for the Rolling Stones. Mick Jagger, back in the mid-'70s, proclaimed them "the greatest band in the world," at that time akin to a papal blessing. Keith Richards called the Nevilles' 1981 album, *Fiyo on the Bayou*, his favorite of the year. So they've been on the *edge of greatness* a long time. Something held them back, time and again; something prevented them from getting the popularity their music merited. Something, probably, called FM radio.

"Look, you can't get out of the clubs without getting on radio," says promoter Bill Graham. "The tragedy is that there is a lack of FM that is not heavily formatted. The Neville Brothers should have been on radio years ago. It's no different with Van Morrison, in that sense, or Etta James—great, great artists that haven't been given their due by exposure."

How does Graham figure into all this? Heavily.

"Bill was listening to us for a long time," says Art, his baritone voice more or less scraping gravel. "He'd been comin' to gigs and one night in the dressing room of the Great American Music Hall in San Francisco, he said, 'man, you know, they should make a Neville pill, because when you're feelin' bad, just take one dose and all your

troubles are gone.' About a year later, we had our first business meeting."

Things changed quickly from there. Graham booked the Nevilles on last summer's two-week Amnesty International Tour, where they rubbed elbows with Sting, Joan Baez, Peter Gabriel, and a whole bunch of people they wouldn't otherwise have met. Later, they opened for Huey Lewis and the News on a 27-date tour, earning the unduly-named yuppie rocker's commercially valuable endorsement when he came out to jam with them nightly. ("Headlining acts don't need to share the stage with the opening act, if they don't want to," says Art, adding, "it helped, definitely.") They played the past two New Year's Eve shows with old friends and admirers the Grateful Dead, who had incorporated several Nevilles/Meters numbers into their repertoire in recent years. ("It's a gas," said Art. "New Year's is amazing. That's a reward in itself, having people like the Dead doing songs you do—it's one of the best compliments you can get.") Last month, Rhino Records released an excellent two-LP anthology (dating to "Mardi Gras Mambo," entitled *Treacherous*), and now....

"We got a new album, and it's *serious*," says Art. "This is nuclear. I've been playin' it over and over, and it's *fresh*. No hype—I really believe this is the one. We got some good people helpin' us out on it, too—Carlos Santana, Keith Richards, Jerry Garcia, Branford Marsalis."

The album is called *Uptown*, and it was released in March by EMI/Rounder. Graham, reached at Bill Graham Presents in San Francisco, predicts it will smash the old FM jinx.

"It is exemplary of who the Nevilles are, but it also retains the roots and groove of who they are and still does something for radio," he says, adding, "If ever there was a labor of love within our functions here, this is it. We work with these guys because we want to."

*Uptown* combines the hell-raising of *Fiyo* with the lyricism of *Nevillization* and their 1978 Capitol album, *The Neville Brothers*. Richards plays on the track that fairly seared the Amnesty audiences, "Midnight Key"; Garcia solos on "You're the Only One," and Santana is on "Forever Tonight." Art's keyboards are prettier, Aaron's angelic tenor a bit darker, and the rhythm section about as deep into a groove as can be. Critics are calling it the "soul/R&B" album of the year. It's about time, too. Art Neville is 49 years old.

"The time is right. We stayed together," he said. "The main deal was that we kept this together through all kinds of obstacles and difficulties. We kept it

together, and we have a reasonable amount of sanity left. We all live on the same street we grew up on, except Charles, who just moved to Oregon. I can look out my door and see Aaron and Cyril.

"Our health is pretty good, so far, knock on wood—and we try to keep it like that. I'm the eldest one in the group, and I'm *young*. Age don't mean *nothin'*, man."

So keep that in mind when the Nevilles come to town (or turntable) in a flurry of bobbing second-line rhythms, tight harmonies, music that percolates with the heritage of cajun, calypso, reggae, rhythm and blues alike; music that melds street gang chants of New Orleans with Mardi Gras Indian dances; music that is blessed by the souls of Professor Longhair and George "Big Chief Jolly" Landry (the Nevilles' uncle); music that—

No longer needs any introduction. ■

## Steve Earle: Country Music's Bright Hope?

by Holly Gleason

For self-described "hillbilly singer" Steve Earle, it's been quite a year. After releasing *Guitar Town* in March 1986, his face and story appeared in everything from *Rolling Stone* to *Time*. And along the way, the songwriting Texan notched a Number One country album in spite of marginal radio play while picking up two Grammy nominations for Best Country Vocal Performance, Male and Country Song of the Year.

"I try not to think about it," Earle

THE FAR SIDE By GARY LARSON



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The cover of Earle's acclaimed 1986 LP

shrugs when asked about his recent success after years of struggling to make \$9,000 in "a good year." Inhaling another cigarette, he adds, "You know, I don't want it to change me—and in some ways, it has.

"I always said that I'd never change my phone number. That was something that other people did; but, not me! Since then, I've ended up changing my phone number twice because people who have no business having it end up calling me when I'm trying to spend some time with my kids."

Up close, though, that's about the only problem the outspoken Earle has these days. Knee deep into the sessions for *Exit Zero*, Earle is writing better than ever, chronicling the plight of the common man in modern America with his unflinching vision.

After spending much of his youth as self-appointed apprentice to Townes Van Zandt, Earle eventually migrated from the Lone Star State to Nashville during the height of the outlaw movement. A publishing deal would later go bad, exiling Earle to Mexico where he would gather experiences for later songs and actually write "The Devil's Right Hand"—which would appear on Waylon Jennings' *Will The Wolf Survive* LP.

There was also an ill-fated contract with CBS that boxed Earle in as a rockabilly rebel. Consequently, it's no wonder that by the time he'd hooked up with producer Emory Gordy he was a little fed-up with Nashville's established way of doing things.

"I decided that I wasn't going to make a record until I'd written a whole album," Earle now says. "I believe that there's a market out there for country records—if we'd just make the kind of albums people want to spend their hard-earned money on rather than having two hit singles and a lot of filler."

Pausing for a moment, he considers the development of his unique

voice. "I think these songs that I've been writing will last. It's funny, because all the time I had my publishing deal, the songs just didn't seem to matter... I was trying to make 'em work for everybody but me. Consequently, the songs didn't work.

"But these songs—well, these songs are mine and I believe in them. They say what I want to say and they really mean something."

While some songs are in the first person, most follow the character vein established in "Someday," the tale of young gas station attendant in a one-horse town. Among the themes presented on *Exit Zero* are the plight of the farmer ("The Rains Came Down," which Earle debuted at the second Farm Aid), a fading football hero ("Number 29") and the constraints of everyday life ("Weekend Living Dangerously").

There are those who contend that Earle will eventually move into writing prose. Certainly he has a gift for capturing the average man and his emotional make-up—no less than Bruce Springsteen and John Mellencamp have been heard covering "Someday" in their live sets, proving that Earle's message transcends country music.

"Pure poetry," answers the leather-jacketed 31-year-old when queried on what makes a song great. "It's when the words fall just as well on paper that it's the best. Townes Van Zandt is probably the best songwriter in the whole world, and I'll stand on Bob Dylan's coffee table in my cowboy boots and say that.

"It's his simple songs which bear that out more than anything else. Take a song like 'If I Needed You'—nothing could be simpler or say more."

Earle has that same understated eloquence in his work. In "Good Ol' Boy (Getting Tough)," Earle writes: "You go to school and you learn to read and write/So you can walk into the county bank and sign away your life." In two lines, Steve Earle has summed up what the American Dream has come to be for many lower-middle-class Americans: a seductive trap. Though he prefers hot rods and tacos to sports cars and fancy dinners, Steve Earle knows how to say what's on his mind; indeed, he knows his mind, which is no small virtue in these days of Reaganomics and high-stakes hostage dealings.

Nowhere is this more clear than when the issue of whether Earle is a country artist or a rock artist is raised. Without pausing, he says, "Listen to me talk—I'm a country singer. That's that."

And through his fierce loyalty to the music, he may actually help redefine it. After all, Hank Williams Sr. was

hardly considered a visionary when he was writing his simple country songs. It is only from the distance that his effect on the music he loved becomes clear.

Paring things down in the studio to just the bare essentials, Earle's songs are never overburdened by string tracks or excessive background vocals. Instead, it's him twanging away with his road band, the Dukes, rocking away behind him, driven by the Duane Eddy-esque guitar lines of Richard Bennett.

There's a definite sense of life to Earle's albums and a sense of hope to even the most desolate character. It's as if by being able to recognize the hollow feelings and pitfalls one can hope to overcome them.

It has certainly been the case for Steve Earle, who could have easily given up years ago. But instead, he takes it all in stride and turns it into songs later.

Though he doesn't like to elaborate about how the personal songs are lived out and then written, he will crack a boyish grin and confide his "nightmare." Laughing, he explains, "I used to dream that CBS would eventually release that rockabilly thing I did for them and call it *Early Earle*. And you know something? I was close. I hear they're getting ready to put it out and they've named it *Early Tracks*."

But Steve Earle doesn't like worrying about things he cannot change. Instead, he invests his time and energy in the future and in his career. The way he sees it, "There are always going to be people like Ricky Skaggs and George Strait, but what we need is people making modern '80s country records. Rosanne Cash and Rodney Crowell are the closest, and I think you're going to see even more writers who are artists. That's what's going to bring country back and I'd like to think that's where I fit in." ■

## Bill Meyers: Movies, Madonna & More

by Roy Trakin

Casual music fans might not have heard Bill Meyers' name but they've probably heard his music. The 33-year-old Chicago native is a regular pop renaissance man with skills as a composer, film scorer, songwriter, arranger and keyboard player. He's written songs for Donna Summer, Earth, Wind & Fire, Rufus, and Apollonia. He's toured with Gino Vannelli, Boz Scaggs, Lou Rawls, and Madon-

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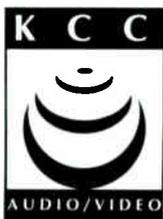
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na, (for whom he arranged the strings on "Papa Don't Preach"). He penned the score for the John Candy-Eugene Levy flick *Armed and Dangerous* and just released his own solo debut, *Images*, a new age-style set of instrumental symphonies recorded direct to disc.

With all these accomplishments, it's no wonder Meyers can live in a multi-tiered Hollywood Hills house sporting a panoramic view of the Capitol Records Tower and the entire city below, while remaining perfectly anonymous to everyone outside his own peers.

"My ego is gratified by the type of people who have responded to my work," says the modest Meyers. "I just want to continue to be able to do good stuff. I've seen a lot of fabulous musicians playing Holiday Inn cocktail lounges. A lot of it has to do with being in the right place at the right time."

The classically trained organist has combined both luck and skill to forge his musical career. He went through a series of metamorphoses, the first of which was discovering jazz while attending DePaul University. From there, the young keyboardist was inevitably drawn to Chicago's fertile rhythm & blues roots.

"Most of the musicians I played with were black, and so are most of my musical heroes," he says.

At a local Yamaha-sponsored pop festival, Meyers got his first big break when he was befriended by blue-eyed soulster Gino Vannelli's brother Ross. That led to an audition and a spot in Gino's touring line-up. From 1976 to 1980, Meyers went on the road with Boz Scaggs (playing as part of a group that included future Toto members Jeff Porcaro and Steve Lukather) and Lou Rawls, while continuing to work on song demos in his spare time. He targeted long-time idol Maurice White of Earth, Wind & Fire for one of the tapes.

"At the time, they were at their peak, the last of the R&B bands with a progressive sensibility," says Meyers. He placed his first tune, "Can't Let Go," on the group's *I Am* LP and followed that with horn arrangements on three later singles. With admirers like producers David Foster and Quincy Jones, Meyers went on to writing songs for Rufus, Donna Summer ("Mystery of Love," co-authored with current Mr. Mister head Richard Page), Jennifer Holliday, and Latoya Jackson, among others. He also became a highly sought-after session player, which finally convinced him to move from the Midwest to Los Angeles seven years ago.

"You can go from feast to famine with session work," says Meyers. "I'll go from not being able to stand an-

other minute to will I ever get another gig? I'll still do sessions, but I found there was something missing for me. I wasn't being challenged. I was playing the same licks over and over. I'd say I enjoyed maybe a quarter of the sessions I did. There always seemed to be more concern over who was getting the most work rather than the quality of that work."

As a keyboard player, Meyers has paid special attention to the ever-changing technological capabilities of today's synthesizers, though he warns against relying on machines rather than humans.

"I find it annoying to be called in to do a session where most of the time is spent in getting different effects or sounds," he complains. "The song should be most important. Melodies and lyrics have been the biggest casualties of the new technology so far. The problem with synthesizers and electronic effects is we haven't caught up to the growth of the technology yet. Now that wind instruments are able to interface with synthesizers, perhaps we'll see people playing together again. And that's the essence of music, isn't it? At the same time, though, there's still a place for the single person doing it all himself. Everything should have its proper place. There's room for all of it."

In his quest to continue growing as a musician, Meyers went to UCLA and took extension courses in arranging for film. As a means of coming up with a suitable demo of his abilities in this area, he agreed to record a solo album direct to disc, as an experiment. The result was *Images*, a series of "visually stimulated aural scenarios," as Meyers describes the five pieces, released by Texas-based Spindletop Records.

The idea behind the album was to rehearse the 35-piece orchestra, then go into the studio and cut each side in a single, uninterrupted take direct to lacquer, with no overdubs, no editing, no re-mixes. While Meyers admits digital recording and compact discs have made this kind of audiophile record slightly outdated, the process still proved educational.

The first side, with "AM/PM" and "Voyager"—the latter based on excerpts from a Louis Vierne piece—was recorded straight through on the third take, after a single rehearsal.

"We didn't use sequencers or computer technology," Meyers insists. "That's why I play acoustic piano and the Rhodes throughout, and use a ten-piece brass and woodwind section and a full percussion rhythm ensemble. I did run some synthesizers, with stereo mixes being fed right into the board. Everyone had scores with red lines

indicating their parts. I also had someone reading the score in the control room, alerting the engineer when important lines were coming up. It required some real teamwork to pull the whole thing off."

Although they didn't end up using the disc that was cut at the session, the digital 2-track recording came out fine and served as the master for the final album. Each of the three pieces on the second side was recorded in the same way, except with breaks in between cuts rather than straight through, as on the first side.

"The best thing I can say about the method is it did affect the performances," says Meyers. "It doesn't sound layered or overdubbed a hundred times. There's a tightness in the playing because everybody knows they're not going to get another opportunity to perfect it. I don't think I'd record this way again, though. It's too frustrating. There are always things you want to change and just can't. Over-

all, I think it's amazing it came out as well as it did."

Something else happened to Meyers between sides one and two of *Images*—he was enlisted to work with Madonna, first on *True Blue*, then as keyboardist in her road band.

"Her musical director, Pat Leonard, is a friend from Chicago," Meyers says, explaining the fortuitous opportunity. "I also knew her manager, Freddie DeMann, because I once arranged a single for Tavares, a group he was working with at the time. I guess that gave me the inside track."

Meyers has nothing but praise for Madonna's professionalism, even though, "it wasn't the most difficult music in the world to play. I gained respect for her as I got to know her a bit. She took an avid interest in every aspect of the production... the lighting, staging, choreography. She didn't take as direct a control in the arrangements. She just told us what she liked and didn't like. I thought the level of musi-



Bill Meyers

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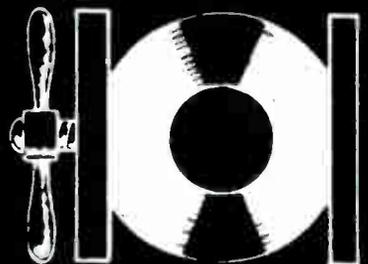
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chianship was high. I wouldn't have any qualms about bringing that group of musicians into the studio and doing a record with them. But it's hard to get excited about 'Like A Virgin,' and that's coming from a musician. I would tell that to Madonna's face, but I'd still back it up by saying, a lot of the stuff grooved and was performed well."

From there, Meyers fulfilled a life-long ambition when he composed the score for the motion picture, *Armed and Dangerous*, which contained a mostly R&B-oriented soundtrack supervised by old pal Maurice White.

"I want more of that," he says. "I haven't even begun to scratch the surface. You really learn about pressure working on film deadlines. The most satisfying thing for me was to hear my music played back by a group of musicians and seeing it against the screen. It was a pleasure to have people involved in the film tell me it worked."

While his achievements behind the scenes are certainly impressive, doesn't Meyers crave any sort of public acclaim or recognition?

"Until I placed my first song with Earth, Wind & Fire, every tune I wrote was a joy to me," he says. "I couldn't believe I was actually composing songs. There's a wonderment in that. But then you get out here to L.A. and realize getting your song on a particular record that's going to sell 5 million copies means a lot of coin. And your perspective changes. You suddenly think about writing something for Donna Summer's new album. I find a lot of very talented people in this town doing nothing but that. And they lose their own identity in the process."

"There's a constant push-pull with me, knowing a solo artist can achieve [such] notoriety that whatever he's doing will be heard by a lot of people. I admit this area has me intrigued, but I'm also finding I appreciate writing the kind of material on *Images*, having no restrictions in a commercial pop sense. That enjoyment has spoiled me to a certain extent. You can't lose perspective on what allows you to create your best music. If you get lost in the dollars and cents, it doesn't come out the right way. What's most important to me is the respect of my colleagues. That's what you strive for."

With a basement home studio boasting a 12-track Akai and a Yamaha 16-channel board with an array of synthesizers (including a Roland Super Jupiter, an Emulator 2, a Casio, a Linn 9000 drum machine, Prophet-5, Minimoog and a Yamaha K88 master control keyboard), Meyers is set for his next test.

"Music has traditionally been subservient to the screen image," he ex-

plains. "What I want to do is experiment on video to give the music and image more equal weight. I spoke to someone in the film business who told me that shorter, episodic features about an hour long will be making a comeback. Which would lend itself to the kind of concept I'm talking about. The sky's the limit." ■

**Billy Bragg's Songs of Social Conscience**

by Bill Milkowski

Billy Bragg is a spunky Brit with an electric guitar, a 60-watt amp and a heart full of conviction. He snarls in the face of bourgeois complacency and challenges his audience to think beyond the basic rock and roll themes of boys, girls, fast cars and party-party-party.

Bragg gave up bands a few years back and started performing on London street corners, where he gained a small but loyal following, along with some favorable coverage in the local rock press. Adopting a do-it-yourself attitude, Bragg released an EP in 1983—the raw *Life's a Riot with Spy Vs. Spy*—which has sold more than 150,000 copies to date in England. He followed that in 1984 with a full-length LP, *Brewing Up with Billy Bragg*, which also went gold in England.

With his American major-label debut, *Talking to the Taxman About Poetry*, the 28-year-old angry young man is looking to stir things up with the American audience. This album is a far more produced affair than his scrappy independent recordings—each of which was cut in a few days' time on a shoestring budget—but it pulls no punches politically.

"Signing this contract with Elektra hasn't changed anything," says the cocky Cockney. "Whenever I talk with any record company, it's about how much control I can have as well as how many records I can sell for them."

Some of the tunes on *Taxman* are bound to rub Yanks the wrong way. "Help Save the Youth of America" is an indictment of what Bragg sees as an inherently hedonistic society: "Help save them from themselves/ Help save the sun-tanned surfer boys/ And the California girls... A nation with their freezers full/ Are dancing in their seats / While outside another nation/ Is sleeping in the streets."

This folk protest song, done to a jumping Bo Diddley beat, concludes with the thought-provoking verse: "And the fate of the great United States/ Is en-



Billy Bragg

PHOTO: PENNIE SMITH

twined with the fate of us all/ And the incident at Chernobyl proves/ The world we live in is very small."

Bragg delivers these lines with clenched jaw, Cockney yelp and thrashing power chords, like Bob Dylan-meets-The Clash. On the rousing workers' anthem, "There's Power in a Union," he hearkens back to the message of Pete Seeger, though his delivery is quite different. Instead of an acoustic guitar or banjo, Bragg assaults the senses with a piecing electric solid-body guitar set on stun. And in contrast to Seeger's plaid shirts and grandfatherly gleam, Bragg comes across like a hard-boiled street fighter.

*Taxman's* political protest songs are balanced with more evocative sketches. In "Greetings to the New Brunette," a giddy ode to a girl named Shirley, he sings: "I'm celebrating my love for you/ With a pint of beer and a new tattoo." In the melancholy "Levi Stubbs' Tears" he tells the tale of a lonely young girl living an ordinary life who finds solace in the songs of the Four Tops. And in "The Passion" he sings about an unhappy newlywed with a dilemma: "In the long empty passionless night/ Many times to herself she has prayed/ That the baby will love her much more/ Than the big boy who stole her away." And his sentimental "Home Front" is full of nostalgic images of placid Brit-life and "the promise of jam tomorrow"—a lifestyle which he openly rejects: "The lonely child looks out and dreams of independence/ From this family life sentence."

Billy Bragg grew up in London emulating such rockers as Rod Stewart and the Faces, Chuck Berry, and (of course) the Rolling Stones. He, his boyhood pal Wiggy, and a couple of

other blokes put together a garage band, playing raunchy covers of "Brown Sugar" and "Johnny B. Goode."

Seeing The Clash in 1977 turned Bragg's life around. "It made me realize that to express some feeling is more important than to get it didactically right as a musical form," he explains. "So shortly after seeing The Clash in concert, we stopped wanting to be the Rolling Stones, because the gap between us and them was so huge and we had no idea how to get across that gap. But in The Clash we saw everything that we loved about the Rolling Stones—plus they were just an inch away from the street, from playing in their mums' back rooms, just like us. So we suddenly realized that nobody comes along and says to you, 'We're gonna make you famous, boy.' You have to do it yourself. And that was really one of the great lessons I had learned—the idea that anybody could do it."

He formed a punk band called Riff Raff, which played around London from 1977 to 1980. Then Bragg dissolved the band and took to the streets on his own with guerrilla abandon.

Though his first two recording projects were strictly one-man-and-one-guitar, *Talking with the Taxman* involves some accompaniment, including guitar work from The Smiths' Johnny Marr (on "Greetings to the New Brunette" and "The Passion"). "This album is certainly more accessible, because I wanted to progress from being just one man and his guitar to being one man and some more guitars and maybe a little bass here and there and a couple of overdubbed vo-

—CONTINUED ON PAGE 205

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# F E E D B A C K

## Dear Mix:

It was with greater excitement than usual that I grabbed my latest copy of *Mix* from the mailperson's hands, as surely, enough time had passed that it would have the press release of the recent merger of two of Alaska's premier recording studios into one, creating Sound Innovations.

Eagerly, I scanned the pages. There it was! On page eight, under "Industry Notes." Holy cow. There we were, with such industry notables as Fairlight, SRC, Nakamichi, United Video, Ampex, and on and on. With a feverish excitement, I read our little blurb. Imagine my surprise (and, yes, shock) to discover that we had also moved to Alabama!

Now, I don't want to slight Alabama; I'm sure it's a nice place. I even have a friend from there. But I happen to love Alaska, and don't plan on moving in the near future. Could you please see about moving us back to Alaska? I sure would appreciate it.

I hesitate to even bring the matter up, but it is the second time you have done this to us. The first time was in your listings, about five or six years ago. Please remember we are "AK," and they are "AL."

Other than your peculiar grasp of geography, I do enjoy your magazine, and the chance to keep up with what's going on in the "Lower 48." Thank you for your time and consideration.

Yours truly,  
Bruce Graham  
Sound Innovations  
Anchorage, AK

Editor replies: Ooops!

## Dear Mix:

After reading the article on the 128th SMPTE conference, I am interested in finding out the address of a company mentioned called Polyphonic FX Systems. Any information would be greatly appreciated.

Yours truly,  
Bob Burrows  
Brock Sound Productions  
Toronto, Ont., Canada

## Dear Bob,

Polyphonic FX Systems is located at 3860 Hollypark Place, Los Angeles, CA 90039.

## Dear Mix:

My associate and I are amateur mu-

sicians/producers/engineers. We've pooled our resources and have recently purchased a small studio setup which includes the following: Yamaha MT44 4-track recorder and MT20 4x4 mixer with patch bay, Yamaha DX21 keyboard, RX15 drum machine, QX7 sequencer, Fostex 4-channel compressor, Realistic 5-channel mixer and 12-band EQ and Technics RS12 cassette deck. Granted this isn't very much, but it's all we can afford, which brings me to my point. We know that *Mix* is for serious big time studios, but what about us small-time amateurs? Is there a magazine or publication which caters to this small but growing market?

Sincerely,  
Daniel J. Plummer Jr.  
Candi Productions  
Jacksonville, FL

## Dear Daniel,

First of all, rest assured that yours is not the first studio to start off with a simple setup. Many of the "serious big time" studios featured in *Mix* began as modest 4-track operations and have grown steadily over the years. In the meantime, you may want to investigate our sister publication *Electronic Musician*, which includes articles for both novice and expert alike on music production and recording. See page 82 for more information. Another resource worth checking out is the *Mix* Bookshelf catalog, a comprehensive selection of audio, video and music industry books from over 70 publishers, as well as audio and video tape courses, sound effects libraries, databases, and music-oriented software. Write to *Mix* Bookshelf, 2608 Ninth Street, Berkeley, CA 94710 for a free copy. Since you own a fair amount of Yamaha products, you should be receiving *Aftertouch*, their users group magazine. Write to *Aftertouch*, Box 2338, Northridge, CA 91323, for a free subscription. At present, we do not know of any associations of small studios, but we would be interested in hearing from any such organizations.

## Dear Mix:

Your February issue of *Mix* proved exceedingly interesting for a number of reasons, not least of which was the

international features concerning the UK. There is no doubt that Great Britain and America share a very special relationship with regards to the recording industry and it comes as a breath of fresh air to see your magazine go so far in promoting this.

I run a European album coordination service here in London and a lot of my time is spent liaising with the people and companies concerned with the recording of an album, the majority of whom are transatlantic. I therefore act as a communications bridge referring work from London to the States and vice versa.

One of the articles that particularly caught my attention was the one by Blair Jackson entitled "Strangers in Strange Lands." As an engineer myself I've come across the problems mentioned, which was one of the principal reasons for setting up Studio TimeLine in the first place. By personally matching facilities to producers and engineers requirements I can help to avoid the pitfalls concerned with recording in another country.

As you say in your opening letter, the recording industry has internationalized very quickly over recent years, (I happen to believe for the better) and a magazine that covers the broader aspect will not only fare well but also prove beneficial to everyone concerned in our industry.

With kind regards,  
Tim Thompson  
Studio TimeLine  
London, England

## Dear Mix:

The first four Beatles CDs are in dull mono! Though George Martin deserves endless thanks for his original contributions to the classic Beatles recordings, he gets no accolades from me for his latest decision to keep these recordings mono. Compare the old *Something New* album and see if you do not agree: the stereo versions have more presence (especially on headphones), save for the inherent limitations of the analog discs of the time (e.g., almost unbearable compression).

Further, I hope Parlophone/Capitol has the good sense to release on disc all of the missing songs without repeating songs from prior discs.

Brian Graifman  
NYC, NY

# MIX WORDS

—FROM PAGE 203, BRAGG

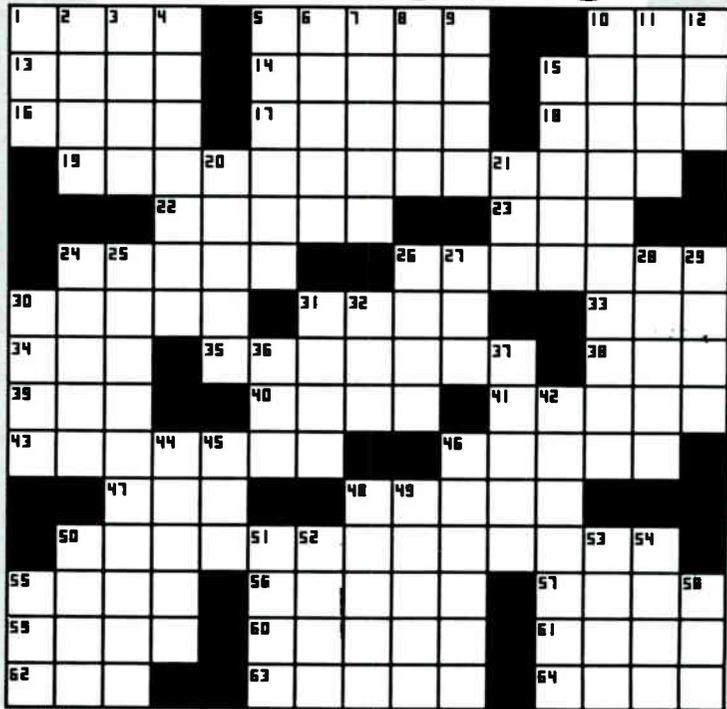
cals," says Bragg. "Maybe the next album will progress to one man and his bank of synthesizers. I can't guarantee. I haven't sat down and thought about it yet. But for the moment, it serves me better to remain solo, at least in concert."

Bragg considers himself as much a musicologist as a musician. In the course of soaking up influences he's encountered the works of Woody Guthrie, Leadbelly, John Lee Hooker and countless other originals. "I think a sense of musical history is a very important thing," he says. "I grew up in the early '70s listening to Motown and to Simon & Garfunkel, and from there I went back on through old country-and-western music, black gospel, Delta blues and white folk music. You know, you get someone who inspires you and you want to find out who inspired them. I think that's a very important way to think about music, not just to look at your hero and stop there.

"There's a lot of kids these days who think that what I'm doing—playing guitar solo and singing—is brand new, that it's never been done before," he adds with a hint of contempt. "They've never heard the early Bob Dylan albums. They've never heard of Woody Guthrie or John Lee Hooker. And these are people who I think of when I think of the solo performer at his best."

Bragg was also influenced by another angry young Briton, Elvis Costello. "I had been listening to Dylan and other American singer-songwriters like Randy Newman, Warren Zevon, Jackson Brown, and suddenly there was Elvis Costello, saying all the things that the other singer-songwriters had been saying about love and emotion, but he was saying it with a gun pointed at your temple, alternately stuck in his mouth. And that really made me think that the singer-songwriter doesn't have to be reflective or introspective. You know—talking to yourself, and 'woe is me' and all that. Elvis Costello made me realize that it could be 'Woe is me, and you're gonna pay for it, mother-----!' And that really impressed me. I was never the same after hearing that first Costello album.

"All songwriters hold a mirror up to society," Bragg continues. "Mine's a bit warped, like one of them funny mirrors you see at the fair, but Costello's was cracked—and it really left a big impression on me. He remains today the one person I've met in this industry who, in his presence I feel the fan again. Working with the English language, as I do, I think he's doing it the best."



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## A Little dB'll Do Ya

### ACROSS

1. Branch
5. Mother of Lavinia
10. Trig function
13. Bob Marley word
14. Desert ship
15. Go slow
16. S.A. country
17. Old car
18. Air conditioning
19. Performance graph
22. Radials
23. Revival prefix
24. Coming soon
26. Pittsburg player
30. Boat part
31. Lost
33. Grapes
34. Singing syllable
35. Not into the mic
38. Asian holiday
39. Help
40. Barrister (abbr.)
41. Portents
43. Latest style in songsters
46. A finish
47. Tube sound
48. Moslem book
50. Possible result of singing 35A
55. Arm bone
56. Lessen
57. Voice quality
59. Mud
60. Like a highway
61. Mediterranean port
62. Transport speed
63. Steamed
64. Review

### DOWN

1. Trumpeter's need
2. Roman road
3. Lunar area
4. Swagger
5. Pact
6. WWI battle site

7. Stockpile
8. Head, to mon ami
9. "River Kwai" actor
10. Turns in on itself
11. Tulsa man
12. Place to roll film
15. Blender button
20. Softly
21. French number
24. Main rooms in Roman houses
25. Cans
26. Attractive
27. Siamese, now
28. Smoothies
29. Teases hair
30. Headline
31. Counterparts to 30A
32. Held a conference
36. "\_\_\_ Pavillions"
37. Type of panel
42. Check transmission quality
44. S.A. cats
45. Emissary residence (abbr.)
46. Covetous
48. Metallic sound
49. River mammal
50. Film or hair
51. White House pet
52. Dyak of Borneo
53. Ibsen heroine
54. Insect
55. Reuters' competition

## Solution to April Mix Words



# CLASSIFIEDS

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—FROM PAGE 14, SESSIONS  
est album, *Michael Omartian* and *Dan Posthuma*, were mixing the project with *Bill Schnee* at *Studio 55* in Hollywood. . . Producer *Tom Dowd* has assembled the crack rhythm section Greg Phillinganes, Nathan East and Steve Ferrone to complete backing tracks at *Encore Studios* in Burbank for the upcoming *Diana Ross* album. Also, *Taavi Mote* is engineering *Leon Patillo's* Sparrow Records project at *Encore*. . . At *Music Grinder* in L.A., *Tom Waits* was in with engineer *Tchad Blake* and assistant *Casey McMackin* working on a new record for Island Records. . . At *Advanced Media Systems* in Orange, *The Cripples* mixed their debut album on Dr. Dream Records with producer/engineer *Bob Brown*, assisted by *Mike Sessa*. . . *George Clinton* was in *Sound Solution* in Santa Monica cutting tracks for the upcoming LP *Otis Day and The Knights* on MCA records with *David Blade* and *Arrin Richard* at the board. . .

## STUDIO NEWS

*Wave Sound Recorders*, Hollywood, CA, has installed an MCI JH-24 and a NEC CT-2660A 26-inch monitor to enhance their current video sweetening capabilities. In addition, plans are underway to construct their fourth studio. . . *Neve* has begun deliveries

of their DTC-I digital transfer consoles designed for CD mastering, with the first units going to *Sterling Sound* and *Masterdisk* of New York City, followed by Nashville's *Disc Mastering Inc.* The next DTC-I is slated for *Precision Lacquer* of Los Angeles, and should be on-line by press time. . . *John Alberts* has joined the staff of *Howard Schwartz Recording* in NYC as a mixer. Alberts comes to the studio following a five-year stint with *Regent Sound Studios* (New York) where he was senior mixer. . . In NYC *I.N.S. Recording's* control room has undergone a lot of changes recently. Now roomier and newly carpeted and air conditioned, the room also includes several pieces of new equipment, such as Gauss 7258 monitors, an Akai S900 sampler, IBM-compatible PC with Texture II MIDI Sequence Software, Macintosh Plus PC with Digidesign Software for Akai S900, and more. . . *Mad Hatter Studio*, in Los Angeles, has upgraded their facility to automated 48-track with the addition of a new Studer A-800 24-track, the GML Automation System and additional outboard gear. . . *Omega Audio* in Dallas has installed a CMX CASS I audio editing system for film and video. . . *The Bennett House Recording Studios* of Franklin, TN, recently purchased the Lynx synchronization system by TimeLine, Inc., along with pro-line Sony ¾-inch video recording gear. . . *Treasure Isle Recorders* in Nashville, has opened its new mix and overdub room. The

studio is equipped with a Trident Series 80B mixing desk, 3M 32-track digital and Sony 24-track analog tape machines, with outboard effects by Lexicon, Eventide, Bel, Yamaha, UREI and ADSR. Equipment and microphone cable runs utilize Mogami wire to insure signal quality. . . *Montage Recording* in Newark, CA, has acquired Simmons SDS-100C drum pads and brain, and Prophet 2000 sampling keyboard and custom software for Prophet 2000 including large string library and many other orchestral samples. . . Acquisitions at *Power Play* in L.I.C., NY, included the addition of a Sony PCM-3202 digital 2-track. The recorder will be utilized for digital mixdowns that can be mastered direct-to-disk as well as live 2-track sessions. . . Westward Communications Ltd./*Spot Shop Studio Inc.*, of Vancouver, BC, have installed a 4-channel Meyer 833/834 recording studio monitoring system, after successful use of this equipment at the Expo '86 Air Canada pavilion. . . New York City's *Power Station* has purchased two Otari DTR-900 PD-format digital 32-track recorders. . . *Production Masters, Inc.* (PMI) of Pittsburgh, PA, has completed a significant upgrading of its 24-track recording facility with the addition of a new computerized audio editing system, The Boss, by Alpha Audio. . . *Power Play Records* in Newark, NJ, has recently upgraded their studio with a Soundcraft 2400, a Studer A-80 Mark IV 24-track and more. . .

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Until the horses bolt from the gate, you can't tell a champion from an also-ran.

Likewise, equalizers "line up" evenly when covering the same "flat" terrain. It isn't until you demand "peak" performance that you can measure what an equalizer is truly made of.

JBL/UREI's 5547 Graphic Equalizer and 5549 Room Equalizer are made of the most advanced electronics ever packaged in an equalizing system. Their proprietary hybrid circuits deliver unprecedented low noise. Discrete active filter circuits provide the highest dynamic range ever achieved under real world operating conditions.

More headroom and less

noise is also a function of the 5547 and 5549's unique, headroom circuit. A special LED display and two gain structure controls allow you new precision in optimizing headroom and signal-to-noise ratio.

The 5547 Graphic Equalizer is the ultimate tool for creative equalization, offering both "Boost" and "Cut," while the 5549 is the ideal corrective

"Cut Only" Room Equalizer.

While both equalizers are at home in the studio, each is built extra-rugged for reliable roadability. And perhaps best of all, the 5547 and 5549's ultra-efficient hybrid technology gives you breakthrough performance at a breakthrough price.

Compare the JBL/UREI 5547 Graphic Equalizer and 5549 Room Equalizer to anything on any "track". Because when "peak" performance is paramount, the 5547 and 5549 simply leave other equalizers standing in the gate.



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