

FEBRUARY 1987  
U.S. \$4.00  
CANADA \$5.00

THE RECORDING INDUSTRY MAGAZINE

# Mix

Interview: Kitaro

**Directory:  
Independent  
Engineers  
and Producers**

**APRS Studio  
Listings**

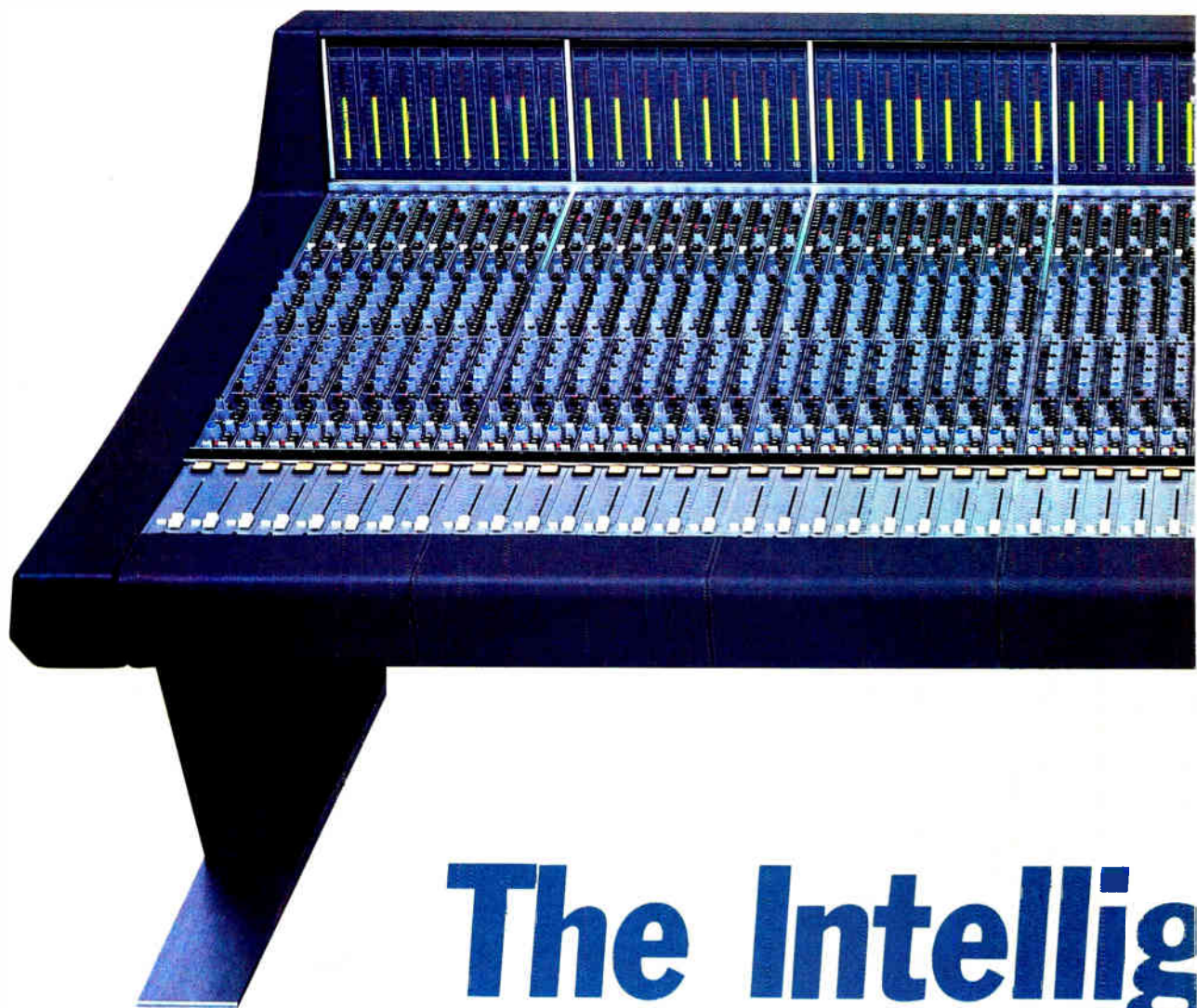
**International  
Recording  
Supplement**

**Arif Mardin**

**Reference Monitor Forum**

**Bruce Lundvall**

**Sound for Billy Joel**



# The Intellig

## **Westar Outperforms That Well-Known Console.**

Compare features, specifications, sonic performance and dynamic automation options, and you'll agree. Exclusive features are: Fully parametric EQ on all 4 bands, eight echo/cue sends, dual stereo mix buses, 60 segment LED meters with spectrum analyzer, up to 64 track monitor, from 20 to 60 inputs, field expandable frame, and three levels of automation options. And excellence in performance: Transformerless +28dBm outputs, EIN at -129dBm, Output noise at -86dB, IM distortion at 0.02% with VCAs, Crosstalk at -80dB, Wide band frequency response and high RF immunity.

## **Westar Is The Only Truly Modular Console.**

The Westar is a totally modular console using air frame design concepts for strength and rigidity. Individual frame sections are in groups of 8 I/O

modules, with plug-in frame wiring for true field expandability. New sophisticated limiter/compressor/gate modules may be fitted, wired either in-line with the input module or peripheral. Plug in interchangeable equalizers and preamplifiers in each I/O module give instant user selectability and allow the addition of new technology at any time. Automated EQs are scheduled to be available in 1987, with retrofit possible on all previously delivered Westar Consoles.

## **Compumix PC Hard Disk Automation.**

Compumix PC is a powerful and technically advanced automation system, providing storage on floppy diskettes of an unlimited number of mixes and off line editing of mix data. The Compumix PC comes complete with IBM XT compatible PC (with Dual Floppy and 20 MB Hard Disk Drives). Mitsubishi 13"





# ent Choice.

color graphics monitor, custom and standard keyboard, and all cables and software. Compumix PC is probably the most cost-effective high-performance automation system available today, and a perfect fit for Westar. As a bonus, the new AMP (Assistant Mixer Program) software provides the mixing engineer and the producer with time saving and practical features like track sheets, telephone auto dialing, timers, and quick-find reference tables.

## Westar— The Best Console Buy Around.

With cost-effective digital processing consoles scheduled to be available by 1990, the profit-oriented studio today needs a reliable high-performance analog console to match the sonic qualities of the new digital recorders like the Mitsubishi X-850. The Westar is such a console system, at a price the studio can pay back by the time digital consoles become reality. It all adds up to a professional studio console system offering the most attractive performance/price ratio. Call or write for our comprehensive brochure.



## MITSUBISHI PRO AUDIO GROUP

### DIGITAL ENTERTAINMENT CORPORATION

Headquarters: 225 Parkside Drive, San Fernando, CA 91340 • Phone (818) 898-2341 • Telex: 311786

New York: Suite 1321 555 W. 57th Street, New York, N.Y. 10019 • Phone (212) 713-1600 • Telex: 703547

Tennessee: 104 Eastpark Drive, Suite 306, Brentwood, TN 37027 • Phone (615) 371-6602 • Telex: 510617477

Canada: 260 The Esplanade, Toronto, ONT. M5A 1J2 • Phone (416) 365-3363 • Telex: 06219839

United Kingdom: Unit 13, Alban Park, Hatfield Road, St. Albans, Hertfordshire • Phone 0727-40584

Circle #001 on Reader Service Card

**Diamond Leasing  
AVAILABLE**

PAGE 30



PAGE 16



PAGE 125



PAGE 128



## FEATURES

### 24 REFERENCE MONITOR FORUM

by George Petersen  
*Engineers and producers speak out on their preferences for small monitors.*

### 56 THE GREAT DAT SCARE

by Barry Fox *A report on the European controversy about the consumer digital format.*

### 62 THE RUSSIANS ARE STRUMMING! THE RUSSIANS ARE STRUMMING!

by Dan Daley *A look at the secret lives of Soviet pop artists and the American who's helping them—move over, James Bond.*

### 78 LUNCHING WITH BONZAI: KITARO

by Mr. Bonzai *The reclusive Japanese musician opens up to Mr. Bonzai.*

### 92 VIVA LE STUDIO! by Linda Jacobson

*How the world-famous Canadian hideaway plans to take on a whole new industry—and Washington D.C.*

### 115 APRS AT 30 by Terri Anderson

*An update on the venerable British organization of recording studios, followed by a directory of these facilities.*

## AUDIO

#### 16 INSIDER AUDIO: DMM for CD

by Ken Pohlmann

#### 30 PRODUCER'S DESK: Arif Mardin

by Robin Tolleson

#### 42 SOUND ON STAGE: Billy Joel

by Gregory A. DeTogne

#### 50 FIELD TEST: Wendel jr

by George Petersen

#### 53 SPECIAL INTERNATIONAL RECORDING SUPPLEMENT

- AES Wrap-up by George Petersen
- Brazilian Recording in Flux by Arnaldo Dines
- Europe: Next in Line for Stereo TV by Richard Dean
- European Manufacturing and the World Market by Al Swanson
- AIR Montserrat: Best of Both Worlds by Diana Wendling & Stacy Baird
- Strangers in Strange Lands by Blair Jackson

#### 128 MI UPDATE: Meet the Super DX7

by Craig Anderton

#### 142 AFTERMIX: LaserVideo

by Philip De Lancie

## MUSIC

#### 125 BRUCE LUNDVALL'S BOLD MOVE

by Neal Weinstock

#### 130 MUSIC NOTES: Larry Klein, Bob Weir's Ace, David Pack, Bruce Hornsby, Alan Douglas

## VIDEO

#### 72 MVP: Discovering Japan

by Lou CasaBianca

#### 146 VIDEO NEWS

by Elizabeth Rollins

## DEPARTMENTS

#### 5 LETTER FROM THE EDITOR

#### 6 CURRENT

#### 8 INDUSTRY NOTES

#### 10 SESSIONS/STUDIO NEWS

#### 46 PREVIEW

#### 178 MIX WORDS

#### 180 FEEDBACK

#### 182 CLASSIFIEDS

#### 186 AD INDEX



# FROM THE EDITOR

## DIRECTORY

118 APRS Studios

150 INDEPENDENT  
ENGINEERS AND  
PRODUCERS



Cover: Composer/synthesist/producer Denny Jaeger's studio in Oakland, California, houses the first Harrison Series Ten console, capable of 80 inputs (being expanded to 112 inputs at press time). The facility also includes two Sony PCM-3324 multi-tracks and 32 direct outs from the Synclavier system (a total of 80 digital tracks) as well as an Ampex ATR-124 analog recorder—up to 104 tracks with lock to picture. Studio design by Dennis Rice with final acoustics by John Meyer.

Photo by: Dennis Bayer

Corner photo of Kitaro: Mr. Bonzai



*Mix Magazine* is published at 2608 Ninth St., Berkeley, CA 94710 and is ©1987 by Mix Publications, Inc. This is Volume Eleven, Number Two, February 1987. *Mix* (ISSN 0164-9957) is published monthly. Subscriptions are available for \$38.00 per year. Subscriptions outside U.S.A. are \$50.00 per year. Single copy price is \$4.00, back issues \$5.00. Please address all correspondence and changes of address to *Mix Magazine*, 2608 Ninth St., Berkeley, CA 94710, (415) 843-7901, Fax: (415) 843-9540. Second Class postage paid at Berkeley, CA and additional mailing offices. *Mix Magazine* is distributed in pro-audio stores, music stores and other related businesses. If you have a recording or music related business and would like to distribute *Mix*, please give us a call. Display advertising rates, specs and closing dates are available upon request. This publication may not be reproduced or quoted in whole or in part by mimeograph or any other printed means, without written permission of the publishers.

FEBRUARY 1987

Circle #002 on Reader Service Card

**A**fter The Beatles first grabbed their share of the U.S. record charts in the early '60s, the music industry quickly adapted to the concept of a world economy. That event signalled the end of the exclusive "made in America" mentality for both artists and their support structure. These days it wouldn't be hard to imagine an Australian artist going into a Japanese recording studio, singing into a German microphone, through an English mixing console onto a Swiss tape recorder, etc., etc., and ending up a few weeks later on top of the American Hot 100.

Few industries have internationalized as quickly as ours, for better and for worse. While our domestic manufacturers find an open door of opportunity to faraway lands looking to get up to speed in the technology of entertainment, the pressure from worldwide competition has eaten away at their home base of influence.

The internationalization of the professional audio electronics industry comes back to London, homeland of The Beatles, in a big way in the first half of '87. Two events which have become primary catalysts for the world pro audio market, the Audio Engineering Society International Convention and the Association of Professional Recording Studios' annual show fall within three months of each other, spawning a range of reactions from geographical frustration to omens of apocalyptic news from the British Empire.

The 82nd AES Convention, March 10 through 13 at the Queen Elizabeth II Conference Center in Westminster, returns to London after seven years. This is the more "international" of the two shows, drawing manufacturers and engineers from over 20 countries. APRS meets in June at Olympia 2, in Kensington. Founded in 1956 as a collective voice for British professional recording businesses, the APRS show has become increasingly important as a forum for the international recording community, though still stressing the concerns of British businesses.

We've made this issue of *Mix* our International Recording issue, where we check in on some of the people, places and events that are making waves in the world recording market. From the DAT scare in Europe, to the recording renaissance in Brazil, to music video developments in Japan, to the cool clean air in Quebec's Le Studio, we hope this survey of activity gives you a feel for how much we all have in common.

It's a small world after all.

Keep reading,

David M. Schwartz  
Editor/Publisher





# 3M

## 250

### **One Tape Sounds True.**

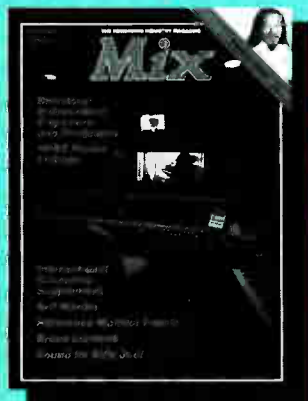
Because capturing all the music is all that matters, we've created the world's finest music mastering tape. 3M 250 Recording Tape. Designed to deliver the greatest dynamic range and best signal-to-noise ratio of any tape in the world. To give you the truest sound.



## DIRECTORY

118 APRS Studios

150 INDEPENDENT  
ENGINEERS AND  
PRODUCERS



Cover: Composer/synthesist/producer Dennis Jaeger's studio in Oakland, California, houses the first Harrison Series Ten console, capable of 80 inputs (being expanded to 112 inputs at press time). The facility also includes two Sony PCM-3324 multi-tracks and 32 direct outs from the Synclavier system (a total of 80 digital tracks) as well as an Ampex ATR-124 analog recorder—up to 104 tracks with lock to picture. Studio design by Dennis Rice with final acoustics by John Meyer.

Photo by: Dennis Bayer

Corner photo of Kitano: Mr. Bonzai



*Mix Magazine* is published at 2608 Ninth St., Berkeley, CA 94710 and is ©1987 by Mix Publications, Inc. This is Volume Eleven, Number Two, February 1987. *Mix* (ISSN 0164-9957) is published monthly. Subscriptions are available for \$38.00 per year. Subscriptions outside U.S.A. are \$50.00 per year. Single copy price is \$4.00, back issues \$5.00. Please address all correspondence and changes of address to *Mix Magazine*, 2608 Ninth St., Berkeley, CA 94710, (415) 843-7901, Fax: (415) 843-9540. Second Class postage paid at Berkeley, CA and additional mailing offices. *Mix Magazine* is distributed in pro-audio stores, music stores and other related businesses. If you have a recording or music related business and would like to distribute *Mix*, please give us a call. Display advertising rates, specs and closing dates are available upon request. This publication may not be reproduced or quoted in whole or in part by mimeograph or any other printed means, without written permission of the publishers.

# FROM THE EDITOR

**A**fter The Beatles first grabbed their share of the U.S. record charts in the early '60s, the music industry quickly adapted to the concept of a world economy. That event signalled the end of the exclusive "made in America" mentality for both artists and their support structure. These days it wouldn't be hard to imagine an Australian artist going into a Japanese recording studio, singing into a German microphone, through an English mixing console onto a Swiss tape recorder, etc., etc., and ending up a few weeks later on top of the American Hot 100.

Few industries have internationalized as quickly as ours, for better and for worse. While our domestic manufacturers find an open door of opportunity to faraway lands looking to get up to speed in the technology of entertainment, the pressure from worldwide competition has eaten away at their home base of influence.

The internationalization of the professional audio electronics industry comes back to London, homeland of The Beatles, in a big way in the first half of '87. Two events which have become primary catalysts for the world pro audio market, the Audio Engineering Society International Convention and the Association of Professional Recording Studios' annual show fall within three months of each other, spawning a range of reactions from geographical frustration to omens of apocalyptic news from the British Empire.

The 82nd AES Convention, March 10 through 13 at the Queen Elizabeth II Conference Center in Westminster, returns to London after seven years. This is the more "international" of the two shows, drawing manufacturers and engineers from over 20 countries. APRS meets in June at Olympia 2, in Kensington. Founded in 1956 as a collective voice for British professional recording businesses, the APRS show has become increasingly important as a forum for the international recording community, though still stressing the concerns of British businesses.

We've made this issue of *Mix* our International Recording issue, where we check in on some of the people, places and events that are making waves in the world recording market. From the DAT scare in Europe, to the recording renaissance in Brazil, to music video developments in Japan, to the cool clean air in Quebec's Le Studio, we hope this survey of activity gives you a feel for how much we all have in common.

It's a small world after all.

Keep reading,

David M. Schwartz  
Editor/Publisher



# CURRENT

## **Japanese Electronics Manufacturers Reject DAT Copyright Appeal**

At a meeting between top executives of Japan's consumer electronics industry and leaders of international recording companies and trade organizations, the Electronic Industry Association of Japan rejected an appeal to support legislation requiring a copyright protection chip in Digital Audio Tape Recorders. The conference was initiated by the international recording industry association IFPI, and the Recording Industry Association of America, to solicit support from the Japanese manufacturers for legislation that would require technological protection of copyright recordings from the consumer DATs soon to be marketed to the public.

The Copy-Code technology recommended at the conference was developed by the CBS Technology Center. In this process, copyrighted recordings would be encoded by recording companies during the mastering stage. The encoding would inhibit the unauthorized copying of those recordings on equipment containing a Copy-Code chip, without compromising the sound quality of the encoded recording.

Japan's rejection is expected to trigger aggressive music industry initiatives in the U.S. Congress and the European Economic Community for protective copyright legislation.

## **Cassette Quality Committee Formed**

An international working committee has been formed of representatives from organizations including CBS, EMI, ICM, Polygram, Sonopress and Teldec, to further improve the quality of the audio cassette. The Musicassette Quality Committee (MCQC) draws its members from the development, recording, quality assurance and manufacturing fields. It plans semi-annual

meetings to agree on measuring methods and manufacturing tolerances, to exchange views on quality and discuss new techniques in the light of growing market requirements. For further details, contact Press Office, Polygram International Ltd., 45 Berkeley Square, London W1X 5DB, England.

## **Composite Digital Videotape Format Submitted**

At a recent meeting of the SMPTE Video Recording and Reproduction Technology (VRRT) committee, both Ampex and Sony independently submitted the same composite digital format specification to SMPTE for consideration as a standard. This followed the two companies' announcements in April that Sony would design and manufacture a composite digital videotape recorder complying with the Ampex format, and would support its adoption as a world standard. A complement to the component digital D-1 standard, the composite digital format is intended to bring the benefits of digital recording to existing composite analog transmission facilities.

Based on a sampling frequency that is four times that of the subcarrier (4fsc), the composite digital format uses 19mm D-1 cassettes with metal particle tape, and shares many mechanical components with D-1 VTRs.

## **Frankfurt Music Fair, Feb. 7-11**

One of the world's largest exhibitions for musical instruments and accessories, the Frankfurt Music Fair runs from February 7 to 11, in Frankfurt, West Germany. The organizers of the fair expect 840 exhibitors representing 32 countries to be showing their wares to more than 55,000 visitors. Among the approximately 510 non-German exhibitors, Great Britain, France and Italy will be dominating the exhibit hall, followed by the U.S. and Japan. For the first time, Cuba will be exhibiting folkloristic instruments

within the framework of a state trading arrangement. The participation of Bulgaria, Czechoslovakia, East Germany, Poland and Hungary makes the Frankfurt fair a focal point for East/West musical trade. For more information, contact Messe Frankfurt, telephone (0 69) 7575-320/357 in West Germany.

## **Showbiz Expo Set for L.A.**

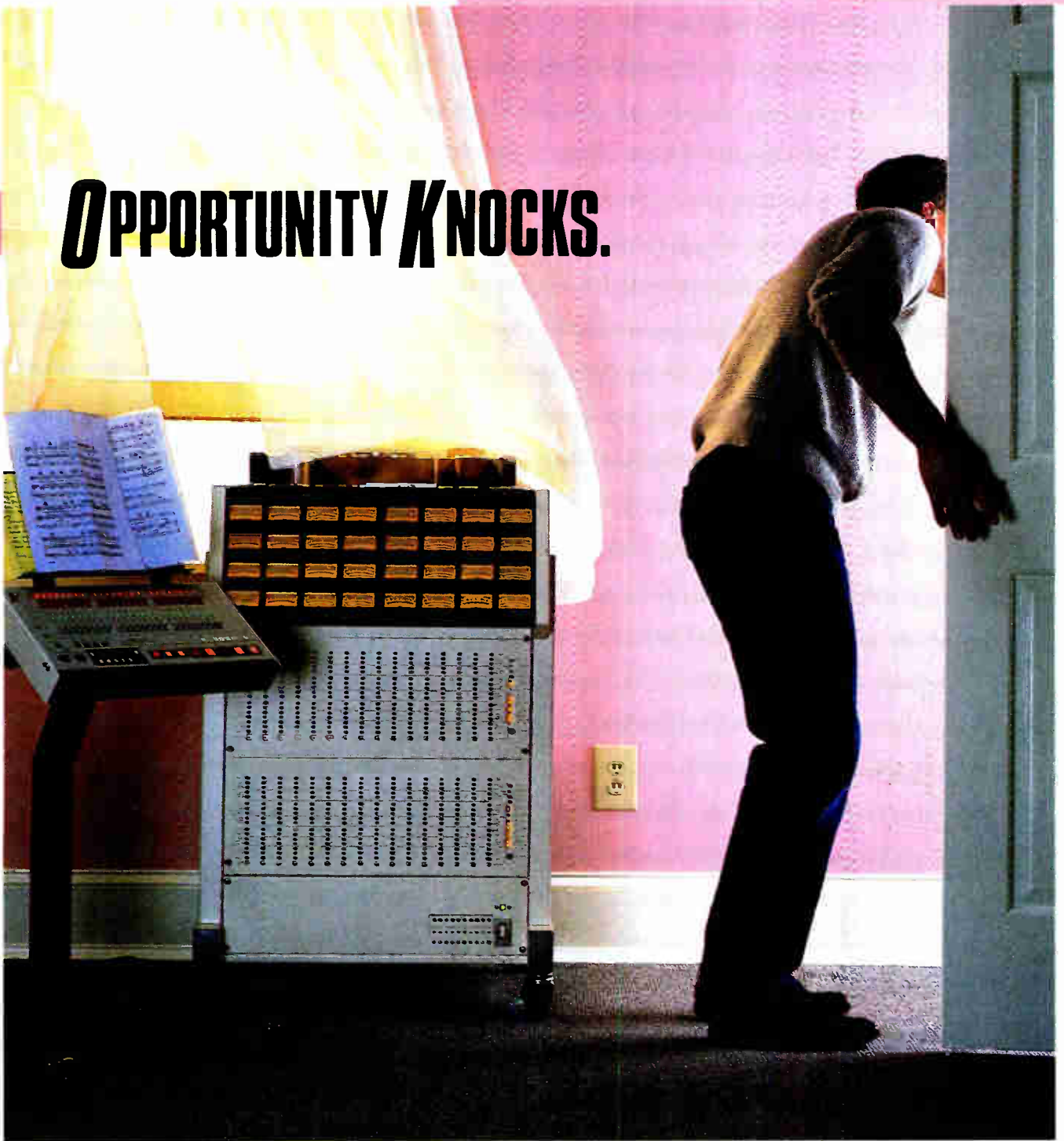
Exhibitors of products and services in the film, video and TV industries will display at the Fourth Annual Showbiz Expo, to be held May 30, 31 and June 1 at the Los Angeles Convention Center. An anticipated 5000 production and business professionals in the entertainment industry will take in the 110 booths and various educational sessions hosted by industry trade associations such as ITS, the Writers' Guild, Directors' Guild, Professional Film and Video Equipment Association and the Association of Visual Communicators. For more info, contact Live Time, Inc., 3747 Arbolada Road, Los Angeles, CA 90027, 213/668-1811.

## **CD-ROM Review Goes Bi-Monthly**

First appearing last July, *CD-ROM Review* will commence bi-monthly publication beginning with March-April. Aimed at professional and business users of CD-ROM technology, the new publication is claiming a circulation base of 50,000, including corporate information managers in the Fortune 1000, American Library Association members, large government database users, major medical facilities, and OEM companies in the industry. Additional distribution will be through selected newsstands, computer retailers, and computer magazine sections of major bookstores. For more information, contact CW Communications, Elm Street, Peterborough, NH 03458. ■



# OPPORTUNITY KNOCKS.



© Otari, 1986

32 Tracks; constant tension tape transport; built in autolocator; noiseless and gapless punch-in/punch-out, and HX Pro—at a price you can afford. We call it "opportunity". You'll call it "a killer".

We know getting started in the music business can't mean an MTR-90 in the first month, even when your talent warrants it. So we've given you the next best thing—the MX-80. Now you have room for the band, the back-ups, the strings and the horns—with some bucks left over for that new console you've been looking at. And there's a 24 channel version too! From Otari: Technology You Can Trust.

Contact your nearest Otari dealer, or call Otari (415) 592-8311.

■ Otari Corporation, 2 Davis Dr., Belmont, CA 94002

**OTARI**

# INDUSTRY NOTES

Fairlight Instruments Pty. Ltd., of Australia, has acquired the controlling interest in its U.S. sales and service organization, Fairlight Instruments, Inc., and has named Paul Broucek as chief executive officer in the U.S. . . . Musicians Institute, in Hollywood, CA, has expanded into a new 60,000 square foot facility at 1655 McCadden Place, Hollywood, to house their new Songwriter and Singer Schools. . . . JBL Professional has announced the hiring of David Kim as sales manager for Soundcraft USA, in America and Mexico. . . . Soundtracs plc has reached an agreement with AKG Acoustics, Inc., to distribute Soundtracs products in the U.S. through AKG's rep and dealer network. . . . At Sony Broadcast Ltd., in the United Kingdom, Chris Hollebhone has become senior manager, pro-audio sales, John Frazier has become UK sales manager and Clive Lorton moved to senior sales engineer. HHB, based in North London, has been appointed a dealer for Sony's pro-audio products. . . . ESL, Inc. of Fort Lauderdale, FL, has been appointed exclusive U.S. representative for RTW, Radio-Television Werkstaetten of Cologne, West Germany. . . . AB International Electronics, Inc., of Roseville, CA, has announced the acquisition of all product assets of AB Systems, Inc., which had been acquired by Theta Industries in 1983. . . . The HHSmith product group of Dialight Corp. has been named the exclusive U.S. marketing agent for Neutrik AG connectors. . . . San Francisco's Sound Recording Organization (SRO) has added Jan Cohn as new business manager and Phil Sawyer as an audio production mixer. . . . Pace Video Center, in Portland, OR, has augmented its staff with Martin Soloway as new general manager, Martha Cansler as Paintbox artist and Danny Rosenberg as projects engineer. . . . Douglas Masla has opened Magnetic Media Productions, a music production and recording studio, at 7250 Hillside Ave., Suite 108, Los Angeles, CA 90046. . . . Jim Stamatis has joined the editing staff at Realtime Video Productions, in San Francisco. . . . Agfa-Gevaert, Inc. has relocated its Dallas

area marketing/training and regional distribution center to 4251 West Highway 114, Irving, TX 75063. . . . Nakamichi Professional Audio has chosen Keiser & Associates to represent their sales and marketing in the Rocky Mountain states. . . . Iain Roche has taken over at Audio Kinetics Inc., New Jersey, as vice president of sales. . . . Harman International Industries has announced the acquisition of Epicure Products Inc., manufacturers of EPI loudspeakers and Thorens turntables. . . . UK-based loudspeaker and PA manufacturer McKenzie Acoustics has appointed sales agent Dave Martin International to handle its overseas orders and sales. . . . Adolph Santorine Jr. has been named national sales manager/director of marketing for the Astatic Corporation. . . . Audio Production Studio and Rainbow Recording have announced the merger of their two companies into Sound Innovations, at 5520 Lake Otis Parkway, Suite 104, Anchorage, AL. . . . Bose Corporation has appointed David H. Bell to the position of manager, professional products. . . . United Video has announced that the design and graphics team of Elaine Schwartz and Doug Dubner, formerly operating under the name of Atlantic Image, will now be working out of its Visual Dynamics Graphics division. . . . Ron Dylewski has joined the staff at Production Masters Inc., in Pittsburgh, PA, as an account representative. . . . Robert C. Hagerty has been named assistant manager of the Audio-Video Systems Division of Ampex Corporation, replacing Mark C. Gray. . . . Mike Sinclair has established a full service concert and tour support production coalition with BML Stage Lighting and Andrews Audio Tours at PO Box 1124, Long Island City, NY 11101, ph. (718) 729-6562. . . . Drum Workshop, Inc. of Newbury Park, CA, has been appointed as a distributor of Dynacord Electronic Drums in the U.S. . . . Stacy Rehm, national sales manager at Dolby Laboratories, died November 17, at the age of 32, after a short illness. She had served with Dolby since 1973 and is survived by her husband and a two month old daughter.

## STAFF

EDITOR/PUBLISHER  
David M. Schwartz  
ASSOCIATE PUBLISHER  
Penny Riker Jacob  
ASSOCIATE PUBLISHER/ADVERTISING DIRECTOR  
Hillel Resner

MANAGING EDITOR  
Blair Jackson  
ASSISTANT EDITOR  
George Petersen  
ASSOCIATE EDITOR  
Ken Pohlmann  
SENIOR EDITOR  
John Woram

MUSIC EDITOR  
David Gans

EDITOR AT LARGE  
Mr. Bonzai

EDITORIAL ASSISTANTS  
Linda Jacobson Josh Gressel  
CONTRIBUTING EDITORS  
Iain Blair Lou CasaBianca  
Dan Daley Philip DeLancie  
Bruce Nazanan Larry Oppenheimer  
Bruce Pilato

ART DIRECTOR  
Tim Gleason

ASSISTANT ART DIRECTOR  
Dave Marrs

DESIGN AND PRODUCTION  
Patsy Messerer Denise Hilton

TYPOGRAPHY  
Linda Dierking Connie Wiggins

PRODUCTION MANAGER  
Anne Letsch

PRODUCTION ASSISTANT  
Kathy Badertscher

ASSISTANT ADVERTISING DIRECTOR  
EASTERN AD MANAGER  
Jeffrey Turner

SOUTHERN CALIFORNIA/SOUTHWEST AD MGR.  
Ken Rose

NORTHWEST/NORTH CENTRAL AD MGR.  
Horton Firmin

SALES ASSISTANTS  
Randy Alberts Donna Burriston

MARKETING ASSISTANT  
Jane Byer

TRAFFIC MANAGER  
Neil McKamey

DIRECTORIES/CLASSIFIEDS MANAGER  
Lauri Newman

DIRECTORIES/CLASSIFIEDS ASSISTANTS  
Athena Craig Georgeanne Dennison

CIRCULATION MANAGER  
Nick Clements

CIRCULATION SERVICES  
Judith F. Acton Lisa Hester

GENERAL MANAGER  
Mark Gunther

ASSISTANT CONTROLLER  
Linda Simpson

ACCOUNTS PAYABLE  
Cathy Boyum

CREDIT MANAGER  
Ann Cuadra

BOOK DIVISION GENERAL MANAGER  
Craig Wingate

ASSISTANT MANAGER  
Camille Coyne

FULFILLMENT SERVICES  
George Keres

OFFICE MANAGER  
Rachel McBeth

RECEPTIONIST  
Lisa Jensen

NATIONAL EDITORIAL, ADVERTISING  
and BUSINESS OFFICES  
2608 Ninth St., Berkeley, CA 94710  
(415) 843 7901

SOUTHERN CALIFORNIA ADVERTISING OFFICES  
19725 Sherman Way, Suite 160, Canoga Park, CA 91306  
(818) 709-4662



# Anything less than a Neve is just a lot of...

Bells and whistles may be all you need for New Year's Eve...or a birthday celebration. But is a desk full of bells and whistles enough for the demanding art and science of music and video production? Today, you need more. You need the Neve difference.

At Neve, the first name in audio mixing control and distribution systems, we offer you all the bells and whistles your creativity demands plus the sonic quality and reliability that sets Neve apart from the rest.

What's more, Neve's "V" Series Console, plus the incomparable NECAM 96 computer-assisted moving fader automation system give you the important extra of total command...with virtually unlimited flexibility and ease of operation. To enhance your creativity to a level you never dreamed possible with:

- 48 groups ■ Intelligent solo facilities
- Split-or in-line operation
- Balanced mix buses
- Full channel dynamics
- Channel and rev status on all inputs
- Mix to analog; mix to digital; mix to picture capabilities

Hear the Neve quality difference for yourself. Find out firsthand how Neve advanced engineering gives you "a touch of the future."

Circle the bingo card for a literature pack. Or call (203) 744-6230 for a demonstration of Neve sound at your location.



Nothing sounds as good as a Neve...  
because nothing else is.

#### **Rupert Neve Incorporated**

Berkshire Industrial Park  
Bethel, Connecticut 06801  
Telex 969638  
Facsimile (203) 792-7863  
(203) 744-6230

7533 Sunset Blvd.  
Hollywood, California 90046  
(213) 874-8124  
Facsimile (213) 874-1406

P.O. Box 40168  
Nashville, Tennessee 37204  
Telex 786569  
(615) 385-2727

#### **Neve Electronics Int'l Ltd.**

Cambridge House, Melbourn, Royston  
Hertfordshire SG8 6AU, England  
ph (0763) 60776 fax (0763) 61886  
telex 81381

  
A Siemens Company

Circle #003 on Reader Service Card

# NOISE

## SOUTHERN CAL

At *Soundcastle* in L.A., new CBS recording artist, *Nathalie Archangel*, was in with *David Kahne* producing and engineering with *Liz Cluse* assisting. . . L.A.'s *X* was in *Capitol Recording Studios* in Hollywood working on a new album with producer/engineer *Dave Jerden*, assisted by *Judy Clapp*. . . In at *Ground Control* in Santa Monica was CBS artist *Ronnie Laws* doing a dance mix for a new single with engineer *Tom Fletcher*. Also, *Dolly Parton* was in recording the soundtrack to her Christmas movie for ABC with producer *Steve Goldstein* and engineer *Paul Ratajczak*. . . *The Del Fuegos* were in *Sunset Sound Factory* doing overdubs for their Slash/Warner release. *Mitchell Froom* handled the production, and *Tchad Blake* engineered with *Mike Kloster* assisting. . . CBS artist *Stanley Clarke* was in the *Yamaha Research & Development Studio* in Glendale working with producer *Eric Nuri* and engineer *Ralph Sutton*. . . *Motley Crue* was in *One on One Recording* in North Hollywood tracking their new album *Girls, Girls, Girls* with producer *Tom Werman*. *Duane Baron* engineered, with *Toby Wright* assisting. . . At *Score One Recording Studio* in North Hollywood, Street Level Productions tracked a 12-inch dance single entitled "On The Road To Love" with the vocal work of singers Carl Graves, Melanie Jackson and Alexandra. Songwriter/producer was *Jorge Martin* with engineering done by *Curtis Drake* and *Al Johnson*. . . At *Conway Recording* in Hollywood *The Tonight Show Band* featuring Doc Severinsen completed tracks with producer *Jeff Tyzik*. *Daren Klein* engineered. Also, *Peter Bunetta* and *Rick Chudacoff* were in producing *Smokey Robinson* for Motown. Daren Klein and *Mick Guzauski* engineered with help from *Richard McKernan*. . . At *Preferred Sound* in Woodland Hills, *Star Search* winner *Kenny James* has been tracking with producers *Frank Day* and *Bill Elliot*, engineer *Matthew Spindel* and assistant *Scott Campbell*. . . Engineer *Dave Levine* worked at *Hit City West* in L.A. mixing live tracks by the redoubtable headbangers *Black Flag*. . . Tracks were laid at *Golden Goose Recording* in Costa Mesa for the score of the movie *Kandyland*. Songs are by Craig Garrison and vocals by Ralph Mormon, singer of Savoy Brown and the Joe Perry Project. *Dennis Rose* produced and engineered. . . *REO Speedwagon* was in *Rumbo Recorders* in Canoga Park finishing overdubs and getting ready to mix. *David Devore* engineered and *Julian Stoll* assisted. . . *Take One Recording* in Burbank had

*Rank & File* in with producer *Bill Pfordresher* tracking their upcoming LP for Rhino Records. *Brad Guilderman* was behind the console, with *Micajah Ryan* assisting. . . *Image Recording* in Hollywood hosted film composer *Tom Newman* recording the underscore for the new Michael J. Fox movie, *Light of Day* for Tri-Star/Taft-Barrish. *John Vigran* was at the desk, *Steve Krause* assisting. Also there, *Bobby Vinton* recorded a new album with *Barney Perkins* at the console. . . At *Amigo Studios* in North Hollywood, *Mystery Roundup* completed a four-song demo with engineers *Garth Richardson* and *Woody Woodruff*, and assistant *Chris Steinmatz*. . . *Darlene Love* was in L.A.'s *Cherokee Studios* completing her album for Columbia Records with *Tom Kelly* and *Bill Steinberg* producing, and *George Tutko* engineering. *Hank Ballard* recorded his new single at Cherokee Studios. Complete with his long time back up group, The Midnighters, Ballard cut "Keep The Fat Right Where It's At," a protest against dieting and fad diets. Ballard produced the single with *Dee Robb* as engineer. . .

## NORTHEAST

Producer *Dennis Scott* recently completed music for *Scholastic Magazine's* new kid video series on baby animals. He also finished a "Gabby Bear" jingle for Select Merchandise recorded at *ScottFree Studios*, in Great Neck, NY, with *Rob Bengston* at the board. . . *Sync Sound* in NYC had *Kiss* in mixing *Kiss eXposed* for Polygram Music Video-U.S. *Grant Maxwell* was the engineer. . . "Shy Guy" by *Sharon Harris* is the latest project that producers *Robert Clivilles* and *Ken Taylor* worked on at *I.N.S. Recording* in NYC with engineer *Steve Linsley*. . . *Evan Johns and the H-Bombs* out of Austin, TX, rambled in to *Shore Fire Studios* in Long Branch, NJ, and finished 12 tracks for a future release. Sessions were engineered by *Jan Topoleski* and produced by *Garry Tallent*. . . Producer *Patrick Adams* was in *Power Play Studios* in L.I.C., NY, finalizing vocal tracks and mixing *Cheryl Adams'* upcoming releases. Exchanging engineering duties on the cutting of the basics were *Julian Herzfeld*, *Adams*, *Tim Meyer*, *Mike Kruzynski* and *Dwayne Sumal*, who assisted. . . At *Evergreen Recording* in NYC, drumming legend *Elvin Jones* laid down tracks with bassist *Gene Perla* for an upcoming CD. *Jay Henry* was at the console with *Gary Tee* also onboard. . . At *Unique Recording* in NYC *Nona Hendrix* finished mixing her new LP for EMI Records with *Dan Hartman* producing and *Chris Lord Alge* engineering. *Steve*

*Antebbi* assisted. . . At *Eastern Artists Recording Studios* in E. Orange, NJ, producer *Larry Smith* was in working on a new *Grandmaster Flash* LP for Elektra. . . *Michael Zager* was in at *Secret Sound* in NYC doing three singles with *Rochelle*; *Scott Noll* engineering. And *Joel Diamond* was in mixing *Roby*, with *Jim Lyons* engineering. . . *The Music & Sound Design Studio* in Bridgewater, NJ, completed audio-cassette duplicating projects for numerous clients, including *Hoechst-Roussel*, *Ethicon*, *AT&T*, *Warner-Lambert*, and the *Schering Corporation*. . . Producers *Hiro Hozumi* and *Stephen Rosen* completed a series of jazz standards for CBS/Sony featuring female vocalists including Morgana King and Sheila Jordan. The ten-compact disc collection is scheduled for Spring release in Japan. The tracks were done at *Sound Ideas* and *Celebration Recording Studios* in NYC with engineers *Dave Baker* and *Jim Anderson*. . . *Black Stalin* was at *Sound Heights* in Brooklyn to record their latest EP for B's Records. Executive producer *Hue Loy* and producer/arranger *Errol Ince* were present at the sessions to supervise the production. *Vince Traina* engineered the sessions with assistance from *Joe Schwinghammer* and *Paul Gold*. . . The Boss System at Philadelphia's *Modern Audio Productions* has been working overtime with the increasing need for audio sweetening and synching for video. MAP's *Bob Schachner* has been kept busy with clients such as *Subaru*, *Blue Cross/Blue Shield*, the *Phillies*, *DuPont*, and others. . . At *39th Street Music* in Manhattan, *Chiele Minucci* produced *Special EFX* for GRP Records with *Paul Wyckliffe* engineering, *Barnaby Bristol* assisting. And *Ronnie Spector* cut tracks—*Michael Young* engineering, assisted by *John Paul Cavanaugh*. . . At *The Warehouse* in Philadelphia, producer *Lance Quinn* finished tracks for singer/songwriter *Myles Goodwyn* (*April Wine*) for Aquarius/Capitol Records. *Obie Obrien* and *Nick Didia* engineered. . . *Michael Baker* and *Axel Kroll* of Simple Simon Productions were in NYC's *D&D Recording* remixing "Sweet Murder" for RCA artists *The Blow Monkeys*. *Douglas Grama* engineered. . . The *Music & Sound Design Studio* in Bridgewater, NJ, completed production of two slide show soundtracks for the *United Way* in Elizabeth, NJ. . . *The Tics* were in at *Inner Ear Recording* (Queens, NY) recording their raw-edged rock direct to 2-track with engineer *Steve Vavagiakis*. . . Recent happenings at *Quad Recording* in NYC included *The Commodores* producing themselves and tracking with engineer *Matt Kasha*. . . *Secret Sound* in NYC got a visit from the Colombian dance band *Starr*, in town to cut their second al-



# NEW Studer A820: Back to the Future



The future of multi-track mastering was commonly assumed to be 100% digital. But now Studer has built a multi-track for the future...by going back to thoroughly refine and update analog technology.

**For the best possible combination** of reliability, production capabilities, format compatibility, and sonic performance, the Studer A820 challenges *all* competitors. Analog *and* digital. No matter the price.

**First, the A820 is fast and flexible.** With total microprocessor control, it starts smoother, locks quicker, locates faster, and shuttles tape better than anything the competition has yet to offer. The tougher the job and the tighter the deadline, the more you'll love the A820.

**The A820 is also fully user programmable.** An extensive software menu lets you choose the operating features you

want, and audio alignment is automatic with all parameters (including NR levels) set and stored digitally.

**Finally, the A820 shakes the "sound assumptions."** With new amorphous metal heads, advanced phase compensation circuits, and fully integrated Dolby™ SR as an option, the A820 boldly challenges the costliest digital machines for overall sonic performance. Let your ears be the judge.

Some other manufacturers apparently assumed analog could not get significantly better. With the arrival of the A820, that's now a questionable assumption. Call your nearest Studer office for detailed directions back to the future. Studer Revox America, Inc., 1425 Elm Hill Pike, Nashville, TN 37210, (615) 254-5651

Offices: Los Angeles (818)780-4234 New York (212)255-4462 Chicago (312)526-1660  
Dallas (214)943-2239 San Francisco (415)930-9866

**STUDER REVOX**  
Circle #004 on Reader Service Card

bum; producer-engineer **Jay Henry** was behind the console assisted by **Peter Henderson**. . . **Aaron "Louie" Hurwitz** engineered and produced four songs at **NRS Studios**, Hurley, NY, with singer/performer **Marie Spinosa** and the group **Big Feachers**. . .

## NORTH CENTRAL

At **Independent Studios** in Kokomo, IN, the **Pink Torpedos** cut their latest single with **David Bentzler** producing and engineering and **John Frazier** co-producing. . . At **Solid Sound**, Ann Arbor, MI, solo folk artist **Craig Kukuk** finished mixing his first project entitled "Wounded" with **Rob Martens** engineering. . . At **Studiomedia** in Evanston, IL, guitarist **David Onderdonk** has been producing his third album on Quaver Records, engineered by **Benj Kanters**. The album, to feature ambient guitar and horn sounds, will be the fifth engineered for Quaver, a local "new age" record company. . . **Seagrape Studios** in Chicago resounded with the metallic sounds of **Speedtrap**, who recorded the song "The Fire" for Silverlin Records upcoming **Metalworks Battalion #3** LP. **Joe Tortorici** engineered the date. . . The new Foley Stage at Toronto's **Comfort Sound** (designed by Canada's top Foley sound effects team Andy Malcolm and Peter McBurnie) was put to use during the sweetening sessions for the feature film **Twin Dragon Encounter**. The studio also added music and effects from their new CD sound effects library. . . Country rock group **Ouray** was in Chicago's **Paragon Studios** recording basic tracks for two of their new songs, "Alibi" and "Could You Forget." **Marty Feldman** engineered the project and **Frank Pirruccello** of Ouray produced. **Scott Barnes** and **Tom Quinlan** were assistant engineers for the sessions. . . At **Soto**

**Sound** in Evanston, IL, blues producers **Steve Wisener** and **Dick Shurman** were in overseeing overdubs for the latest album by **Eddie King** and **May B. Mae**. **Jerry Soto** engineered. . . The jazz/R&B/light rock musical group **Family Portrait** has been recording an extensive demo portfolio at **Take 1 Studios** in Cleveland. Take 1 is also filming a documentary on the group. . . At **ARS** in Alsip, IL, the metal band **Nineteen** completed the remix of their album **Missing in Action**. The album was engineered by **Harry Brotman** and produced by **Nineteen**. . .

## NORTHWEST

**Roy Rogers**, featured slide guitarist with blues legend John Lee Hooker, has started recording his second LP at **Russian Hill Recording** in S.F., **Samuel Lehmer** engineering. . . **Prudence Dredge**, the rollicking nine-piece group from Seattle with Montana roots, finished an 11-song LP with engineer **Bruce Calder** in Studio C at **Steve Lawson Productions** in Seattle. . . One Step Productions selected **San Francisco Production Group** to provide post production for the pilot episode of **Stepping Into Life**, a daily half-hour interview series, currently being offered for national syndication. . . At **Villa Recorders** in Modesto, CA, recent sessions included an LP by the metal band **Intrinsic**, **Ed Sandar** producing with **Fred Eichel** engineering. . . At **Dave Wellhausen Studios**, Wellhausen engineered the **Robin Flower Band's** new album for the Flying Fish label, and **Verlin Whisk** completed his debut album of C&W tunes. . . At **Triad Studios** in Redmond, WA, **Jim Valley & Rainbow Planet** were in for overdubbing on a new album. **Lary Nefzger** engineered. . . **The Music Source** in Seattle

completed production on theme music for commercials promoting NBC Sports' coverage of the 1988 Olympics in Seoul, Korea. . . Vocalist **Keta Bill** and co-producer **Gregory M. Ercolino** tracked at **Drone Studios** in Redwood City, CA, for Keta's appearance on KPIX's **Afternoon Show**. The session was engineered by **Brett Brown**. . . **David Lee Roth** and band were in at **Granny's House** in Reno, working on a New Year's show for **The King Biscuit Flour Hour**. It was produced by **Steve Vai**. . . At **Colorado Sound** in Westminster, Denver's **Chris Daniels & The Kings** put the finishing touches on their **Roadhouse Music** album. **Jim Mason** and the band produced the album. . .

## SOUTHEAST

Working at **Treasure Isle** in Nashville were **Highway-101**, produced by **Paul Worley** and engineered by **Tom Harding**; **Scott Wesley Brown**, produced by **Greg Nelson**; **Michael Clark**, engineered by Tom Harding. . . At **Air Studios** in Hendersonville, TN, **Leon Everette** and **George Jones** recorded a duet recently, for Everette's upcoming single release on Orlando Records. Producer/engineer for the session was **Mike Daniel**, assisted by **Denny Knight**. . . **International Sound** in North Miami Beach finished mixing a 12-inch version of "Serious" by **Donna Allen** for the 21/ Atlantic label, engineered by **Barry Mraz**, **Eric Schilling** and **John Haag**, assisted by **Carlos Santos**. . . Recent activity at **Southern Tracks Studio** in Atlanta included tracks for an **Alicia Bridges** 12-inch release with **Doug Johnson** producing and **Marc Aramian** and Doug Johnson engineering; and the group **Atlanta** doing pre-production recording for their upcoming single on Southern Tracks Records. . . Recording at **Mirror Image Studios** in Gainesville, FL, was guitar legend **Bo Diddley**. The session was engineered by Mirror Image's newest staff member, **Mark Pinske**. . . CBS's **Steve Buckingham**, teamed with engineer **Joe Bogan**, is back at **Stargem** in Nashville with their newest find, **Ricky Van Shelton**. . .

## SOUTHWEST

Recent activity at **Lone Star Recording** in Austin included the **Wild Seeds** mixing their Jungle Records album **Brave, Clean, and Reverent**, with producer **Mike Stewart** and engineer **Jay Hudson**. . . **Slash**/Warner Bros. artists **The Bodeans** were at **Planet Dallas** putting down live tracks to be aired on the nationally syndicated **George Gimmarc's Rock & Roll Alternative**. . . **Powerhouse** in Las Vegas recorded the audio for **Lola Falana's** Italian TV special. . . Producer **G. Brian Tankersley** and What? Record's **Lynn Nichols** were at **Rivendell Recorders** in Pasadena, TX, with artist **Dave Perkins**, finishing his new LP for the label. . .

—CONTINUED ON PAGE 178

WE'RE PLEASED TO ANNOUNCE THAT  
**DISKMIX™**  
THE TIME CODE-BASED AUTOMATION SYSTEM,  
IS NOW AVAILABLE WITH

# MOVING FADERS

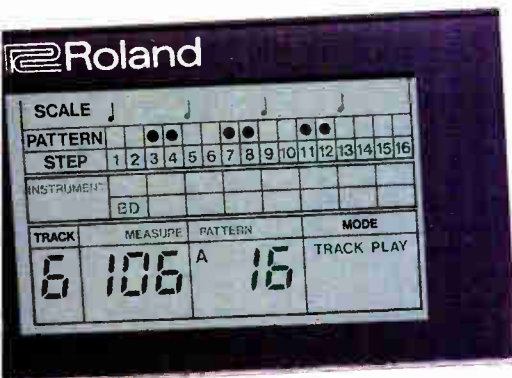
DIGITAL CREATIONS CORP.  
400 S. Oyster Bay Rd., Hicksville, New York 11801  
(516) 822-0881 Telex 510-600-5040



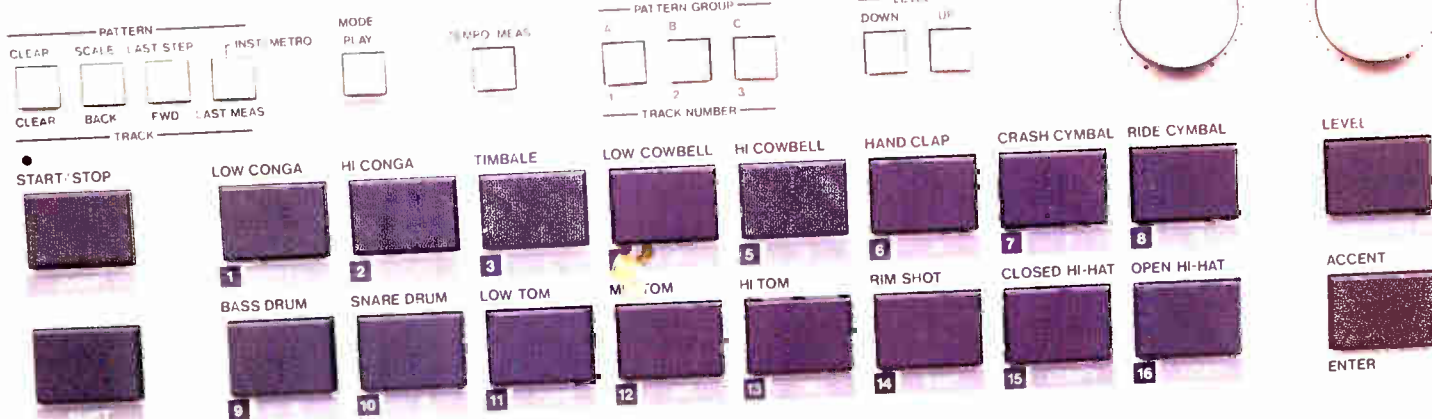
Circle #005 on Reader Service Card



TR-505



# RHYTHM COMPOSER TR-505



## LIGHT HEAVYWEIGHT

Weighing in at only 950 grams (that's 2 lbs. 2 oz. to us), Roland's spunky new TR-505 Rhythm Composer sports a winning combination of traditional drum-kit and Latin Percussion instruments. But don't let its small size and modest price fool you—the TR-505 boasts heavy-weight digital PCM samples of kick, snare, toms, handclaps, high hats, cymbals, timbales, congas and cowbells—16 voices in all to give your rhythm tracks, rehearsals or live performances a punchy professional drum sound and feel. Behind all this brawn is a sophisticated computer brain with more than enough smarts and memory to make this drum machine your ally in the fight against boring drum programming. Program 48 of your own drum patterns (in real-time or step-time) or take advantage of 48 useful preprogrammed patterns—either way you're off and drumming right away. The large LCD display helps you keep track of every beat and performance parameter. But that's not all, our new champ still has a few moves you haven't seen. The TR-505 is a thoroughly modern MIDI instrument loaded with MIDI features and controls including an ability to respond to dynamic drum parts. Battery or AC powered, the versatile TR-505 scores an easy Technical Knock-Out over the competition. But don't say we didn't warn you—this little powerhouse will knock your socks off!

Circle #006 on Reader Service Card



Roland Corp. US, 7206 Dominion Circle, Los Angeles, CA 90040, (213) 685 5141.



# 3M

# 250

## **One Tape Sounds True.**

Because capturing all the music is all that matters, we've created the world's finest music mastering tape. 3M 250 Recording Tape. Designed to deliver the greatest dynamic range and best signal-to-noise ratio of any tape in the world. To give you the truest sound.



# TO THOSE WHO PUT A RANGE OF MUSIC ON A ROLL OF TAPE, ONE TAPE IS TRUE.



## **One Tape Stands True.**

Helping you capture all the music...that's what we've been doing since we introduced recording tape back in the '40s.

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

And we stand behind you—with some of the most advanced research in the industry.

All to keep our standing—as number one in the world of the pro.

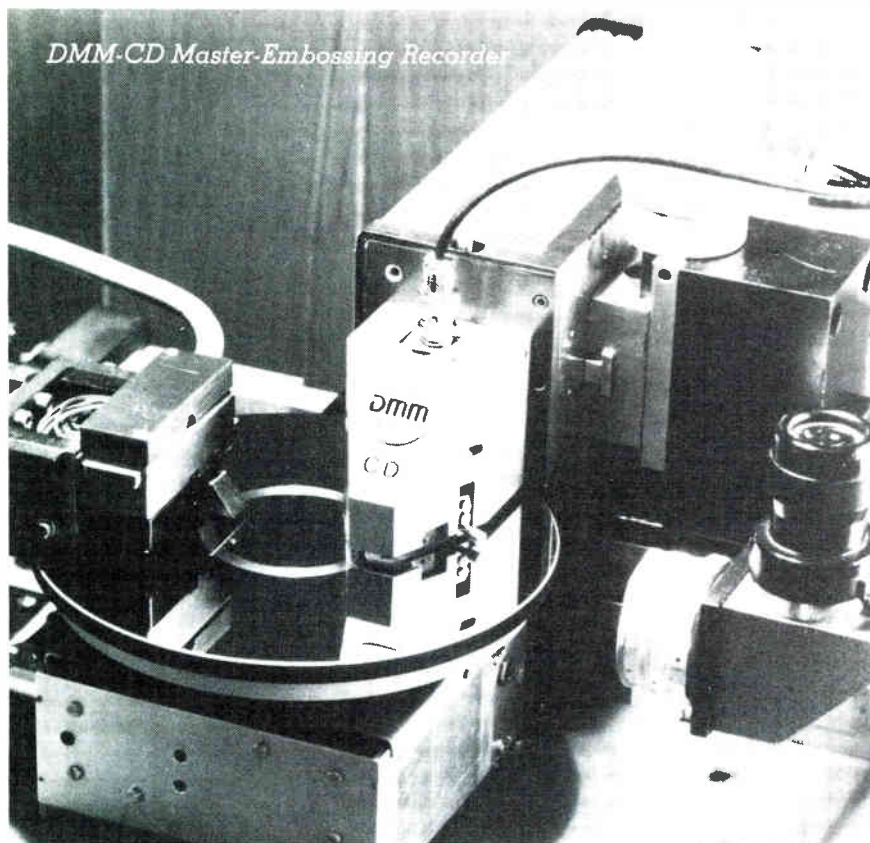
**NUMBER ONE IN THE WORLD OF THE PRO**

**3M**

Worldwide Sponsor  
1988 Olympic Games



# INSIDER - AUDIO



*DMM-CD Master-Embossing Recorder*

## DMM for CD

by Ken Pohlmann

A piece of U.S. audio history was recorded last year. Dollar sales of the LP dropped below a market share of 20% (down sharply from 30% the year before). And dollar sales of the CD rose above a market share of 20% (up sharply from 10% the year before). Those two lines crossed a lot sooner than many people predicted. And they will never cross again.

Naturally, that kind of milestone prompts many people to reflect on the course of events, and how times change. For example, they might recall what happened to the slide rule manufacturing industry shortly after pocket calculators were introduced.

Which brings us to Teldec Schallplatten GmbH, manufacturers of Direct Metal Mastering (DMM) technology for LPs. This record company, with headquarters in Hamburg, and labor-

atories in Berlin, Federal Republic of Germany, has announced a DMM process for producing compact disc masters. They claim lower investment and production costs compared to conventional photoresist CD mastering. Will this new process profoundly impact the compact disc profit equation, or merely add to the growing arsenal of devices available to CD manufacturers? The first step toward an answer is an understanding of how the new DMM-CD technology works. . . .

DMM for LP mastering is a process in which an analog signal is cut directly into a blank disc electrolytically plated with copper. The process largely eliminates pre- and post-groove echo, reduces groove noise, and generally results in a clean, more transparent sound quality. LP fans have thus come to know and love Teldec.

A little less known is Teldec's early experimental work in cutting video sig-

nals onto discs. A piezoelectric transducer was used to mechanically record data with a bandwidth of several megahertz onto a disc; both the Telefunken/Teldec and RCA videodisc technologies used this method in the early '70s to record video signals in a frequency modulated, analog groove.

Alternately, the Philips-developed videodisc system pioneered analog video recording via pits arranged in a spiral groove. Of course, that work ultimately led to the compact disc. There was thus considerable precedent for the mechanical disc recording of high bandwidth information. It was Teldec's job to find the correct parameters required to satisfy the unique requirements of CD mastering.

Most analog audio disc recording uses a cutterhead on a vertical arm. Downward pressure on the recording medium is adjusted to provide correct groove depth, and follow surface variations. The pressure, of course, is modulated by the input signal. Alternatively, an advance ball can be attached to the cutterhead so that the cutterhead follows surface variations. The groove depth can be set by adjusting the variation between the advance ball and the cutting stylus.

For videodiscs, as in the Telefunken/Teldec system, the cutterhead height is fixed and adjusted to remove surface material to create a new surface. Thus track pitch is constant, and no land is left between groove segments. High precision is obtained; for example, groove depth may be only 0.1 micrometer.

The transition from spiral groove recording to spiral pit recording may be easily conceptualized as an interrupted groove in which the interruptions are a function of the driving signal; in the case of the CD, the physical lengths (and hence timings) of the interruptions contain all of the encoded information. As a first approximation, the first (conventional analog) mechanical process could be used, lifting the cutting stylus on and off the recording surface as needed. However Teldec discovered that the microscopic dimensions of the CD prevented the stylus from following surface variations without causing damage.

They thus turned to piezoelectric electromechanical transducers, as a videodisc recording. Figure 1 shows a piezoelectric longitudinal transducer with a cutting stylus attached. Deformation of



# BUILT FOR THE DEMANDS OF PRODUCTION.



**I**n the production business, quality plus speed equals success.

That's why the TASCAM ATR-60 Series is engineered for those who make their living with recorders. All five share a design philosophy stressing function over flash; an overriding concern for performance without complication; a thoughtful integration of features which respond to the needs of the professional.

— On every ATR-60, the deck plate won't flex. Ever. So you won't be compensating for flex-induced phase or wow and flutter in post production.

— The unique Omega-Drive puts less stress on your tape, so the cumulative tension of a thousand start/stop passes won't reach your tape.

— Heads designed and man-

ufactured by TASCAM means Sync frequency response equals Repro, so you don't have to rewind and change modes to make critical audio decisions.

— Sync Lock and the most responsive servo control in the business will keep you working instead of waiting for a machine to lock up.

— Time Code Lock keeps code coming from the Sync head, regardless of the audio monitor mode, so your synchronizer won't get confusing double messages when modes are switched.

— Input Enable/Disable allows you to monitor any source without repatching or changing mixer settings, avoiding a common cause of aborts.

— Long cable runs don't bother a TASCAM ATR-60, since +4 dBm, +8 dBm and even +10 dBm levels are available.

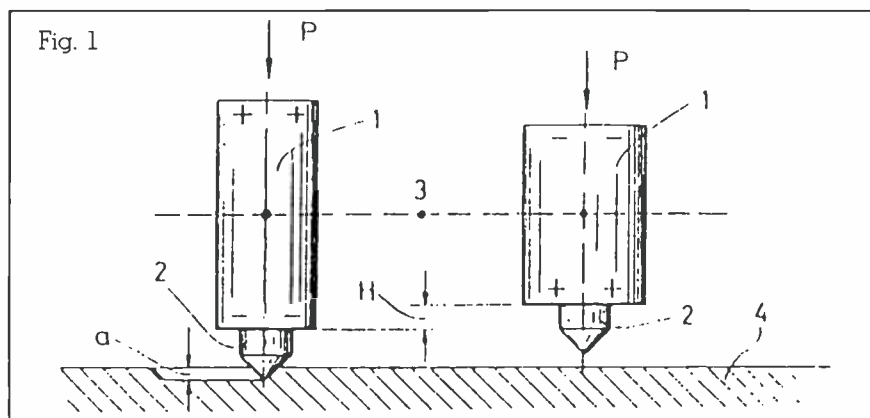
There are five ATR-60 recorders: the ATR-60-2T (IEC Standard) Center Track Time Code; ATR-60-2N/2D Quarter-inch Mastering; ATR-60-2HS Half-inch High Speed Mastering; ATR-60-4HS Half-inch 4-Track High Speed Mastering or Multitrack; and the ATR-60-8 Half-inch Production Quality 8-track.

To see, hear and feel them, visit your nearby TASCAM dealer, or call TASCAM for the name of the dealer nearest you.

Production is a demanding business. And the ATR-60's are built to meet the demand.

Pure Performance  
**TASCAM**  
TEAC Professional Division

7733 Telegraph Rd. • Montebello, CA 90640  
Telephone: (213) 726-0303



the element occurs through the piezoelectric effect, according to the polarity of the bipolar applied potential. The assembly rests on the disc, pressing on the recording surface because of gravity. Because the center of gravity of the assembly cannot change instantaneously due to inertia, the longer dimension causes the cutting stylus to press into the recording surface while the shorter dimension causes it to move away, lifting from the disc.

The stylus thus presses into the disc during positive pulses and skips above it during negative pulses; using an equation based on gravitational force, and the difference in length in the piezoelectric element, the maximum possible time between positive pulses can be calculated. This in turn is correlated to the lowest data frequency of the CD signal (196 kHz). The stylus is thus designed to successfully jump over (and onto) the disc surface within the constraints of the CD's EFM signal. In addition, maximum relative error for pit depth can be judged.

The stylus is mounted in a floating support and the complete assembly is mounted in a triangular bracket: it is hinged at one side, and the stylus is free to move in a vertical direction. In addition, the bracket can follow deviations of several micrometers in the disc surface.

Because of mechanical losses, the mechanical movement exhibits a resonance peak, as shown in Figure 2, a plot of amplitude response versus applied frequency. This yields phase error. Corrective measures using feedback provide aperiodic damping; this results in stable operation and transient response. The assembly is thus able to produce a high quality EFM signal.

Teldec researched two recording methods: disc cutting and disc embossing. With disc cutting, a cutting stylus similar to that used in analog mastering is used to remove the chip from the disc, creating a pit. A major obstacle is the literally billions of chips distributed on the disc surface during cutting; be-

cause the laminar boundary layer of air is larger than the chips, the chips cannot be vacuumed off during cutting, as is the case in groove cutting. The CD master's surface must be cleaned after mastering—a problematic proposition, given that any remaining chips would create data errors. In addition, chips might foul the cutting process itself.

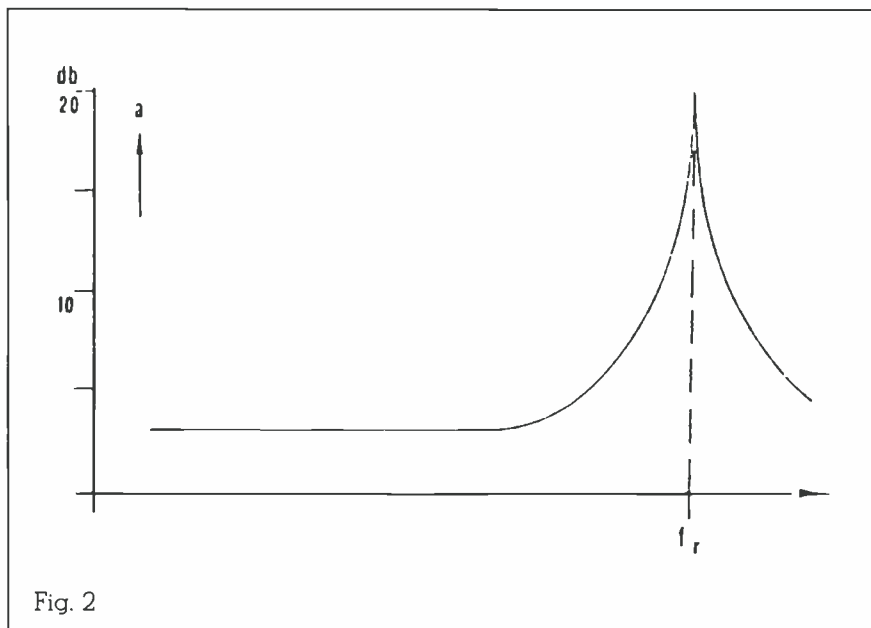
Teldec thus focused its efforts on the second method: disc embossing, in which the transducer element is pressed into the disc surface. No cut is made thus no chips are produced. Rather, the impression of the pits remains on the disc surface. The shape of the diamond stylus is crucial, to create a pit geometry compatible with the CD system.

The circular spot of the laser beam used in conventional photoresist CD mastering, and the photoresist development procedure itself, results in a rounded pit, as shown in Figure 3. A CD player's pick-up laser beam is reflected when it strikes the land between pits resulting in a high percentage of reflected light. When the beam strikes a pit, the one-half wave-

length dimension difference between the land and pit causes cancellation, and thus a relatively low percentage of reflected light. For CDs replicated from a Teldec master to be playable on a regular CD player, the pick-up's laser beam must respond identically to the pits replicated from embossing.

An embossed pit has a geometry similar to that of an analog groove, as shown in Figure 4; a cross section view would reveal a "V" shape with walls at a 45 degree angle. By selecting a suitable stylus angle, and optimizing the speed with which the cutting stylus is moving, pits can be achieved which modulate the pick-up's laser beam with the same intensity and a similar phase characteristic as the pits from conventionally mastered CDs. Teldec states that a CD player built with standard wavelength and aperture cannot distinguish between the two types of pits; presumably this is the case for pick-ups with either half-silvered mirror, as well as polarization separation design, in which plane polarization of the laser beam is critical in the pick-up's operation.

An embossed pit also differs from a photoresist pit because embossing results in a displacement of material; in simple terms because of material flow, a ridge is created along the lateral pit edges. The pits on the conventionally mastered disc have a rounded contour because the polycarbonate cannot conform exactly to the mold geometry. Embossed pits produce a relatively sharp edge because of deformation after injection molding. Figure 5 shows a cross section of a mold, and injection-molded disc substrate. Ridges produced by embossing produce a hollow area in the negative area of the stamper. This encourages polycarbonate flow, and a





# THE IBANEZ SDR1000: *a closer look*



**True Stereo • 16-Bit Processing:** a proprietary high-speed, 16-bit processor creates two simultaneous reverb simulations, for vast stereo images or two independent reverb chambers!



**Easy Sound Creation and Storage:** the unique user-prompting display makes interactive sound editing simple. Store your creations in any of 70 user-programmable memory locations.



**\$895**

**Now Look a Little Closer for the Best News of All:** the price!



**IBANEZ®**

For a full-color catalog, send \$2.00 (\$3.00 in Canada) to: Ibanez, Dept. **MXE7** P.O. Box 886, Bensalem, PA 19020 • 3221 Producer Way, Pomona, CA 91748-3916 • P.O. Box 2009, Idaho Falls, ID 83403 • In Canada: 6969 Trans Canada Highway, Suite 105, St. Laurent, Quebec, Canada H4T1V8.

Circle #054 on Reader Service Card

# ENGINEERS & PRODUCERS

## SPEAK OUT

### ON

## SMALL MONITORS

by George Petersen

Over the years, advancements in audio technology have brought sound reproduction ever closer to the brink of the ultimate in fidelity, both in the consumer and production realms. Yet at the same time, engineers and producers are faced with the question of which audience to mix for—knowing their final product will be heard on equipment ranging from \$10,000+ audiophile playback systems to 2-inch AM radio speakers, and everything in between. Clearly the answer is not easy to come by, and there is a need for several types of studio speakers to be available to check one's work.

One trend which has emerged over the past half-decade is the use of medium-sized reference monitors—something which falls between the omnipresent Auratone cubes found in many studios and full-size control room systems. We talked to a number of engineers and producers around the country about their choices and preferences in reference speakers, and not surprisingly, received a variety of responses about this highly subjective topic.

#### John "Jellybean" Benitez

A former club DJ turned record

producer, Jellybean Benitez is perhaps best known as a dance remix specialist, having completed about 200 such projects (including 20 number-one hits and about 80 top-tens on the dance charts) over the years for dozens of top acts. Producing Madonna's "Crazy for You" single turned out to be quite a departure from his usual projects: "It was so out of my league to do a ballad," notes Benitez, "it was definitely the most challenging record I ever made—totally instinct, with nothing from past experience to draw on." At press time, Benitez was producing a song for Whitney Houston's new album, and preparing for the release of the Jellybean *Just Visiting This Planet* LP, which should be out later this month.

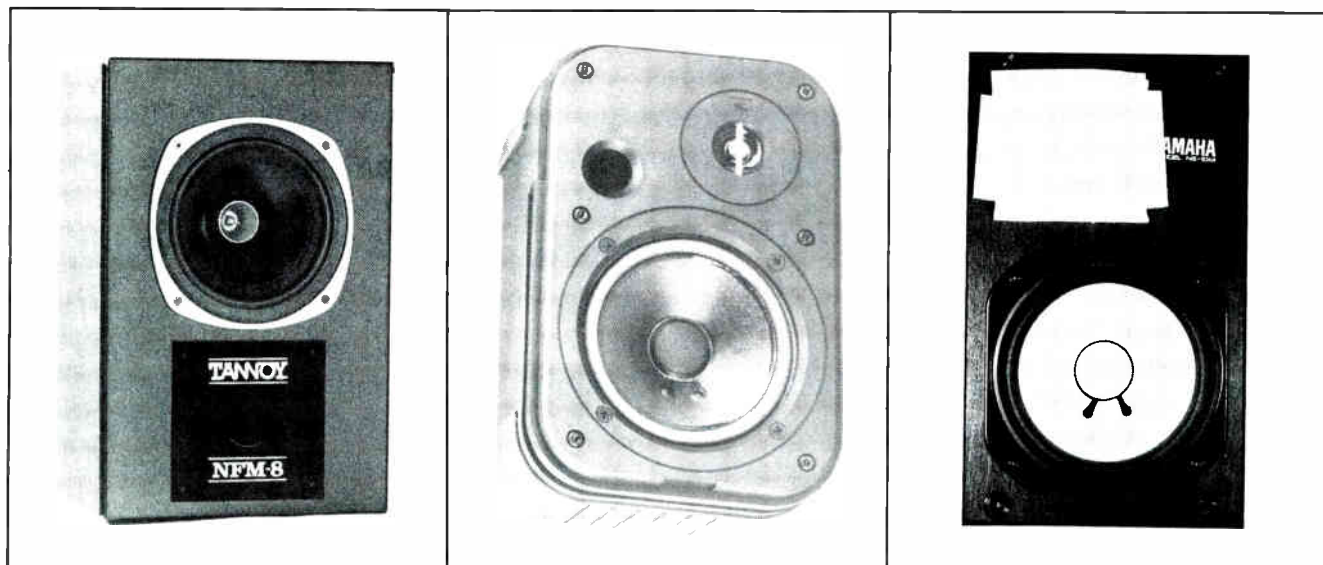
"I like listening on the Yamaha NS-

10s and the E-V Sentry 100s—going back and forth between those two and whatever [main] monitors that are in the studio, usually UREIs. I also like listening on the little speaker on the Studer (2-track). After I finish my whole mix, I try it on that speaker: if you can hear everything on it, then you can hear it on anything. I listen for different things on each speaker and like switching around—about 50% on the Yamahas, 25% on the Sentrys, 15% on the mains, and 10% on the Studer. I used to work only on the Sentrys, and then I started listening on the Yamahas, but I always use the Sentrys because there are certain things I listen for on those, especially when I'm doing a dance mix.

"I have pairs of the Yamahas and Sentrys at home and at the office, and I always bring those wherever I'm working. I have a bunch of different speakers at home—Visonik 803s, ADS, JBL 4411s, E-Vs and Yamahas. I have them in different rooms and use them to A-B things, going from room to room."

#### Gene Lawson

Besides running a music publishing venture and The Reflections, a 24-track studio in Nashville, Gene Lawson has kept his engineering chops busy over the past 24 years. One of



Above: Tannoy NFM-8, JBL Control-1 (with cover removed), and Yamaha NS-10 (shown with tissue taped over the tweeter—a popular choice among recordists).





## IN THE PAST WE HAD A BIG ADVANTAGE OVER THE COMPETITION. NOW WE'VE GOT A SMALL ONE.

Until UREI's 813 Time Align® Monitor entered the studio, speaker systems had become a "smear" on the industry. A "time smear," in which high and low frequencies subtly assaulted the ear because they arrived out of sync. The results were general listener fatigue and unrealistic sound, particularly on lead instruments and vocals.

The UREI 813 solved the "time smear" problem with Time Alignment™, unifying sound into a single point source. This dramatic breakthrough, along with other major technical advances, soon established the 813 as the industry standard.

Now UREI introduces less of a good thing: the 809 Time Align® Studio Monitor. The 809 delivers all the engineering depth of its big brother, but at a compact size and price that's ideal for small control rooms and near-field applications.

UREI's 809 features a remarkable, all-new 300mm (12") coaxial driver that achieves a true one-point sound source, superior stereo imaging, and tight bass. It incorporates a unique titanium diaphragm compression driver that unleashes unequalled high frequency response.

The 809 has exceptional power handling capabilities, high sound sensitivity, and low distortion. It accomplishes precise acoustic impedance matching and smooth out-of-band response with UREI's patented high-frequency horn with diffraction buffer. And its ferrite magnet structures assure the system's high sensitivity drivers will not degrade with time and use.

UREI's Model 809 Time Align® Studio Monitor. Smaller package. Smaller price. Same impeccable "813" sound quality. See how it fits into your studio today.

JBL Professional  
8500 Balboa Boulevard  
Northridge, CA 91329

**UREI**

Time Align® is a trademark of E.M. Long Associates, Oakland, CA.

Circle #010 on Reader Service Card

Lawson's current projects is an album for Denzil "Dumpy" Rice (former Conway Twitty keyboardist) which Lawson produced and now is shopping for a record deal.

"The Auratone (cubes) have such a midrange honk that if you can make it sound good on them, it will usually sound good on anything you play it on. A lot of the engineers like the Eastern Acoustics MS-50s, a two-way system, and we recently got a pair of the Eastern Acoustics/RCF SCD6000s: they have a good bass punch and a couple of the engineers here like them. Some of the independent engineers who come in bring their own loudspeakers, so we see a lot of Yamaha NS-10s, and the Electro-Voice Sentry 100s are fairly popular.

"You can mix on anything that you're familiar with, but the trick is having something you can reference back to—you can't be safe on any one loudspeaker. We have a low-power FM transmitter here that allows you to go out to your car and listen to your mix. Most people in the music business are probably more familiar with their own car speakers than any other point of reference, so that works out pretty well."

### Don Mack

One of Don Mack's favorite projects was working on the acclaimed Brian Eno/David Byrne collaboration, *My Life in the Bush of Ghosts*. "Everything about the project was very creative," notes Mack, "we did amazing things in the studio—there was a lot of experimentation." Now mostly involved in producing, at press time Mack was working on metal rockers Odin's second LP, and shopping a demo for Allegiance, another hard-edged group.

"I really haven't found any small reference monitors that I'm completely comfortable with, that I'd want to buy and bring with me. I use the Yamaha NS-10s because they're so universal, but I have a problem with the high-end bump that they've got. I don't like using or looking at toilet paper [taped over the tweeters], so I always rip it off and put the grill covers on. The NS-10s work fairly well, but get a little hard to listen to sometimes—they're tough to mix on all day long, but I'm used to their sound. I'm still looking for the perfect little monitor: the NS-10 would be great if they'd put an attenuator on it so you could turn down the tweeter.

"I switch between speakers quite frequently while in the studio, using the big monitors to make sure I know what's happening on the low-end situation. When I go to mix levels, I key off the smaller speakers, but I'm always moving back and forth—even check-

ing things on headphones. There are certain things, imaging and so forth, that you can hear better on headphones. I like using everything available to me in the studio."

### Glenn Meadows

Glenn Meadows, co-owner and engineer at Masterfonics, a Nashville facility, has mastered over 50 gold and platinum records over the years, and recently remodeled both mastering suites and installed a dedicated remix room featuring Hidley/Kinoshita monitors that reportedly are accurate to 20 Hz. The speaker systems utilize TAD components, FM Acoustics amplifiers, and concrete enclosures.

"For near-field monitors, we're tending to favor the Genelec S30 little tri-amped self-powered monitors; they relate very well to our Hidley monitors. The Genelecs are not really a small monitor, but not huge—they're a medium-to-small size cabinet that an engineer could carry with him.

"Part of the key to a monitor's sound is the amplification system, so if you carry your own monitors into different studios, then you're at the mercy of whatever amplifiers and speaker cable the studio is using for small monitors. If you go in with the Genelecs, you plug into the patchbay or monitor amp feed and have the same reference point from studio to studio."

### William Mueller

Another engineer who is getting into producing is William Mueller, now working with saxophonist Don Mark (perhaps best known for his playing on the *Entertainment Tonight* theme). Mueller, the chief engineer at Sheffield Audio-Video, a digital facility in Phoenix, Maryland, garnered a 1985 Grammy nomination for engineering Michael Hedges' *Aerial Boundaries* LP, and more recently completed radio and TV mixes for the upcoming PBS special *A Tribute to Monk*, featuring Herbie Hancock and Wynton Marsalis.

"I'm using what everyone else in the world is using: NS-10s with tissue over them. I've been using them since '82 or '83, so it's been a while. The studio has UREI 813s, like everyone else in the world, and the reason I use NS-10s is the same reason I use 813s: because everybody else does and I can be assured of what I'm hearing. In our truck we have UREI 811s and I'm real happy with them. I don't use NS-10s in the truck because the UREIs are tight and sound good enough—I have the tweets [HF drivers] turned back a bit, but when I cut something on the truck and bring it into the studio, it's generally right.

"I read an article a couple of years ago, where Bob Clearmountain said

he was very concerned about his ears, and I feel the same. I've been engineering for 20 years, and am concerned about burning my ears out, so I listen mostly on small monitors, at a much lower level than most engineers. You can have problems perceiving pitch at high and low frequencies when working at high volumes and most of the clients I work with are happy that I don't monitor at extreme levels."

### Jim Reeves

With 25 years behind the board working with acts ranging from Count Basie to ZZ Top (including stints as staff engineer for both Columbia Records and the Record Plant), Jim Reeves truly can be called an audio veteran. Now independent, the Yonkers, New York-based Reeves is currently working on a jazz project with Omar Hakim.

"Right now I'm using Visonik David 8001s. They give me a good overall reference, with enough bottom and top end to work with. I was going to go with the Yamaha NS-10s, but I didn't like the idea of using tissue paper over the speaker, so I went with these—I like the response of them and I can take my tapes and play them anywhere and get what I expect.

"Usually I start a date on the big speakers, and then go down to the small speakers to start to get perspectives. At various points in the session, I'll turn on the mains just to check and recheck things. I've been doing this for about 25 years—in the beginning I'd just stay up on the mains and I'd find that a lot of things get out of hand up there. But on the small speakers, I can tell if something's jumping out awkwardly—like a cymbal crash that's hotter than it needs to be. Transient things that go by quickly are harder to gauge at a loud level: I get a better perspective and it's more pleasing at a lower level on smaller speakers."

### Barry Rudolph

Besides offering engineering and producing services for record and video dates, North Hollywood-based Barry Rudolph also does technical writing and reviews for *Music Connection*, a Southern California music industry magazine. At press time, Rudolph was recording the new LP for the Dazz Band at Ray Parker's Amereyca Studio, with producers Bobby Harris and Robin Smith. Rudolph's favorite past project was engineering Lynyrd Skynyrd's highly successful *Street Survivors* album.

"I use two or three reference monitors: I like the Tannoy SRM-12Bs or SGM-12Bs, and I also like the little KEFs. I'm OK on the Yamaha NS-10Ms, if that's all a studio has—they're not



# Rack Magic



**T**he new Peavey PCS™ (Processor Controlled System) isn't magic, but the audio processing functions it performs, when taken together with the correct power amplifiers and speaker enclosures, can sound quite magical!

- **Electronic Crossover**

The PCS™ is a premium quality 3rd order (18dB per octave) electronic crossover. The PCS™ crossover function is selectable 2 or 3 way for use with a variety of Peavey speaker enclosures.

- **"Sense Inputs" (Telemetry Ports)**

The PCS™ utilizes "sense inputs" which are connected to the outputs of the system's power amplifiers.

- **User variable loudness compensation**

This function adds a predetermined amount of low end at low sound pressure levels. As system output rises, this compensation is incrementally removed until, at maximum power, the system is again flat. This technique provides the inverse of the way humans hear, and results in a system which sounds "impossibly" good at low levels, and very high in apparent headroom at high levels. This compensation is user adjustable to suit individual preferences.

- **Subsonic Filtering**

The PCS™ also utilizes extremely high order subsonic filtering to remove unwanted headroom wasting subsonic signals. This technique results in a very tight, punchy low end by maximizing available energy in the usable portion on the bass spectrum.

- **Excursion Protection**

In addition to the subsonic filtering the PCS™ also engages special excursion protection during extreme power events. This is accomplished by slightly raising the corner frequency of the high pass filtering. This further enhances the system's power handling, apparent headroom, and overall clarity.

- **Thermal Protection**

The PCS™ constantly monitors the outputs of the system's power amplifiers and when they reach the transducers' maximum power handling the PCS automatically engages limiting circuitry. The system's transducers are protected from unacceptable and destructive power amp clipping, and output sound pressure is maximized.

Use the Peavey PCS (Processor Controlled System) in its 2-way mode with the Peavey SP-2™ or the new SP-4™ trapezoidal enclosure, or for bigger jobs use the PCS in its three way mode by adding a subwoofer to either enclosure.

The PCS™ from Peavey...no, it's not magic...but use it correctly and audiences just might think you are!



Circle #011 on Reader Service Card

For a complete look at the entire Peavey line, write for our magazine "The Monitor". Please send \$1.50 to cover postage and handling.

my favorite. I also don't take the grill cloths off or do that baloney with the tissue paper. Another pair I've been using are the JBL Control Ones: I like them and have a pair at home now—they're truer than the Yamahas. They also give you the middle frequencies, with a tighter low-end than the NS-10s. I've also been using the UREI 809s lately and I like those about the same as the Tannoys—it's hard for me to pick a favorite."

### Bob Stone

Formerly the chief engineer at Larabee Studios, West Hollywood, California, independent Bob Stone has built somewhat of a reputation as a remix engineer (some of his favorite

projects have included the 12-inch of Donna Summers' "Last Dance," and Shalimar's "Second Time Around"). Not one to be typecast, however, Stone has worked extensively with Frank Zappa over the years, on diverse recordings such as "Valley Girl," *Shut Up and Play Yer Guitar*, and *The Old Masters*. Stone's current projects include Zappa's *Jazz from Hell* and he is co-producing Dweezil Zappa's *Having a Bad Day*.

"I've been using the Yamaha NS-10s, although I'm not pleased with them. They have their known deficiencies: I've been real tempted to do some corrective surgery on the signal that drives them, like the tuning you'd do on a main monitor system: it's not so

far out of line to take care of some of the more drastic ambiguities with any small near-field system. I leave the NS-10s non-tissued, after seeing the hilarious article on the tissue paper results and calibrations ["Examining the Yamaha NS-10 'Tissue Paper' Phenomenon," Bob Hodas, *Recording Engineer/Producer*, February 1986]. I leave them as-is, knowing what they're going to be doing, and use them for balance at a low-to-moderate level, and depend a little more on the main monitors for the real accuracy—EQ and so forth.

"Smaller monitors offer a lot more consistency and greater opportunities for extended work periods, without having the fatigue curve calibration: mind fatigue, ear fatigue, and everything else—you don't find yourself wanting to keep increasing the highs and upper frequencies just because you've been working a long day."

### Phil York

In addition to recording gold and platinum records, Dallas-based independent Phil York (voted "Best Recording Engineer" in 1983 by the Texas Music Association) also offers periodic classes in engineering and production, as well as cassette courses on the music business. Some of York's recent projects include Bugs Henderson & The Shuffle Kings, and Secret Cinema, both of which he is currently shopping.

"The Auratone cubes are just too small—not enough bottom end—so I got some Radio Shack Minimus 12s, acoustically padded with a napkin—with six to eight pinholes punched in it—inside the grill. It's a cheap make-do, but it gives me the best mixes. It happens to be that those speakers are a great cross-section of American bookshelf speakers. I call them my 'awful' speakers—it's a nickname written on the back of them—because if I can get a mix to sound good on those awful things, then it'll sound great on anything else.

"I've tried the Yamaha NS-10s and they're much too bright and have a peak about 1 kHz: I don't like them. I've tried several others that are around town—I work about eight different studios in Dallas—and my favorite has turned out to be the little compact [NFM-8] Tannoys. Those are primo; I've gotten such good mixes on them and I really like them. One thing I don't like is equalization in the alternate monitor line. It doesn't make any sense, but there are studios with EQ in there. Engineers should check to see if there's any EQ on the alternate monitors any time they work at any studio for the first time."



## The acoustic analysis system that means business.

TEF System 12 utilizes TDS technology and determines areas of reflection within parts of an inch. With this kind of accuracy you may never have another call-back.

In addition, TEF System 12 substantially ignores ambient interference. That means you'll schedule jobs when it's convenient for you. And, you'll schedule more jobs than ever before.

### An investment in professionalism.

An analyzer with pinpoint accuracy, documentation and impressive displays. Software that reduces the need for other bench and field instruments. Software that reduces analysis time to seconds. Training programs and a helpful newsletter. All designed to enhance your reputation as a professional sound contractor. All designed to help you increase sales.

For more information, call or write.

**TECHRON**

1718 W. Mishawaka Road, Elkhart, Indiana 46517 • (219) 294-8300

Circle #012 on Reader Service Card



# IF ANY OTHER "ONE BOX" SYSTEM WAS THIS ADVANCED, AND THIS COST EFFECTIVE, AND THIS WELL BUILT, WE MIGHT HAVE SOME COMPETITION.

## HOW ADVANCED?

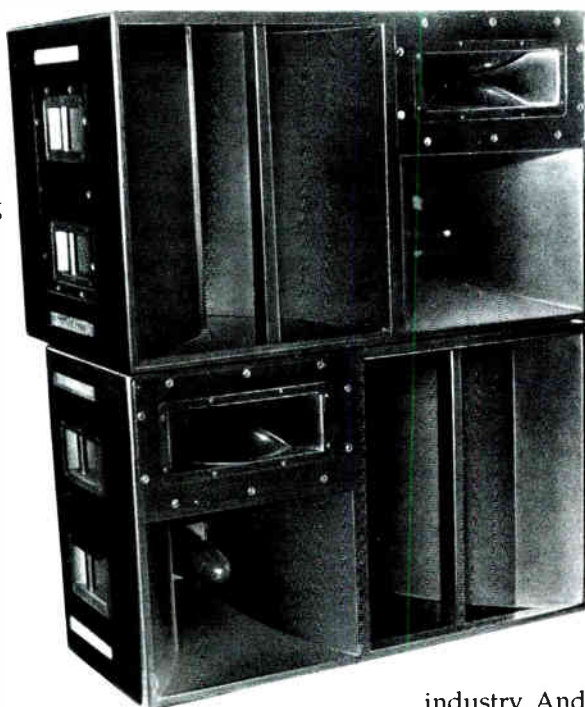
EAW "One Box" systems utilize advanced horn technology enabling 3 to 8 dB more acoustic output than even the costliest competitive vented systems. And the horns that EAW builds sound like no other horns. They all make use of exceptionally complex throat sections eliminating the beamy hollow sound typical of other horn loaded systems. EAW's horn technology is so advanced that it was selected by the Japanese Audio Consulting Society as the best high output system in the world after they compared it to 14 of the best vented and horn loaded systems from the US, Europe and Japan.

## HOW COST EFFECTIVE ?

EAW is the largest manufacturer of "One Box" systems in the United States and our large computer controlled wood working stations enable us economies of scale no other system manufacturer can compete with. As a result EAW's KF Series "One Box" systems offer more performance per dollar than any competitive system. But the real bottom line for rental companies is return on investment, and this is where EAW has no competition. As a result of our reliance on sound engineering, not fad design techniques, our systems remain competitive for a long time. In fact EAW's first "One Box" systems built in 1978 for Carlo Sound are still in demand today, and Carlo Sound is still getting returns on their investment while lesser competitive systems have been long retired.

## HOW WELL BUILT?

EAW KF Series are built from the finest materials available, including - exterior surfaces made from 18 ply to the inch cross-grain laminated European birch with the highest sheer strength of any commercially available wood product - horn flares injected with high density polyurethane foam for absolute acoustical integrity - high



tech aircraft flying hardware - 100mm voice coil RCF Laboratory Series Cone Drivers featuring exceptionally low distortion and virtually no power compression - heavy duty vinyl dipped perforated steel grill assemblies for indestructible road worthiness. No other competitor has the experience to compete in this category.

## WHY EAW KF SERIES?

Because we are the source for professional "One Box" loudspeaker systems. When we invented the "One Box" system we raised the expectations of an entire industry. And now, we are in the process of advancing the technology we pioneered.

## The Source For "One Box" Systems.

You can maximize your next quarter revenues by contacting EAW today. Our loudspeaker systems are easy for your crews to use, as well as a positive attribute your customers are looking for. In fact, EAW KF Series have been proven to have a pull through effect on rental of a "B" system. So, if quarterly revenues are important to you, now is the time to contact EAW. To expedite the process, call our president, Frank Loykoat 617-620-1478.



## "One Box" Systems That Defy Competition.

59 Fountain Street • Framingham, MA 01701  
Phone: 617-620-1478 • IMC 1651

# PRODUCERS • DESK

by Robin Tolleson

## Arif Mardin

In his remarkable 23-year recording career, Arif Mardin has been consistent and daring—traits that don't always sit well together. Arif (pronounced a-reef) has left his mark on three decades, working largely out of a home base at Atlantic Studios in New York. That career is far from over—Mardin will probably still be a step ahead of his peers in decades to come.

The 54-year-old producer, born in Istanbul, Turkey, and trained in Boston, became a partner with Tom Dowd and Jerry Wexler at Atlantic in the '60s, making wonderful records with Aretha Franklin. He developed into a crafty popster in the '70s, helping shape The Rascals' "Groovin'," Hall and Oates' "She's Gone," and the Bee Gees' "Jive Talkin'," as well as merging jazz and R&B to turn that most unusual trick, the instrumental hit, with the Average White Band's "Pick Up The Pieces." In the 1980s, Mardin has put his stamp on such artists as Chaka Khan, Scritti Politti, Culture Club, George Benson and Howard Jones. He worked with Phil Collins on the *Against All Odds* soundtrack, with David Bowie on *Labyrinth*, and is heading back into the studio with the Bee Gees to see if he can locate the magic he found with them on *Main Course* over a decade ago.

"Here Arif is in his 50s, and he's still as innovative and fresh as anybody," says bassist Nathan East, winner of a NARAS MVP award three years running. "He's definitely one



PHOTO: YVES BEAUVAIS

of my favorite producers, musicians, and people to work with. Pros don't really get any better."

Mardin's first musical love was jazz, and when he first arrived at Atlantic Studios he was assigned to work on projects with Max Roach, Sonny Stitt, Charles Lloyd, King Curtis, Herbie Mann, and other jazz-influenced players. He worked several albums with Mann's group that featured Roy Ayers, Reggie Workman, Bruno Carr and Patato, then was behind the board for *Push Push*, which saw the flute wiz taking on such R&B classics as "What's Going On" and "Spirit In The Dark," with help from the likes of Duane Allman, Cornell Dupree, Richard Tee, Donald "Duck" Dunn and Bernard Purdie.

Mardin was called in to take over production chores from Tom Dowd for The Rascals when they decided to move in a jazzier direction, and he brought in bassist Chuck Rainey and saxman Joe Farrell to guest on Dino Danelli's adventurous 7/8 tune "Nama" (*Search and Happiness*). Mardin arranged and conducted the orchestra on Lady Soul's *Aretha's Jazz*, a 1968 release produced by Wexler and Dowd. And he was part of the production team for the Franklin hits "Spirit In The Dark," "You're All I Need To Get By," "Bridge Over Troubled Water," "Spanish Harlem" and "Rock Steady." But his association with Franklin wasn't simply a matter of sharing a common record label; when she moved to Arista in 1981 she brought



# Power by Association!

**A-1 AUDIO  
AUDIO TECHNIQUES  
MARYLAND SOUND  
SEE FACTOR  
SOUND ON STAGE  
ULTRA SOUND...**

**When you power your system with Crest  
you're in sound company!**

The nation's highest quality sound reinforcement companies rely on Crest power amplifiers for their major concert tours. After listening, bench and road tests, the nation's leading touring companies and dozens of regional companies have switched to Crest. Superior sonic quality and extreme reliability under any condition have made us the professionals' first choice.

That's the power of success. Find out for yourself why the Crest Audio name is associated the world over with excellence. It is an association you can count on.

Contact Crest Audio for complete information.



Circle #014 on Reader Service Card

 **CREST AUDIO**

150 Florence Ave., Hawthorne, NJ 07506, USA 201-423-1300  
Telex 136571 IMC CREST-AUDIO-US

Mardin over to produce *Love All The Hurt Away*, using the finest Los Angeles session players.

On the 1982 *Chaka Khan* album, Mardin arranged a "Bebop Medley" for the singer, featuring "Hot House," "Epistrophy," "Yardbird Suite," "Giant Steps" and more. His string, horn and vocal arrangements can be found across the spectrum of contemporary music—James Taylor's cover of "Up On The Roof" from *Flag*, Steve Winwood's "My Love's Leavin'" on *Back In The High Life*, and George Benson's *In Your Eyes* all sport the Mardin arranging touch.

Howard Jones' *You Know I Love You* is an example of Mardin's ability to maintain a clear, clean sound, in the midst of sampling and all sorts of processing. Khan's *Destiny*, on the other hand, shows Mardin (with help from his producer-son Joe Mardin) at his most daring, mixing outrageous audio effects, metal, pop, R&B and rap, and shuffling around a roster of the finest contemporary musicians of the day, including Marcus Miller, Nick Moroch, Scritti Politti's Green and Gamson, Reggie Griffin, Phil Collins, Pino Palladino, the Breckers, Phillip Saisse, Steve Ferrone, Anthony Jackson, Jimmy Bralower and Sam Rivers.

Drummer Steve Ferrone began working with Mardin in the Average White Band but has continued to get calls from the producer for projects with Khan, Scritti and others. "Arif knows how to get the best out of you," says Ferrone. "He gives you a shot at doing things that you might have an idea for. He knows how to use musicians to their utmost. And sometimes he'll have you do something in a certain way that'll make you think about it differently, so that you'll come up with something fresh."

**Mix:** You've been involved with a lot of the classic R&B records of the last 20 years. Did you have a lot of R&B in your background?

**Mardin:** Actually, since I was a kid, nine or ten years old, I used to collect Duke Ellington records. I really started with jazz. I loved the free spirit of jazz, and black heritage and everything. When I came to Atlantic I was actually more involved in the jazz side, producing sessions with Max Roach, Herbie Mann, King Curtis and others. Tom Dowd and I co-produced *The Rascals*, and that was like my first leap into the pop side of it. From then on, working closely with artists like Aretha Franklin—even when I wasn't producing her I was doing arrangements for her in the studio, watching her and listening to her sing—I guess that was *the* school for me. Aretha's School of Soul.

**Mix:** What were you doing before you joined Atlantic Records in 1963?

**Mardin:** I was a graduate of the Berklee College in Boston. I was a recipient of the first Quincy Jones Scholarship to Berklee College, if you can believe that. I was an arranger and composer, actually. And my heart was totally in jazz. And it still is, as much as it can be. On some of the albums I try to inject some jazz influence from some of my loves. Like on Chaka's albums I usually have one tune that reflects that aspect. After I graduated Berklee, I taught there, and then I made the big move to New York. And you know, I was struggling, writing arrangements for jazz groups, things like that. I became part of the studio personnel at Atlantic, and was involved with test pressings, paperwork, the master books and library. I really started from the bottom. And I had a teacher named Tom Dowd—I learned to edit and mix, then I moved into production.

**Mix:** You, Dowd and Jerry Wexler did some memorable recording as a team.

**Mardin:** Yes. Jerry was obviously our superior and motivator. And in almost all the cases he also signed the artist. We worked with Aretha Franklin, but it was through Jerry's signing. And the team was formed, but we would report to him.

**Mix:** One of the first things I heard you guys do was Aretha's *Live At The Fillmore*.

**Mardin:** Yes, I really like that. I'm proud of that, because I mixed that and we tried to capture the actual live feeling. That one, and another one I'm proud of is *Donnie Hathaway Live At The Bitter End & Troubador*. That was a memorable experience, just being part of the audience. The audience participation and excitement was unbelievable.

**Mix:** Was it harder to do a live recording back then, or easier?

**Mardin:** Well, just the same. Equipment changes, equipment gets better. But after all, you go there with a truck and make sure the microphone lines are secure. You mic the audience and hope for the best. The artist usually has the problem. They have to deal with the audience. So it's just the same problems.

**Mix:** Does your keyboard training and arranging knowledge help a lot as a producer?

**Mardin:** Yes, of course, because at least I can put on different hats for different occasions. I'm a lousy piano player, but my knowledge of orchestration and harmony helps a lot because I can sit

down and reharmonize a tune and suggest new chords. To me chords are very important. It's a certain language—there could be an ominous chord, there could be a happy chord, and people wouldn't know why a certain song at a certain spot feels strange or good. The chords have a lot to do with it, the harmony of a tune. So I try to really keep a watchful eye on what the chords are going to be in a song.

**Mix:** You seem to have a big hand in Scritti Politti. That sounds kind of like a producer's wonderland, there are so many great sounds.

**Mardin:** Again, I was fortunate enough. Green Gartside, a founding member of Scritti Politti, wanted me to work on a specific tune called "Wood Beez (Pray Like Aretha Franklin)." And from that I worked on three songs. Basically it's how Green and David Gamson arranged those tunes. There was no need to change anything, except I made some editorial changes probably on the length of the tune and where the chorus comes in, where the solo comes in. It was a great collaboration, actually.

**Mix:** It's a real sophisticated song, but the arrangements are kind of simple and open.

**Mardin:** Well, it's their style. It's state-of-the-art, and it's danceable. It's almost like having Stravinsky on top of a great dance rhythm. Some of those chords are really wonderful.

**Mix:** How important is it to have a good rapport with engineers you are working with?

**Mardin:** I would like to feel secure with an engineer, that the engineer will get the right sounds. After all, it's not my job. I can suggest changes, suggest sounds and colors, but the engineer is paid not only for bringing those sounds in but at the same time suggesting new ideas and new sounds. What I like is an engineer who says, "Don't worry about it, I'll surprise you." And that's why I work with the likes of engineers that I work with. One of the processes of production is that you bounce off other people, you grab ideas, and I don't mean steal them—you always give them credit. It's like you're making an instant soup, and you're feverishly adding the mushrooms and the herbs and this and that. And definitely at the end it's very rewarding. So an engineer says "Wait a minute, let me have this kind of sound here," and that will lead to another comment from me or from the artist saying, "Yes but how about counter-acting that with something here in the bridge?" So that's very important. I'm not a person who sits down and fiddles



# FORMIDABLE.

DIGITECH BUILDS SERIOUS DIGITAL DELAYS FOR THE PROFESSIONAL MUSICIAN. WE BUILD FOUR HARDWORKING MODELS, EACH WITH DIFFERENT AMOUNTS OF DELAY, FROM 2 SECONDS OF FULL BAND WIDTH, UP TO 7.2 SECONDS OF LIMITED BANDWIDTH; AND EACH HAS A SELECTION OF FEATURES YOU DEMAND IN A PROFESSIONAL DDL: 10:1 SWEEP WIDTH, FLANGING, CHORUS, DOUBLING, ECHO, SLAP-BACK AND SAMPLING WITH REPEAT. THE POSSIBILITIES BOGGLE THE IMAGINATION. AND WITH SUGGESTED RETAIL PRICES FROM \$259.95 UP TO \$399.95 YOU CAN AFFORD TO GET SERIOUS. DIGITAL DELAYS FROM DIGITECH ARE FORMIDABLE INDEED.



**DigiTech**

5639 SOUTH RILEY LANE SALT LAKE CITY UTAH 84107 (801) 268 8400

Circle #015 on Reader Service Card

# The digital effects.

COMPRESSOR RELEASE = 525ms	PARAMETRIC EQ. MID FRQ = 500 Hz	AUTO PAN DIRECTION= L→R
TRIGGERED PAN PANNING = 525ms	FREEZE A REC MODE= AUTO	FREEZE B OVER DUB
PITCH CHANGE A BASE KEY = C 3	PITCH CHANGE B 1 FINE = + 8	PITCH CHANGE C L DLY = 0.1ms
PITCH CHANGE D F.B. GAIN= 10 %	ADR-NOISE GATE TRG. MSK= 5ms	SYMPHONIC MOD. DEPTH= 50 %
STEREO PHASING MOD. DLY= 3.0ms	CHORUS A DM DEPTH= 50 %	CHORUS B AM DEPTH= 10 %
REV 1 HALL REV TIME= 2.6s	REV 2 ROOM DELAY = 20.0ms	REV 3 VOCAL LPF = 8.0 kHz
REV 4 PLATE HIGH = 0.7	EARLY REF. 1 TYPE = RANDOM	EARLY REF. 2 ROOM SIZE = 2.0
STEREO FLANGE A MOD. DEPTH= 50 %	STEREO FLANGE B MOD. FRQ= 0.5 Hz	STEREO ECHO Rch F.B = +58 %
DELAY L,R Lch DLY = 100.0ms	TREMOLO MOD. FRQ= 6.0 Hz	DELAY VIBRATO VIB RISE= 1400ms
GATE REVERB LIVENESS = 5	REVERSE GATE TYPE = REVERSE	REVERB & GATE TRG. LEVEL= 65

If you want highly cost-effective, extremely versatile digital sound processing, you may not need anything more than the new SPX90 Digital Multi-Effect Processor. Or want anything less.

Built into its rack-mountable chassis are 30 preset effects specifically designed to suit a wide range of studio and live performance applications. Everything from pitch change to a variety of echo, delay, and reverb effects.

All the preset effects have up to nine user-programmable parameters. So you can further individualize them for your particular need and store them in any of the 60 on-board RAMs for instant recall using the front panel keys, optional remote control or footswitch.

The SPX90 offers MIDI-compatibility including the ability to make program changes during live performance via MIDI. Some effects can





# Without the expensive side effect.

\$775\*

**NOW AVAILABLE!**  
MFC-1 Midi Foot Controller  
for SPX90.

**YOURS FREE!**  
SPX90 Applications and Programming Guidebook  
Featuring programs and data from famous  
artists, engineers and producers.  
For your free copies write:  
SPX90  
P.O. Box 227  
Winona, MN 55987

even be actuated by a change in input level during performance.

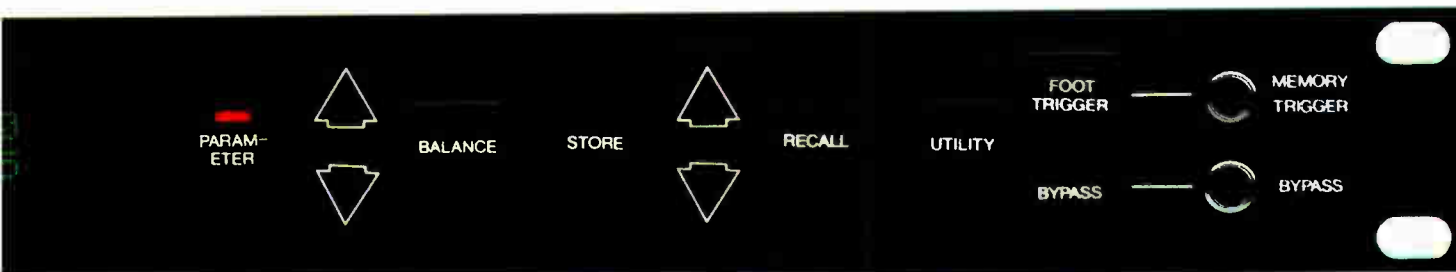
All this advanced technology wouldn't be all this affordable if it were not for the extensive use of Yamaha-developed LSI's. Using these LSI's in the SPX90 has enabled us to bring you uncompromised sound processing capability at a very reasonable price.

So whether you're a studio or sound reinforcement engineer, keyboard player, guitar player, bass

player, even home recording enthusiast, the SPX90 can add incredible creativity to your music. At a very credible price.

See your Yamaha Professional Audio dealer. Or write: Yamaha International Corporation, Professional Audio Division, P.O. Box 6600, Buena Park, CA 90622. In Canada: Yamaha Canada Music Ltd., 135 Milner Avenue, Scarborough, Ont. M1S 3R1.

\*U.S.A. suggested retail price subject to change without prior notice. Canadian price will vary.



Circle #016 on Reader Service Card

# SOUND ON STAGE



PHOTO: TIMOTHY WHITE

## BILLY JOEL'S THE BRIDGE TOUR

by Gregory A. DeTogne

Billy Joel's latest album, *The Bridge*, has been described by critics and fans alike as being demonstrative of the diverse nature of the musician, and of the wide-ranging extent of his musical powers, his growth, and willingness to experiment. Along with the evolution of his music, the logistics of his act have undergone a metamorphosis, due in no small part to the addition of a specially designed new sound system, stage and lighting rig.

Designed and built by Audio Analysts, the Billy Joel sound system fits neatly into one of the four trucks on The Bridge Tour. With facilities in both Canada and the U.S., Audio Analysts has been in business since 1967, when they were recruited for the sound chores during the World's Fair held in Montreal that same year. Daily operations are managed by three partners: Pierre and Bertrand Pare, and Albert Leccese.

Using what Albert Leccese refers to as an "all-in-one-box" system, sound for the tour is flown above the stage in a circular arrangement, which matches Joel's "in-the-round" performing style. Basically a refinement of a Clair



PHOTO: TIMOTHY WHITE



# Without the expensive side effect.

\$775\*

**NOW AVAILABLE!**  
MFC-1 Midi Foot Controller  
for SPX90.

**YOURS FREE!**  
SPX90 Applications and Programming Guidebook  
Featuring programs and data from famous  
artists, engineers and producers.  
For your free copies write:  
SPX90  
P.O. Box 227  
Winona, MN 55987

even be actuated by a change in input level during performance.

All this advanced technology wouldn't be all this affordable if it were not for the extensive use of Yamaha-developed LSI's. Using these LSI's in the SPX90 has enabled us to bring you uncompromised sound processing capability at a very reasonable price.

So whether you're a studio or sound reinforcement engineer, keyboard player, guitar player, bass

player, even home recording enthusiast, the SPX90 can add incredible creativity to your music. At a very credible price.

See your Yamaha Professional Audio dealer. Or write: Yamaha International Corporation, Professional Audio Division, P.O. Box 6600, Buena Park, CA 90622. In Canada: Yamaha Canada Music Ltd., 135 Milner Avenue, Scarborough, Ont. M1S 3R1.

\*U.S.A. suggested retail price subject to change without prior notice. Canadian price will vary.



# RACKMAX

**FOR HIGH PERFORMANCE APPLICATIONS REQUIRING UP TO 16 INPUTS, STUDIO CONSOLE SPECIFICATIONS, IN A PORTABLE, RACK MOUNT DESIGN...**

**THERE IS ONLY ONE RACKMAX**

- 16 input channels in a 19-inch rack.
- Velvet-glide 100mm faders
- 48 volt phantom power—switchable each channel.
- Complete solo system.
- 3 auxiliary sends per channel—all jumperable.  
Pre EQ  
Post EQ/pre fader  
Post fader
- EIN: < -128 dBv  
THD: 0.05% any input to any output  
Frequency response: ± 0.5 dB 20 Hz to 20 KHz

**RACKMAX is now available for your review at your favorite Biamp dealer.**

**biamp**  **AMERICAN SOUND CRAFTSMANSHIP**

Biamp Systems, P.O. Box 2160, Portland, Oregon 97208 (503) 641-7287

with all the EQ, and if I don't say anything, that means I like it. If I hate it, if I don't like it, I'll definitely stop it or comment about it. I do or may have a finished sound in my mind. I know how it must sound. But then if the engineer gives something better or different and equally good, I say okay, abandon my idea, what you have is good. I'm extremely flexible. I've worked with Lew Hahn, I've worked with all the engineers at Atlantic Studios. Michael O'Reilly. I worked with Brian Trench and am going to work with him again with the Bee Gees next week. And I work with Kevin Killen, who did some U2 and Peter Gabriel. Together we did the Howard Jones record—he's another fine engineer with a beautiful, clean sound.

**Mix:** I was expecting something a little more machiney on Howard Jones' new record, but it sounds played and warm.

**Mardin:** Our secret on this one was that we used live musicians on almost all the tracks. The single ("You Know I Love You") that's out now is Steve Ferrone playing drums. We cut the track with mechanical drums, brought Steve Ferrone in and he played over them, and then we took the mechanical drums out. So that's why it sounds nice. On one track we have Nile Rodgers and another track we have some English musicians. We definitely didn't go the whole techno way.

**Mix:** There is some interesting sampling being done on "Give Me Strength."

**Mardin:** That's Howard's own vocals that we sampled actually from his demo. He cut his demo on an Akai cassette, the 12-track, and we took his backup vocals that he sang himself, and sampled them in a very random way, almost like the 1950s tape editing, electronic style—cut the tape up. And we sampled those. Some of them were wrong, but sounded right. Some of the syllables were chopped, and some of them had extra space before it, as if a bad editor had come in. So we sampled those sounds, and that was the basis of his vocal answers to himself. We do voice sampling on all my albums, and we don't steal other people's voices. We sample things that are needed in the project.

**Mix:** This is a growing controversy.

**Mardin:** There is no controversy, actually. Sampling is here to stay. There's nothing wrong with it, with the act of sampling. It's the end result that's important. If one samples somebody well-known, at the end it should be so disguised and so covered with other effects and other things that it becomes just like using another color. But if the

well-known person is unadulterated and unashamedly out in the open, then there's a problem. I suggest that the union could think of a sampling session where you hire a conga player or percussionist or drummer, and pay him a fee to sample and he goes home. And by the way, everybody is thinking, "Wow, once I'm sampled I'll be there forever." No producer would use a sound for more than two or three albums, then it becomes passe. Everybody talks about Phil Collins' drum sound, which is sampled. I don't think they'll use it again, because everybody uses it, you see. It's gone.

**Mix:** There's a real interesting horn sound on "Step Into" on Howard's record. It sounds like an old big band recording.

**Mardin:** Yes, I don't know where that even came from. It was probably like an old radio thing. It was mono, anyway. We even have a tap dancer in the middle part. We sampled her clicks, soft click, loud click, and then we created our own pattern. We had her tap dance on sand in the studio, and we recorded that.

**Mix:** You've seen a lot of change in the recording industry. Has it all been good?

**Mardin:** Yes; at the same time, there are some producers and artists, including myself, who make records and sometimes get bogged down or actually fascinated by the scientific details and gadgetry, and become like children with new toys, and forget what the essence is about. The essence is the song, after all. So that's very important. This gadgetry should actually enhance, and not occupy us. Sometimes people who make records use just a few synthesizers that everybody owns, and they use presets, so sometimes all records sound alike. It sounds unbearable. So that's the other danger. You have these two extremes—the ultra-sophisticated technology where you might lose track of what the song is all about, and the other side is all these cheap records that just sound alike and are terrible.

I don't think this technology is a big threat to live musicians, because you can't beat good live musicians. Man is the best computer, built by God, so you have to have good musicians. Machines eliminated some marginal musicians who used to play terribly and would cost us a lot of money. The drum machine eliminated the people who would rush or slow down, unsteady. Now young people really play very well—they have to compete with machines in a way. On one hand one feels that string players maybe don't have too many jobs now. That's true.



But if there's a string arrangement to be done I always call the right amount of strings, and we do it. It's diminished a little bit, but it's not because of machines. It's because most songs now don't require the old padding that we used to have. Styles have changed. In the '60s and '70s, strings played a big part in R&B music. Not anymore. You use them when you really need them.

**Mix:** What are your feelings about digital recording?

**Mardin:** I have a lot of objections to 2-track digital. I think it sounds brittle, sounds woody, doesn't have the warmth, definitely doesn't have the high octave, the silk that analog gives you. And I'm not a stickler for "Wow, there's no hiss." I mean, I like tape compression—I'm probably more old-fashioned on that. Two-track digital has improved a lot. It's much better now, but I'm waiting to be surprised. Now on multi-track digital, we are going to use 32-track Mitsubishi (digital) with the Bee Gees, and it'll be a first for me on that system. I hear it's excellent. At Atlantic we have two 24-track Sonys, and they're especially good when you're doing synthesizers. Again, for some types of music I still like analog, but multi-track digital doesn't bother me as much as 2-track.

Of course when you talk about digital and compact discs, they sound marvelous, so I'm contradicting myself. That is another interesting thing. Some compact discs sound fantastic and some sound worse than the album mix. I can only say one thing on that: if they use the original equalization, either equalized tape or equalization and level adjustment, and compression necessary to make an ordinary LP—if you use those settings for CD then you're defeating the purpose, because there is no level problem with CD. We cheat on LPs, we raise the intros. When there's a big bass thump the mastering engineer would lower that particular instance on the tape so that the needle won't skip, and always watch the grooves and this and that. On CDs you have no problem, you just put it up. So CDs and cassettes actually need a new intermaster, a fresh new look. Some companies are doing it, and it sounds marvelous.

**Mix:** Musically, Chaka Khan goes all over the place on the *Destiny* record, and she pulls it all off.

**Mardin:** Chaka is an international person. Chaka is an artist of much greater vision than some people want to shackle her with—in just one groove, one kind of music. This is my complaint—that unless you happen to hit on something of the magnitude of a Michael Jackson or Lionel Richie



**Bernie Grundman MASTERING**

6054 Sunset Blvd. Hollywood, California

*Thank You*

Readers of **MIX** for voting  
**Bernie Grundman Mastering**  
**Outstanding Mastering Facility.**  
It means a lot to us.

6054 Sunset Blvd., Hollywood, CA 90028 (213) 465-6264

Circle #017 on Reader Service Card

## EQUIPMENT FOR SALE?

If you have equipment to sell—whether it's a single microphone or an entire studio—**Mix Classifieds** are the place to advertise. **Mix Magazine's** classified section is the biggest in the industry, and more than 75,000 audio and music pros read **Mix** every month!

When professionals need equipment, **Mix** is the first place they look. So if you've got gear you absolutely must sell, advertise in the magazine you can count on to get results. To place your ad, call Lauri Newman at (415) 843-7901, or use the order form in the back of this issue.

THE RECORDING INDUSTRY MAGAZINE  
2608 NINTH STREET, BERKELEY, CALIFORNIA 94710 (415) 843-7901

**Mix**

where there's automatic crossover, the people like Chaka who are true innovators, one of the original source voices... Like people copy Aretha, young people copy Chaka. And she likes not only R&B music, but she likes jazz, she likes French music, she likes rock and roll. When she was growing up it was the Eagles, Jimi Hendrix, you know, she likes Joni Mitchell. And when she goes in and records a rock and roll-inspired tune, it isn't that she wants some mythical instant crossover into the AOR field—far from it. Some near-sighted critics, especially in the black magazines, accuse her of doing that. It's so untrue, because she just likes those songs.

**Mix:** She also seems to be able to stretch into rap, with "Earth To Mickey" and "I Feel For You."

**Mardin:** That's a very interesting thing. On the previous album when I called (Grandmaster) Melle Mel to rap on "Feel For You," and then played it for Chaka the next day, she was really embarrassed to hear her own name uttered so many times. Like when you hear your own voice on a cassette for the first time at a family gathering or something, you think it sounds terrible. She said the same thing. "Oh, my name, wow." It took her a long time to really digest that, and she learned to live with it, in fact she likes it now. But we've prepared a single version and 12-inch version of "Earth To Mickey" from the new album. It's hilarious. We took Chaka's rap, which sound like a cross between Whoopi Goldberg and Bette Midler, and did a sort of—I don't want to say Max Headroom—but we did a very sort of New York surrealistic way of starting the record with her, and it's fantastic, really. We're going to release that single, and I hope people will enjoy it.

**Mix:** Have you learned any tricks from rap music?

**Mardin:** Tricks is the wrong thing. Rap music is very alive and it's a very important music, especially for big cities. But again, some rappers, especially young ones, maybe for budget problems or whatever, sometimes it all sounds the same. Why can't they shift one accent so that we have something interesting? Obviously you have great rappers—Run DMC I really like. LL Cool J. But the younger ones take the clichés and imitate them rather than latch onto the inventiveness.

**Mix:** Complete this sentence. MIDI has made my life \_\_\_\_\_

**Mardin:** Easier. Except that you have to know how to use MIDI. It's just like if you have a wild horse, you have to know what to do with it. There's a lot of

MIDI delay problems that you encounter and have to measure. If you're playing one master keyboard and you have three other synthesizers responding, you have to make sure that they are all aligned properly. Some instruments are way behind, especially the older instruments. You have to reckon with that, otherwise MIDI is a fantastic thing. Your DX7 would probably be close to time, but if you have a Jupiter 8 in your link it would be way behind. So that means you have to actually record them separately sometimes. And you have to bring it forward with the use of devices, a Doctor Click or whatever. Unfortunately, sometimes you say, "Why don't I have a drummer and *play* it?" That's also sometimes what you do, rather than sequence every single line because it has to be sequenced. You get a great player, and a great player will play the chords and the patterns that you like. I like the sequenced drums or bass, or mechanical sounding guitar parts, or things that have to move in exact 16th notes. But when you have a great guitar player you want him to play over it rather than simulate a guitar sound with a synthesizer, and spend hours and have the end result be possibly stiff.

**Mix:** (Drummer) Steve Ferrone said that on "I Feel For You" he was just recording along with a bass and click.

**Mardin:** Well, I don't know about "I Feel For You," but we did that with "Wood Beez" on the Scritti track. He had only a bass and a guide hi-hat. He played wonderfully, and when we played the song to him when it was finished, he was surprised.

**Mix:** What was your reason for recording Steve like that?

**Mardin:** Well, sometimes things happen because of, not technical reasons, but logistics. I don't think we had the time to give him a guide keyboard track. All we were able to do at that time was guide drums and a bass. He was in the studio, so we didn't want to lose time, and that was it. On that particular track, spontaneity was not the object. We wanted solid rhythm, hypnotically playing the same thing almost.

**Mix:** I was a little surprised and intrigued by the drum sounds on "Coltrane Dreams" on *Destiny*.

**Mardin:** Chaka and I have always been dreaming about a song where everything is her voice. And she came in the studio one day and sang these drum sounds, and we recorded all of those. Then they were put in the Synclavier and we processed them. And Steve Ferrone came in and played Chaka's sounds as if it were a drum

kit. All the drums and bass sounds were actually Chaka's voice. We added a little bit extra bass to her bass part, but apart from the keyboard sounds and the tenor sax it was all Chaka.

**Mix:** How do you feel about how many takes a singer should be given to nail a part?

**Mardin:** There are different types of singers. Natural singers like Aretha or Chaka would sing maybe three versions, and that would be it. Sometimes you would take a whole verse or a chorus from one take and the rest from another. There are younger singers who are maybe not experienced, so you would piece together a whole vocal from as many as ten takes, 12 takes. It all depends. Now with the new technology, if there's a repeated section like a chorus, once the lead singer sings it once you can just say, "Look, the second and third choruses are exactly the same, so we can use the first chorus there. All you have to do is sing your ad libs on top." It's good and bad, it depends on the situation. Chaka always sings different things, subtle variations on the third word on the second line, so that it's not a copy. She would do a little something that only the connoisseurs would know.

**Mix:** You used 16 engineers on the *Destiny* record.

**Mardin:** Well, ten songs. If there were 16, I'm sure the assistants would be included too. I would go to Hit Factory and do vocals, and there would be assisting engineers there. I did some at Greene Street and other places. Maybe about five main engineers.

**Mix:** Do you have a problem with tracks sounding different using all the engineers and studios? Or is that an intention?

**Mardin:** I'm looking forward to a little of that, at the same time I was in charge of almost all the mixing. It was done at Atlantic. If you provide them with your original 2-track recording tones, which will set your equalization and your levels correct, then in the process of mastering you will have no problem as to what track is misaligned or what track needs to be boosted two dBs or something. Everything will be the same. That's one of the tricks of doing an album where there are different producers or songs done in different cities. You have to provide the tones for however many producers you have on it. Then when the mixes come around you don't have to tamper technically, only the producers' taste is different.

**Mix:** What are some of your most memorable tracks, and why do you



# New Carver Amps for permanent installation, studio, and concert use. PM-175 and PM-350.

**NOW THAT THE CARVER PM-1.5 IS PROFESSIONALLY SUCCESSFUL, IT'S STARTED A FAMILY. INTRODUCING THE NEW CARVER PM-175 AND PM-350.**

Month after month on demanding tours like Bruce Springsteen's and Michael Jackson's, night after night in sweltering bars and clubs, the Carver PM-1.5 has proven itself. Now there are two more Carver Professional Amplifiers which deliver equally high performance and sound quality — plus some remarkable new features that can make your life even easier.

**SERIOUS OUTPUT.** The new PM-175 delivers 250 watts RMS per channel into 4 ohms. As much as 500 watts RMS into 8 ohms bridged mode. The larger PM-350 is rated at 450 watts per channel into 4 ohms. Up to a whopping 900 watts in 8 ohm bridged mode. Both with less than 0.5% THD full bandwidth at any level right up to clipping. Plus 2 ohm capability as well.

**SERIOUS PROTECTION.** Like the PM-1.5, both new amplifiers have no less than five special protection circuits including sophisticated fault interruption against dead shorts, non-musical high frequency, and DC offset protection, as well as low level internal power supply fault and thermal overload safeguards. The result is an amplifier which is kind to your expensive drivers — as well as to itself.

**OUTBOARD GOES INBOARD.** Each PM-175 and PM-350 has an internal circuit card bay which accepts Carver's new plug-in signal process-

ing modules. Soon to be available is an electronic, program-mable 2-way stereo crossover, with 24 dB per octave Linkwitz-Reilly phase -aligned circuitry, a built-in adjustable high-end limiter and balanced outputs. And more modules will be available in the near future to further help you streamline your system.

**PRO FROM CONCEPTION.** The PM-175 and PM-350 inherited their father's best features. Including slow startup and input muting to eliminate turn-on current surge, 11-detent level controls, phone jacks, power, signal, clipping and protection indicators as well as balanced XLR input connectors. In a bridged mode, both amplifiers will drive 70-volt lines without the need for external transformers.

**MEET THE FAMILY AT YOUR CARVER DEALER.** All remarkable Carver Professional Amplifiers await your own unique applications. Hear their accuracy and appreciate their performance soon.

**SPECIFICATIONS: CARVER PM-175** Power: 8 ohms, 175 w/channel 20-20kHz both channels driven with no more than 0.5% THD. 4 ohms, 250 w/channel 20-20kHz both channels driven with no more than 0.5% THD. 2 ohms, 300 w/channel 20-20kHz both channels driven with no more than 0.5% THD. Bridging: 500 watts into 8 ohms; 400 watts into 16 ohms. THD-less than 0.5% at any power level from 20 mW to clipping. IM Distortion less than 0.1% SMPTE. Frequency Bandwidth: 5Hz-80kHz. Gain: 29 dB. Input Sensitivity: 1.5 V rms. Damping: 200 at 1kHz. Slew rate: 25V/microsecond. Noise: Better than 115 dB below 175 watts. A-weighted. Inputs: Balanced to ground, XLR or TRS phone jacks. Input Impedance: 15k ohm each leg. Compatible with 25V and 70V systems. 19"Wx3.5"Hx11.56"D

**SPECIFICATIONS: CARVER PM-350** Power: 8 ohms, 350 w/channel 20-20kHz both channels driven with no more than 0.5% THD. 4 ohms, 450 w/channel 20-20kHz both channels driven with no more than 0.5% THD. 2 ohms, 450 w/channel 20-20kHz both channels driven with no more than 0.5% THD. Bridging: 900 watts into 8 ohms; 750 watts into 16 ohms. THD-less than 0.5% at any power level from 20 mW to clipping. IM Distortion less than 0.1% SMPTE. Frequency Bandwidth: 5Hz-80kHz. Gain: 31 dB. Input Sensitivity: 1.5 V rms. Damping: 200 at 1kHz. Slew rate: 25V/microsecond. Noise: Better than 115 dB below 350 watts. A-weighted. Inputs: Balanced to ground, XLR or TRS phone jacks. Input Impedance: 15k ohm each leg. Compatible with 25V and 70V systems. 19"Wx3.5"Hx11.56"D



- Powerful • Reliable • Versatile • Stackable • Rugged • Easy to Install • Compact • Lightweight • Cool Operation • Bridgeable • Quiet • Affordable • Multi-Function Protection • Superb Sound

## CARVER

P.O. Box 1237, Lynnwood, WA 98046

POWERFUL

MUSICAL

ACCURATE

Circle #019 on Reader Service Card

Distributed in Canada by: **evolution technology**

Lexicon V2.0 PCM-60 software  
*turns your plate  
inside out!*

*Inverse room, gated reverb and  
ambience at your fingertips*

See your authorized Lexicon  
dealer now!

**lexicon**

Circle #043 on Reader Service Card

think those stand out?  
Mardin: I have many fond memories. Some of them would be not my production techniques, but incidents in the studio where the vocalist would overwhelm you with great vocals. Most of the Aretha Franklin dates were like that, and Chaka Khan. I keep remembering Donnie Hathaway in the studio singing those wonderful vocals. Maybe I'm a little prejudiced because he's no longer with us, I just remember him fondly, with his exaggerated yearning, so my work with him is very memorable at this point. Also the making of "Night In Tunisia" was very interesting with Chaka and Dizzy Gillespie and Herbie Hancock. I liked "Jive Talkin'" very much, because for 1974 it was close to state-of-the-art with the synthesizers. Those are really memorable sessions. For a session to be memorable there has to be a great marriage between the artist, producer, musicians and environment. All hits come out of a good marriage. You have to include the A&R department too, record company, artist, management—the relationship really enhances and helps make a great record in the end. Like with the Bee Gees 13 years ago, there was incredible electricity in the studio. Everybody was creating, everybody was suggesting something. Good ideas were flying around, and I guess that's what it is. For example, "Pick Up The Pieces" was great with the Average White Band, but we didn't know we were making a hit record. We were making a grooving record. A few weeks after the record was released, the promotion department came and said, "Wow, it's an instrumental, but it's a hit."

**Mix:** Are there any steps you take to try to insure the success of a session?

Mardin: Yes, I always communicate with the people interested, and I give reports. I don't try to guard things. On some projects maybe we used to do that, and it's not successful. You have to get other people involved. You have to send them work-in-progress cassettes. You have to not be afraid of sending them a cassette saying this is just a rough mix, and don't make too many excuses. If you believe in something, send them the cassette. Let them comment about it. At the end they will be more supportive. I would like to spread my responsibilities in a way that I know I have somebody fantastic working on the arrangement—it's my forte anyway—so I go in and bug him, and change things. And then I know that there's somebody else great doing this and that. The days of doing everything yourself are over. You've got to have a great team. ■

If you  
learned  
audio  
by  
the  
seat  
of  
your  
pants...



**Designed to help you mend the  
holes in your audio education.**

**AT LAST:** Sound Shop Seminars now on cassette.  
Here is the audio training series that will:

- Teach you how to maximize your sound system
- Establish a solid foundation in basic audio concepts
- Give you the secrets "pros" use to get great LIVE sound

You'll get 6 tapes loaded with practical information and technical "how-to's" covering MICROPHONES • MAKING TECHNIQUES • MIXERS & MIXER CONTROLS • AMPLIFIERS • MATCHING AMPLIFIERS TO SPEAKERS • SPEAKERS & SPEAKER LOCATIONS... thorough audio training for only \$69.95

**ORDER TODAY!** (By Mail) Sound Investment Enterprises,  
P.O. Box 4139, Thousand Oaks, CA 91359 (By Phone) 818/991-3400

**SATISFACTION GUARANTEED or your money back!**

☒ **YES** Send me \_\_\_\_\_ copies of Sound Shop on cassette. I've enclosed  
plus \$3 shipping and handling. (Calif. residents add sales tax.)

Name: \_\_\_\_\_ Phone #: \_\_\_\_\_  
Address: \_\_\_\_\_ City: \_\_\_\_\_  
State: \_\_\_\_\_ Zip: \_\_\_\_\_  
☐ Charge my VISA / MC # \_\_\_\_\_ Exp. Date: \_\_\_\_\_  
☐ Send me more information about: ☐ Sound Shop on cassette  
☐ Sound Shop Seminars ☐ Sound System Handbook, Vol. I ☐ Other services

Circle #044 on Reader Service Card





# AKAI S900 Super Sampler

*The most powerful and extensive Digital Sampler under the sun.*

At last the most exciting and realistic form of digital synthesis in the history of modern civilization is now affordable to the common man. Utilizing the AKAI S900's crystal clear frequency response you can capture every nuance of a concert grand piano, and every vibration of a priceless violin. In fact, anything you hear . . . you can sample and play back on a MIDI keyboard, Guitar-to-MIDI Converter or even from a set of drum pads. From the sound of a road grader to a rocket . . . from a note on Louie's trumpet to the honking of a goose . . . any sound can be easily sampled and then played back on your MIDI keyboard. Yes . . . even the old analog and digital synthesizers can be sampled and instantly replayed at the push of a button on the S900.

## Features:

- 40 kHz Sampling Rate
- 32 Sample Points
- 12-Bit Resolution
- 8 Individual Audio Outputs Plus Left, Right, and Mix
- 12 Seconds of Sampling Time at Full Bandwidth
- 64 Seconds of Sampling Time at 4 kHz Bandwidth
- Adjustable Sampling Rate for Each Sample
- Velocity and Positional Crossfade
- MIDI Compatible Plus an RS232 Port
- 3.5" Disk Drive
- Full ADSR, Filter, and LFO

## Available Sound Disks for the AKAI S900:

- SL501 Piano 1, Piano 2, Honky Tonk
- SL502 Bass
- SL503 Drums
- SL504 Voices, Flute-Vocal
- SL505 Orchestra
- SL506 Strings 1
- SL507 Brass
- SL508 Harp Gliss, Cello Viola, Pan Pipes
- SL509 Pizz Strings, Eastern, Kalimba, Piza Strings
- SL510 The Island—Steel Drum, Shaker, Island Bell, Bass Marimba
- SL511 Bell JVT, Strings, String Bell 1, String Bell 2
- SL512 Guitars, Fuzz Guitar 4, 4-in-1 Guitar, Fuzz Guitar 1, Fuzz Guitar 2
- SL513 EFX1 Baby, Lotus, Zipper, Can, Gong, Glass

**AKAI**  
professional

**Creative At Heart.**

Circle #020 on Reader Service Card

For complete details write to AKAI P.O. Box 2344 Fort Worth, Texas 76113  
Gentlemen: Send me a data sheet on the **AKAI S900 Super Sampler**  
Name \_\_\_\_\_ Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Tele ( ) \_\_\_\_\_

# SOUND ON STAGE



PHOTO: TIMOTHY WHITE

## BILLY JOEL'S THE BRIDGE TOUR

by Gregory A. DeTogne

Billy Joel's latest album, *The Bridge*, has been described by critics and fans alike as being demonstrative of the diverse nature of the musician, and of the wide-ranging extent of his musical powers, his growth, and willingness to experiment. Along with the evolution of his music, the logistics of his act have undergone a metamorphosis, due in no small part to the addition of a specially designed new sound system, stage and lighting rig.

Designed and built by Audio Analysts, the Billy Joel sound system fits neatly into one of the four trucks on The Bridge Tour. With facilities in both Canada and the U.S., Audio Analysts has been in business since 1967, when they were recruited for the sound chores during the World's Fair held in Montreal that same year. Daily operations are managed by three partners: Pierre and Bertrand Pare, and Albert Leccese.

Using what Albert Leccese refers to as an "all-in-one-box" system, sound for the tour is flown above the stage in a circular arrangement, which matches Joel's "in-the-round" performing style. Basically a refinement of a Clair



PHOTO: TIMOTHY WHITE





## 500 Series Loudspeaker Systems

Finally. Fully integrated sound reproduction systems. With no compromises, and no complications.

*The Meyer Sound 500 Series.* A family of full-range professional loudspeakers, and a matching 1200 watt stereo amplification unit with built-in complementary phase equalization and driver protection. It's an unbeatable combination, packing all the performance that any professional could dream of.

- Effortlessly smooth, flat frequency response
- Unrivalled phase accuracy
- Vanishingly low distortion, even at extreme sound pressure levels
- Dynamic range exceeding that of 16-bit digital audio

Until now, excellence like this was beyond the range of most budgets. But through a combination of unique design innovations, the 500 Series achieves a significant breakthrough in price performance. And by making full use of the advantages of integrated system design, the 500 Series offers a new level of elegance, simplicity and reliability.

The Meyer Sound 500 Series incorporates loudspeaker models suited to virtually all professional applications—from stage to studio, cinema to church. And all are fully compatible with the 500 Stereo Integrated Amplifier.

For more information on this remarkable new line of loudspeakers, contact your pro audio dealer or Meyer Sound.



Meyer Sound Laboratories, Inc.  
2832 San Pablo Avenue  
Berkeley,  
California 94702



# COMPLETE 16-TRACK AUDIO POST SYSTEMS FROM \$14,600.

Here's your very best buy in the latest high-tech audio sweetening hardware, complete from input to output. It's tailor-made for film and video post production, a completely integrated system. No other manufacturer can offer you all this, all ready for on-line operation.

We even offer automated audio assembly exiting as an option. It's called F.A.M.E., for Fostex Automated Media Editing, and it lets you program edit decision lists so that all your dialog, effects, music and cues are synchronized right on the money.

Your investment in Fostex gear pays for itself. Just take a look at what you spent last year for outside audio post work, and see how much sense a Fostex system like this makes:

- **Model E-16**, 16-track recorder with integral noise reduction. No need to leave a guard band for the SMPTE stripe. **\$7000.**
- **Model E-2**, 2-track recorder with center channel SMPTE track. Full compatibility with standard half-track tapes. **\$3600.**
- **Model 4030** Synchronizer with Model 4035 Remote Controller. Allows you to control up to one master recorder and up to three slaves with chase and pre-roll; also resolves to film. **\$2000.**
- **Model 450-16** Recording Console. 16 x 4 x 2 with phantom powering, parametric EQ, solo and in-line monitoring. **\$2000.**
- Fostex also makes a complete line of microphones (including a unique M/S Stereo Mic), monitors

(point-source, phase coherent), the hot tip in headphones (Model T-20), signal processors — even the interconnecting cables and all the other Necessarys™ you need to remain on-line.

So check with your Fostex dealer today and join the fast-growing list of professionals who are producing popular records, videos, TV show themes and movie soundtracks on Fostex equipment.

Also check out our Autolocator and SMPTE generator/reader. Model 4050 lets you lock MIDI to SMPTE for even greater automation and flexibility. Trust Fostex for all of your on-line audio needs.

## Fostex

ON-LINE AUDIO  
FOR OFF-LINE VIDEO

15431 Blackburn Ave., Norwalk, CA 90650 (213) 921-1112

Special cables and interface units may be required, depending on other hardware. Not all products are available at all dealers. Prices and specifications are subject to change without notice.



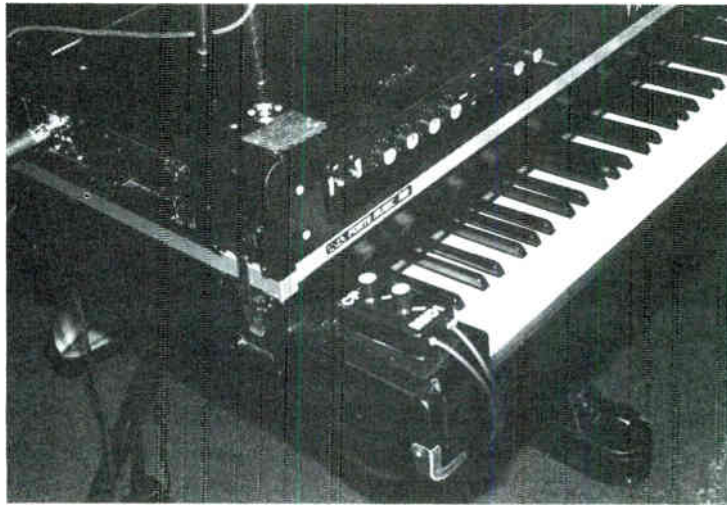
Brothers design, 60 of Audio Analysts' proprietary modular cabinets comprise the circle of sound, which is suspended via a network of adjustable straps, swivels, and ten flying bars, and then positioned with the help of four two-ton and 20 one-ton motors. Internally, the cabinets have benefited from the years of R&D Leccese and his crew have put into them. Their current configuration utilizes a four-way design with crossover points at 250, 1200, and 6500 Hz (the lows, mids, and highs are active, while the ultra highs are passively crossed). Eighteen-inch drivers cover the low end, while 10-inch drivers designed in conjunction with JBL cover the midrange frequencies. Above 1200 Hz, frequencies travel to 2-inch compression drivers coupled to 90 x 40 horns. Ultra-highs are emitted from slot radiators.

Despite the circular arrangement of the array, there is a left and right balance, and to boost low-end efficiency, Leccese depends upon coupling the low frequency drivers in positions half of their diameter from one another, which provides an extra 1½ dB of free energy. As a result, coverage patterns are narrow and highly defined, and an extra long throw is obtained, which is especially useful in the large arenas that serve as venues on The Bridge Tour. Although narrow coverage patterns could be viewed as being a detriment by some, under these circumstances, nothing is lost because coverage can be equally defined all the way around the circle.

According to Leccese, proper design, concern for parameters, and carefully matched dispersion patterns throughout the different bandwidths have allowed Audio Analysts to pack a truly high-powered system into four smaller enclosures. "In the old days when we first started doing concerts of this magnitude, it was an era of the bin system," he recalls. "Everything was done with the pyramid approach in mind. The bigger enclosures were used as a base, and everything else was stacked on top. It took up tremendous amounts of truck space, and was a pain. With this system, it's really easy as far as truck pack is concerned, and there's a high degree of neatness in hanging the whole array assembly."

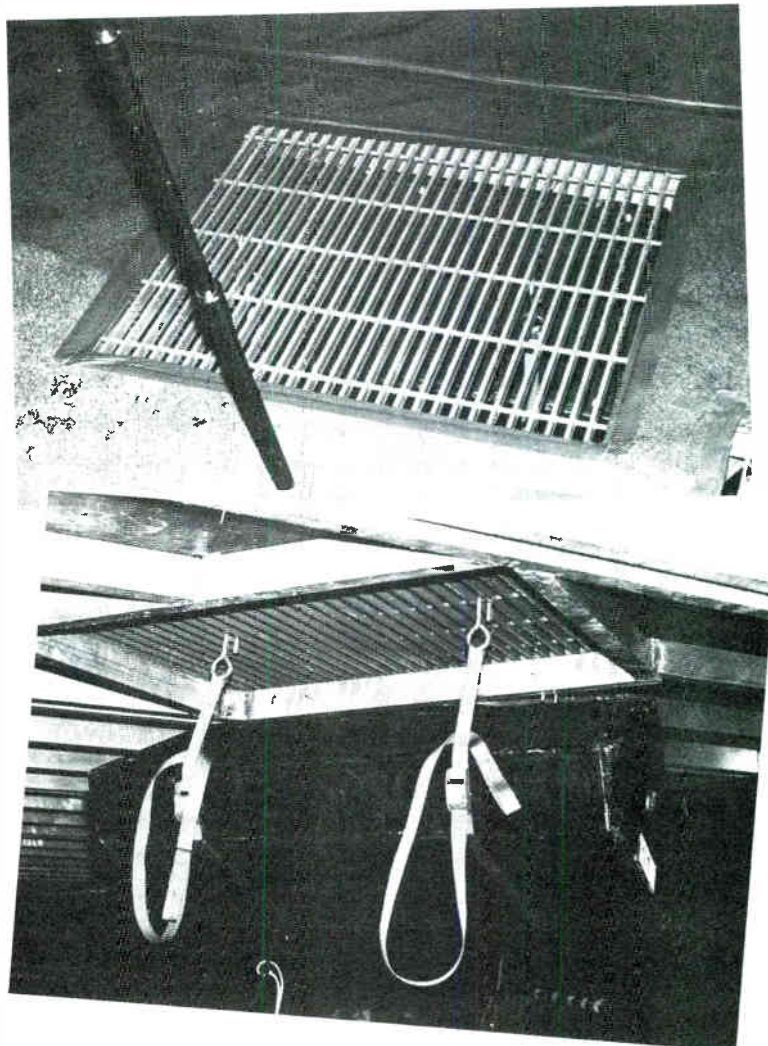
Leccese is continually looking for new ways to upgrade the system, and so he has undertaken a three-year project to design an all-digital crossover that will replace the current modified BSS version that is being used. "The digital crossover will work by initially transforming the analog signal into numbers, which will then go

—CONTINUED ON PAGE 140



*(Above) For The Bridge Tour, all four keyboards on stage (including Billy Joel's baby grand piano) are rigged with independent MIDI controllers that allow "anything to be played anywhere." Monitor mix levels can also be controlled from each keyboard station.*

*(Photos below) Monitors in the clutter-free stage design are suspended below the stage with adjustable straps, and serve up sound through fiberglass grates on the stage's floor.*



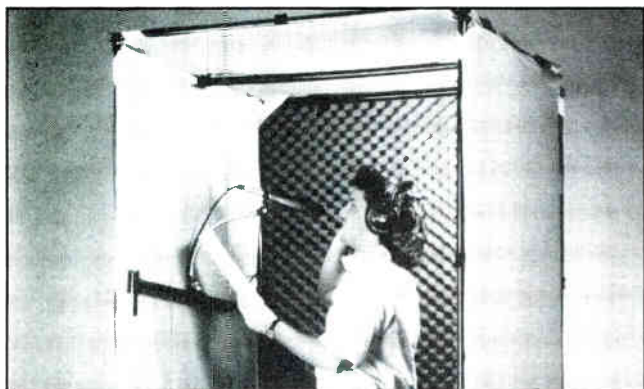
# P R E V I E W



## Alesis Microverb

Unveiled at last month's NAMM Show in Anaheim, the latest digital reverb from Alesis (North Hollywood, CA) is the Microverb, featuring 16-bit linear PCM processing over a 90 dB dynamic range. Microverb provides six small, seven large, and two gated programs, along with reverse reverb. Sounds range from small rooms and plates to large, cavernous halls. Decay time, coloration, depth, and imaging characteristics vary with each program. Controls include input and output level, reverb depth, and a 16-position program selector knob. A multicolor LED indicates power, signal presence, and overload. Microverb accepts input signals from low-level guitar to the professional +4 standard. Five 1/4-inch jacks provide stereo in, stereo out, and reverb defeat. Suggested retail price is \$249.

Circle #023 on Reader Service Card



## Portable Sound Control Panels

Soundforms, a San Diego, CA, company, has created portable sound control panels for use in virtually any environment. Their S-22 panel is 42" x 78" (for a 22 sq. ft. booth), while the S-15 panel is 42" x 42" (15 sq. ft. booth). You can use the panels free-standing, hanging on a wall, or snapped together with the company's Double-Clips to form sound booths or baffle walls of any size and shape. One S-22 panel weighs 5½ pounds. Each panel consists of an easily-collapsible plastic frame, attachable acoustic foam, cover fabric in any of nine colors, and attachable wall mounts. The S-22 panel is \$94.95; the S-15, \$69.95. Complete packages are available starting at \$194.95.

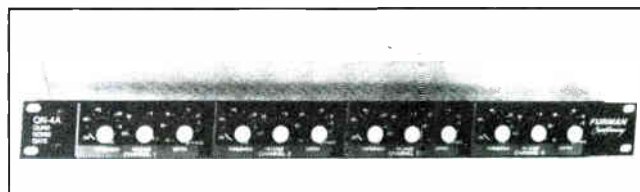
Circle #024 on Reader Service Card



## Crown GLM-100/ENG Mic

The miniature GLM-100/ENG omnidirectional, electret-condenser microphone is offered by Crown International (Elkhart, IN) for lavalier use, sound reinforcement, and close-miking of acoustic instruments. With a frequency response of 80 Hz to 20 kHz, the GLM filters out extreme low frequencies to reduce boominess and ambient noise pick-up. It also features minimal off-axis coloration, low vibration pick-up, and its balanced, low impedance output allows long cable runs. The GLM, which operates from its built-in battery or phantom power, is supplied with a tie mount and two styles of foam windscreens.

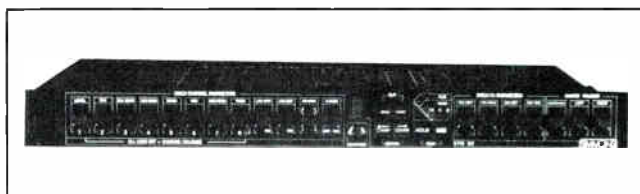
Circle #025 on Reader Service Card



## Furman QN-4A Noise Gate

Furman Sound, Inc. (Greenbrae, CA), introduced their moderately priced, four-channel noise gate, the QN-4A (successor to the QN-4). It uses pulse width modulation to accomplish the gating function. The QN-4A provides threshold, release rate, and depth of cut controls for each channel. Also included are a threshold indicator LED and key input. The unit is priced at \$395.

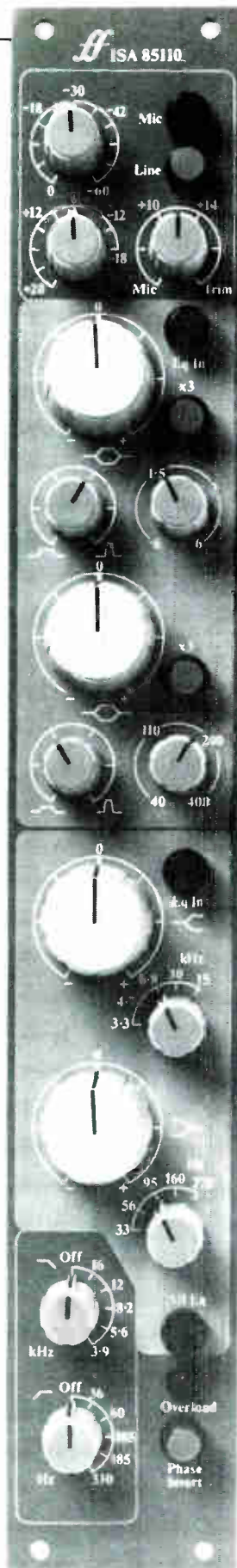
Circle #026 on Reader Service Card



## Simmons SPM8:2 MIDI Mixer

Simmons Group Centre, Inc. (Calabasas, CA) debuted their SPM8:2 Programmable MIDI Mixer at the Winter NAMM show last month. The 8-channel stereo mixer can store 64 different mixes ("patches"): combinations of level, EQ, panning, and effect-send settings from all eight channels. Via MIDI, a keyboard or percussion machine can recall the patches, making it possible to have a separate mix for each synth patch. The SPM8:2 fits into an effects





Focusrite ISA110

# Important People Talk About Great Sound.

"When we changed our console we were concerned about losing that great sound. So we added a 12 x 8 Focusrite submixer and now have a winning combination. Clients are saying 'the best studio in the world'."

**George Martin**  
*Air Studios*  
*Montserrat*

"Absolutely the finest, most musical sounding preamp-equalizer I've ever heard."

**Bob Schwall**  
*Chief Engineer*  
*Right Track Recording*  
*New York City*

"They went out on rental the first day we had them and we haven't seen them since."

**Josh Weisberg**  
*General Manager*  
*A.T. Scharff Rentals*  
*New York City*

"It's sweet, smooth and sunny."

**Buddy King**  
*Soundcastle Studios*  
*Los Angeles*

Focusrite Ltd.—Electro-Acoustic design engineers. Introducing a line of modular signal processing devices available in console retrofits, outboard racks or complete custom consoles. Call us for a demonstration.

**Focusrite**  
The Sound Alternative.

*U.S./Canadian Distributor:*  
**ZIMBELMAN LTD**  
1100 Wheaton Oaks Court  
Wheaton, IL 60187  
(312) 653-4544

*West Coast Rep:*  
Audio Intervisual Design  
1032 North Sycamore  
Los Angeles, CA 90038  
(213) 469-4773

rack, and includes a programmable, four-function effects bank that you can apply independently to channels and store within a saved patch. Crossfade time between one patch and the next is also programmable, up to ten seconds. Each channel includes three-band EQ, with parametric mid-band.

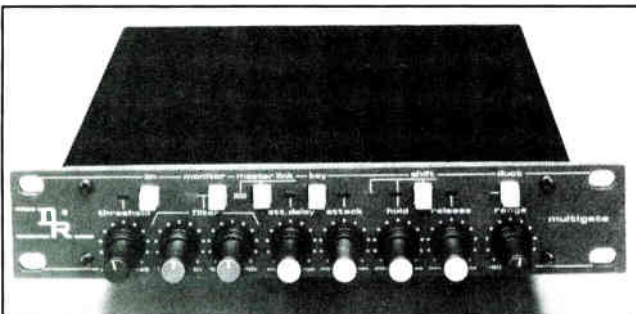
Circle #028 on Reader Service Card



## Shure SM89 Shotgun Mic

The SM89 Condenser Shotgun Microphone was developed by Shure Brothers for location film and TV production, theater sound reinforcement, and spot news coverage. Along with a new capsule design, it features Shure's Accu-Port™ interference tube system. The SM89 has a highly directional pattern, fine-tuned frequency response, and an output that drops smoothly, without comb filtering, as it gets off-axis. The 60 to 20k Hz frequency response has a slight high-end rise to compensate for losses due to distant or moving source pick-up. A low frequency roll-off reduces pick-up of wind, vibration, ambient noise, and rumble; a switch on the mic selects 60 Hz or 160 Hz roll-off. The two-piece, aircraft-grade aluminum SM89 weighs 6.9 ounces, and operates over a wide phantom voltage range. Price is \$900 including case and windscreens, and the A89SM shock mount is optional.

Circle #029 on Reader Service Card



## D&R Multi-Gate

D&R Electronica BV of The Netherlands has introduced their Multi-Gate noise gate, incorporating a dual-band, sweepable key filter and standard control parameters to provide "frequency conscious" gating. Multi-Gate's attack, delay, and hold controls allow you to create and modify the amplitude envelope of any signal, independent of its actual dynamic structure. This allows editing of sounds for digital sampling, reverse dynamics, and automatic fades. Multi-Gate features an extremely fast attack circuit (under 4μsec) and is priced at \$749. It's available in the U.S. through WJR Distributors of Atlanta, GA.

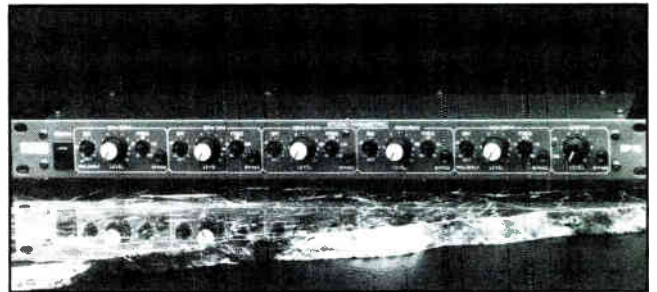
Circle #030 on Reader Service Card

## Quested Reference Monitors

Recently introduced by Quested Monitoring Systems, London, England (and distributed in the U.S. by Apogee

Electronics Corp., Santa Monica, CA), are the 405 series of compact near-field monitors. The 405P has an internal crossover, while the H405 is an active model with external crossover (amp package available early 1987). Both models are two-way designs with four 5-inch woofers and a 1-inch tweeter in each cabinet; the driver arrangement is symmetrical for horizontal or vertical use. Frequency response is stated as 55-17k Hz ( $\pm 2$  dB), and the H405 includes removeable port liners, allowing users to tailor bass response to their own needs.

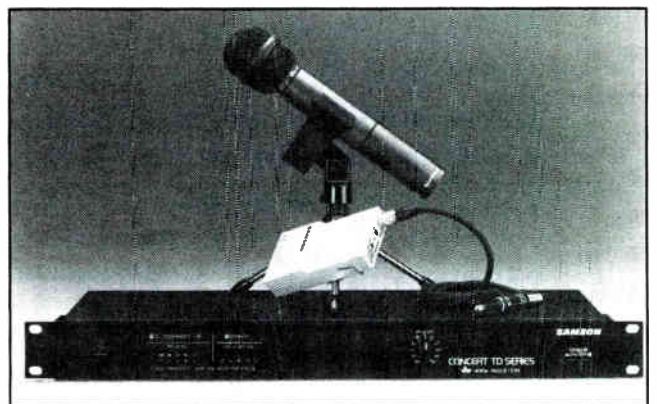
Circle #031 on Reader Service Card



## Rane SP15 Parametric Equalizer

The Rane Corporation's (Mountlake Terrace, WA) new SP15 studio parametric equalizer is designed for use with digital equipment and in other low-noise, low-distortion applications. The compact, five-band EQ features noise and distortion performance is said to exceed the specs of 16-bit digital audio. The SP15 provides +12dB boost and -15dB cut capability, four-octave frequency sweep range on each band, and variable bandwidth range from 1.5 octaves to 0.03 (1/30th) octave for notch filter capability. There's an individual bypass switch for each band, along with an LED bypass indicator. List price is \$589.

Circle #032 on Reader Service Card



## Samson Concert Wireless System

Samson Products, Hempstead, NY, has introduced the Samson Concert TD (True Diversity) wireless system, which incorporates dbx noise reduction. According to the manufacturer, this minimizes typical companding problems such as poor transient response, "pumping," and spurious noise, and reduces FM wireless transmission medium noise by 40 dB. The Concert TD System has a dynamic range of over 115 dB. The system consists of a rackmount, crystal-controlled CR-2 receiver (with ten channels for simultaneous use), a CH-2 hand-held transmitter (with a variety of optional mic capsules, including the Electro-Voice N/D 757), and a CT-2 belt pack transmitter (which can be used with many different electret condenser lavalier mics).

Circle #033 on Reader Service Card





The fact that we don't want to mention digital recording in this advert is no reflection on its undoubted merits, or the merits of Brüel & Kjær Series 4000 Professional Microphones.

The thing is, we've seen enough adverts claiming that the ultimate microphone for digital recording has arrived; too many in fact. To paraphrase Shakespeare, "methinks they do protest too much". And he was acknowledged as a genius without mentioning digital recording once....

All we'd like to say is: don't listen to us, listen to our microphones. They speak for themselves.

#### SERIES 4000 PROFESSIONAL MICROPHONES

**Brüel & Kjær** 

**Brüel & Kjær Instruments, Inc.**

185 Forest Street, Marlborough, Massachusetts 01752 · (617) 481-7000

**Contact your local dealer for a demo microphone  
and make your own evaluation.**

86-349

**AVC SYSTEMS**  
747 Church Road, Suite A6  
Elmhurst, IL 60126  
(312) 279-6580

**EAR PROFESSIONAL AUDIO**  
2641 E. McDowell  
Phoenix, AZ 85008  
(601) 267-0600

**LEE FURR ASSOCIATES**  
5035 N. Via Condesa  
Tucson, AZ 85718  
(602) 299-2571

**PHIL REDDISH SOUND**  
6234 Pearl Road  
Parma Heights, OH 44130  
(216) 885-3030

**STUDIO-SONICS CORP.**  
1165 Tower Road  
Schaumburg, IL 60195  
(312) 843-7400

**AVC SYSTEMS**  
2709 E. 25<sup>th</sup> Street  
Minneapolis, MN 55406  
(612) 729-8305

**EVERYTHING AUDIO**  
16055 Ventura Blvd.  
Encino, CA 91436  
(818) 995-4175

**LEO'S PROFESSIONAL AUDIO**  
5447 Telegraph Avenue  
Oakland, CA 94609  
(415) 652-1553

**RECORDING CONSULTANTS, INC.**  
8550 Second Avenue  
Silver Spring, MD 20910  
(301) 587-1800

**TEKCOM CORP.**  
408 Vine Street  
Philadelphia, PA 19106  
(215) 527-6700

**BRIDGEWATER SOUND**  
160<sup>th</sup> and S. Halsted  
Harvey, IL 60426  
(312) 596-0309

**HY JAMES**  
24166 Haggerty Road  
Farmington Hills, MI 48018  
(313) 471-0027

**MARTIN AUDIO VIDEO CORP.**  
423 West 55<sup>th</sup> Street  
New York, NY 10019  
(212) 541-5900

**RMS SOUND**  
3235 S. E. 39<sup>th</sup> Avenue  
Portland, OR 97202  
(503) 239-0352

**VALLEY AUDIO**  
P.O. Box 40743  
2812 Erica Place  
Nashville, TN 37204-3111  
(615) 383-4732

**BRIDGEWATER SOUND**  
936 Montana Street  
Chicago, IL 60614  
(312) 281-8920

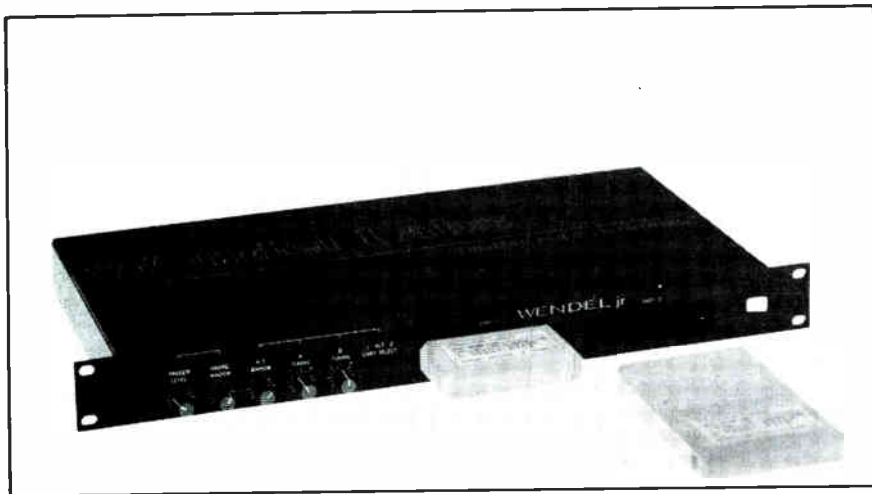
**L.D. SYSTEMS, INC.**  
467 W. 38<sup>th</sup> Street  
Houston, TX 77018  
(713) 695-9400

**MILAM AUDIO COMPANY**  
1470 Valle Vista Blvd.  
Pekin, IL 61554  
(309) 346-3161

**RMS SOUND**  
17517 15<sup>th</sup> Avenue, N.E.  
Seattle, WA 98155  
(206) 362-0491

**WESTLAKE AUDIO, INC.**  
7265 Santa Monica Blvd.  
Los Angeles, CA 90046  
(213) 851-9800

Circle #034 on Reader Service Card



## Wendel jr.

by George Petersen

Capturing drum sounds has traditionally been a troublesome area for studio recordists, requiring a good room, good mics, good techniques, and a good sounding drum kit. If any of the above are lacking, then the overall results will be poor. Drum machines or sampling devices can sometimes help with the dilemma of dealing with faulty drum sounds in the studio, but then again the limitations of audio quality from 8- and 12-bit systems can be problematic, and those drum sounds themselves may not sound "right."

After a year of beta testing on major album projects by top artists, a solution has come forth in the form of a new product from Wendel Labs, of Canoga Park, California. It's a device that offers some of the best drum and percussion sounds ever recorded, but it's not a drum machine. Wendel jr, the result of years of research by renowned engineer Roger Nichols (Steely Dan, Rickie Lee Jones, Donald Fagen, John Denver), is a percussion replacement system, designed to automatically trigger high-quality 16-bit drum samples from a variety of sources: drum machines, drum pads, recorded tape

tracks, or live miked acoustic drums.

The initial concept of Wendel was born out of Nichols' attempt at maintaining consistency during the Steely Dan albums, which typically used a number of different drummers playing over a period of months in any number of studios. Wendel made its debut in December 1979 on "Hey Nineteen," on the band's *Gaucho* LP, and was used on all the album's other cuts as well. Wendel jr is a simplified version of the original Wendel (which cost \$80,000), offering the same sounds in a low-cost (\$995), single rack-space, sample playback unit.

Wendel jr's sounds were originally recorded on the 3M digital system (50 kHz sampling rate) and then transferred in the digital domain to a hard-disk based computer for editing and subsequent "blowing" onto ROM chips for use in the Wendel Cart™ interchangeable cartridges. The carts come in several forms: "single sound carts," containing only one sound; "dual sound carts," with two different sounds available on one cartridge; and "long sound carts," which due to their extended memory requirements, use two cartridges for a single sound.

Operationally, Wendel jr is straightforward and easy to use. A front panel

manual trigger button allows "auditioning" sounds or playing extra beats while Wendel is being externally triggered; this control also serves an additional function—when the button is held down, the unit ignores external triggers, thus acting like a mute switch. Trigger sensitivity and "ignore window" controls permit the tailoring of input signals to suit nearly any application: besides precisely following the input signal, the ignore adjustment can create flam effects (by triggering once from the initial attack, and again from the trigger signal's decay), or skipping beats, i.e.—turning a steady quarter note kick drum trigger into a half note pattern. An endless number of variations can be created using these controls.

Certainly one of Wendel's most unique and useful features is the ability to alternate an input signal between its two cartridge slots, accomplished by adjusting the "alternate window" control and setting the cartridge select switch in the center "ALT" position. Thus, a single trigger signal—say an electronic metronome set at 120 beats per minute—could become a distinctly alternating (left-right-left-right, etc.) single stroke roll with either two snare carts in place or by using the optional Wendel left hand, right hand dual-sound snare cart.

Two separate tuning controls (one for each cartridge slot) with an approximate two-octave range increase Wendel's versatility considerably, although for most applications, a deft touch is required, as a very small variation in the tuning knob produces a major change in the sound of most cartridges, notably the kicks and snares. One cart which allowed the full range of the tuning control was the "Xplo 86," a powerful explosion utilizing the unit's full 92 dB dynamic range. Tuned high, it became a plinking, arcade-style .22 rifle, while at the opposite end of the scale, it became a booming 16-inch battleship cannon.

A good selection of carts are available—a dual-sound kick/snare cartridge is provided with the unit and optional carts include: ride cymbal (with ten seconds of natural decay), toms, more kicks and snares, cross-stick/woodblock, closed/open high-hat, handclaps, timbales, cowbells, shakers, congas, fingersnaps, and more. One unusual cart is the "snare

—CONTINUED ON PAGE 181



Today's tougher audio requirements  
demand a new choice

# Telex *Pro Series* 6120 XLP

A new duplicator with 8X speed  
and tougher specs.

Improved frequency response plus less distortion and crosstalk are just a few of the technical gains achieved in the new Telex Pro Series duplicator. This means that you'll make duplicates that are **true to the master** than with any comparable tape duplicator on the market today.

Yes, here's a system with all the advantages of the famous 6120 high speed duplicator plus enhanced specifications. Features that made the 6120 popular such as compact size, unlimited expandability, track select, audio level monitors and easy one-button operation remain distinct Telex advantages. But, by developing the 6120XLP with 8X speed, Telex gives you the advantage of improvements in many **important professional specifications** such as distortion, frequency response, speed accuracy and crosstalk. And, the new cassette transport speed allows you to duplicate directly from 15 ips open reel masters for the ultimate in quality and convenience.

The Pro Series 6120 uses a newly developed, highly effi-



New XL LIFE cassette head

cient **XL LIFE™** cassette head featuring ultra-hard physical characteristics for **extra long life** (10X normal) plus a satin smooth surface that resists excessive oxide build-up preventing the need for frequent maintenance. Its advanced engineering, precision design and painstaking manufacturing techniques contribute immensely to the Pro Series improved specs including an **unmatched frequency range** of 50 to 13KHz. For further technical details and the name of your nearest 6120 dealer, call or write Telex Commu-

nica-tions, Inc., 9600 Aldrich Ave. So., Minneapolis, MN 55420.

## Up to 12 months to pay with no interest!

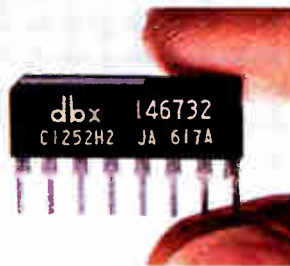
The entire Telex 6120 duplicator series is available with special **NO INTEREST** financing through participating Telex dealers. Yes, with only 10% down and up to 12 months to pay, you could be eligible for special **NO INTEREST** financing. Think of it! You could pay for your 6120 out of the savings or income generated.



**TELEX®**

Call Toll Free in U.S. 800-828-6107 • In Minnesota Call (612) 887-5531

# ANNOUNCING THE BIGGEST IDEA IN THE HISTORY OF WIRELESS



*Samson incorporates dbx\* noise reduction to achieve  
a new standard of wireless performance.*

Samson Concert TD Series is the first true diversity VHF wireless system with dbx noise reduction. We've been setting new standards of sound and reliability in wireless over the years, but we're always refining our technology to make it even better. That's why we chose world-class dbx technology to solve the biggest problem in wireless — noise.

dbx noise reduction makes the Concert TD Series incredibly quiet. It also expands frequency response to deliver the best possible sound for vocals and instruments. And you won't hear it working because dbx circuitry eliminates the pumping and breathing that

plagued wireless sound in the past.

Breaking new ground with our Concert TD Series, Samson engineering excellence now takes a quantum leap forward in its ongoing search for the highest standard of wireless performance. We are the first to incorporate dbx noise reduction because we want to guarantee the best possible audio quality available in wireless today. Now there's every reason you can think of to enjoy the unlimited freedom promised by wireless.

First we took the worry out of wireless with reliable no-dropout performance, now we're taking the noise out of wireless with dbx.

**SAMSON®**

**WE TOOK THE WORRY OUT OF WIRELESS®**

Samson Products Corporation, 124 Fulton Avenue, Hempstead, New York 11550  
(516) 489-2203 TLX 284696 SAM UR FAX (516) 489-2418  
In Canada: Omnimedia Corporation Ltd., 9653 Cote de Liesse,  
Dorval, Quebec H9P 1A3 514-636-9971



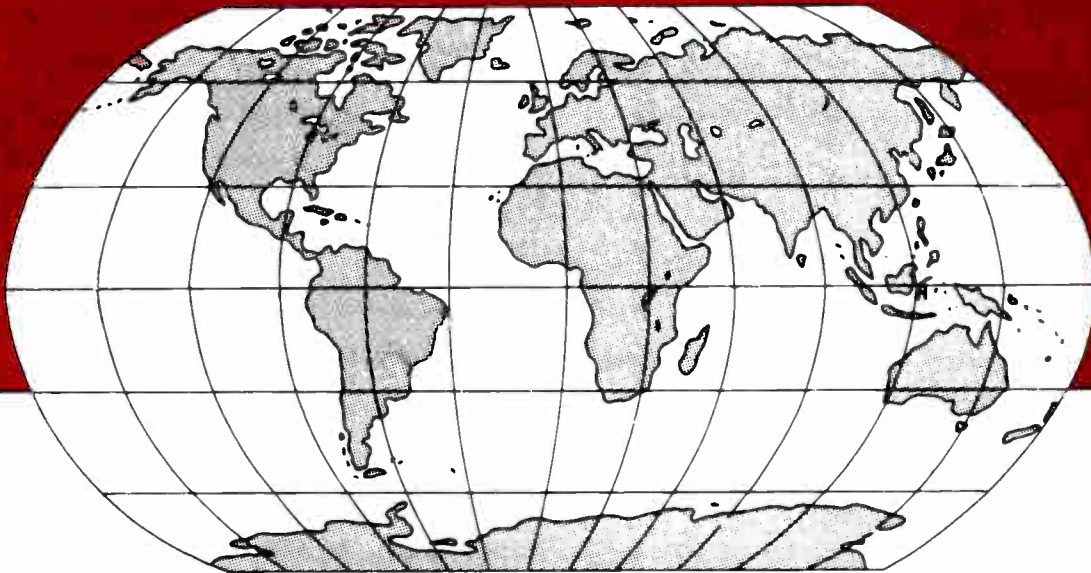
Mic Capsules Available: Electro-Voice  
N/D 757 element offered exclusively in  
wireless by Samson.  
Also available: BK-1, SM 58, SM 85, SM 87

Circle #036 on Reader Service Card

\*dbx is a registered trademark  
of BSR North America Ltd.

© 1986 Samson Products Corporation





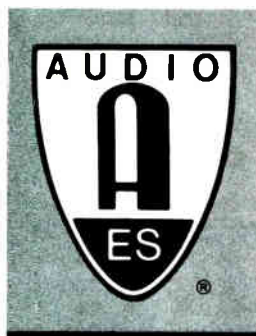
# **SPECIAL INTERNATIONAL RECORDING SUPPLEMENT**

---

## **C · O · N · T · E · N · T · S**

---

- |           |   |            |  |
|-----------|---|------------|--|
| <b>54</b> | AMERICAN AES WRAP-UP<br>by George Petersen  | <b>86</b>  | EUROPE: NEXT IN LINE FOR STEREO TV<br>by Richard Dean                                    |
| <b>56</b> | THE GREAT DAT SCARE<br>by Barry Fox   | <b>92</b>  | VIVA LE STUDIO!<br>Canada's Growing Giant<br>by Linda Jacobson                           |
| <b>62</b> | THE RUSSIANS ARE STRUMMING!<br>THE RUSSIANS ARE STRUMMING!<br>Joanna Stingray and the Soviet<br>Underground<br>by Dan Daley | <b>98</b>  | EUROPEAN MANUFACTURING AND<br>THE WORLD MARKET<br>by Al Swanson                          |
| <b>68</b> | BRAZILIAN RECORDING IN FLUX<br>by Arnaldo Dines   | <b>105</b> | AIR MONTSERRAT:<br>THE BEST OF BOTH WORLDS<br>by Diana Wendling and Stacy Baird          |
| <b>72</b> | MVP: DISCOVERING JAPAN<br>by Lou CasaBianca   | <b>115</b> | THE APRS AT 30<br>Plus a Directory of APRS Studios<br>by Terri Anderson                  |
| <b>78</b> | LUNCHING WITH BONZAI: KITARO<br>by Mr. Bonzai   | <b>124</b> | STRANGERS IN STRANGE LANDS:<br>The Joys & Perils of Working Overseas<br>by Blair Jackson |



# THE DIGITAL/ANALOG FUSION: A RAINBOW OF TECHNOLOGY

A report on the 81st Convention of the Audio Engineering Society

Photos and text by George Petersen



(Above) Trident unveiled their Di-An console to the U.S. market.

**A**n estimated 4000 audio professionals from nearly every part of the globe plan to convene at the 82nd Convention of the Audio Engineering Society, held March 10 through 13, 1987 at London's Queen Elizabeth II Centre, and at press time all of the available exhibit space was sold out, insuring a wealth of new products and technology to behold. In keeping with the international theme of this issue, which will be distributed at the show, we present this look at the last AES meet, for our overseas friends who didn't attend.

The 81st Convention of the Audio Engineering Society, held November 12 through 16, 1986 in Los Angeles, could only be looked upon as a success on every level. Logistically, the split-facility concept, with frequent shuttle buses ferrying attendees between spacious LA Convention Center and the downtown Hilton hotel, worked quite well, with the exception of a few "where do I register?" snafus.

An excellent selection of papers and workshops were presented, covering a variety of topics, in keeping with the convention's theme—"The Digital/Analog Fusion: A Rainbow of Technology." In the latter part of the 1980s, there is a place for both analog and

digital technology, and their co-existence offers choices and realistic alternatives so the industry can select from the best of both worlds.

Certainly, the lure of digital nabbed the lion's share of attention on the exhibit floor, with the unveiling of new digital consoles, such as the Neve DTC-I digital transfer console, the Digi-mix mastering mixer (distributed by ESL of Ft. Lauderdale, Florida), and Yamaha's 8-in by 2-out wonder, the DMP7, priced under \$4000. Another growing trend was evidenced by the demonstrations of tapeless recording, with New England Digital showing their Synclavier Direct-to-Disk™ system and Lexicon debuting Opus, their entry in the field of digital workstations. Digital recorder manufacturers were caught up in a flurry of activity, with Sony announcing the sale of their 300th PCM-3324 multi-track, while rivals in the PD (professional digital) camp demonstrated their compatibility, with a tape exchange between the Otari DTR-900 and Mitsubishi X-850 32-tracks.

So with all this digital brouhaha, what is the state of analog? Apparently hale, hearty and healthy, judging from the plethora of new recorders shown. With the introduction of the

MX-80 24/32-track series, Otari has become the first manufacturer to offer both analog and digital 32-track recorders. Adding strength to the 2-inch, 32-track analog format, AEG has reintroduced the M 15A deck, available in 8, 16, 24 and 32-channel versions. Soundcraft's Saturn multi-track made its U.S. AES debut, as did Tascam's long-awaited ATR-80/24, another 2-inch, 24-track recorder. At the higher-priced end of the scale, Studer's new A320 multi-track, available with optional Dolby SR (which fits into card slots beneath the transport) may prove to be a serious challenger to digital recording systems.

Throughout the convention, there seemed to be an upbeat feeling in the air, with nearly all manufacturers expressing their optimism in an industry that's definitely on the rebound from the doldrums of just a few years back. And judging by the busy convention floor, packed with attendees checking out the latest technological offerings, there is little reason to doubt that optimism.

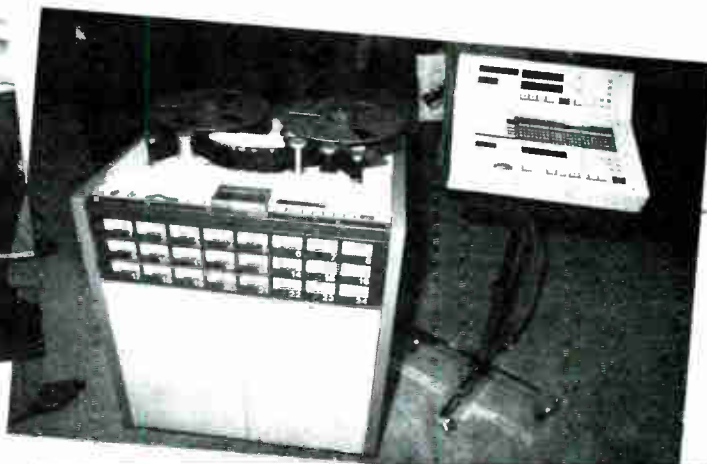
While space limitations restrict the number of products spotlighted here, we'll be keeping you informed about other new developments in the months to come. Keep in touch. ■





*(Above) Lexicon's Brian Zolner demonstrated the Opus Audio Production System.*

*(Below) Tascam made their long-awaited entry into the 24-track market with the introduction of the ATR-80.*



*(Above) Teldec directors Horst Redlich (left) and Manfred Atzert answered questions about the CD Direct Metal Mastering process.*



*(Above) Yamaha's DMP7 digital mixer attracted quite a bit of attention. Don Morris (left) demonstrated the unit, which is slated for delivery in mid-1987.*



*(Above) Todd Wells of Soundtracs explained the automation system of their CP6800 console.*



*(Below) Soundcraft's Gary Lynn (left) pointed out some of the Saturn multi-track's features.*

# The GREAT DAT SCARE

by Barry Fox

If you are visiting London for the AES Convention this spring, and try talking about digital audio tape (DAT), you may be surprised to get frosty looks. Here's why. . . .

On June 29, 1986—what has become known in the European audio industry as "Black Sunday"—one of Britain's most prestigious newspapers ran a story that sent shock waves through the record and electronics industries in Europe.

"Compact discs are about to be made obsolete by a new generation of audio cassette dubbed digital audio tape" ran the opening line of a featured article in Rupert Murdoch's newspaper, the *Sunday Times*. "DAT," it continued "will give quality far superior even to that of compact disc."

"Most at risk in Britain are companies that have invested heavily in compact disc production plants," predicted the *Sunday Times*. "Thorn-EMI and Discotec have invested £25 million and £15 million respectively. Had they seen DAT coming, they might not have sunk such large sums into a technology that is likely to have a limited life."

By this time, all around Britain, industry people were choking on their breakfast cereal.

"From early [1987] there is likely to be a sudden slowing in compact disc sales as people wait to see what DAT has to offer," the *Times* continued, ending on the prediction that "DAT is likely to be the music medium everybody uses, professionals and the public alike."

The next week there was an uproar. The prediction about slowing CD sales was self-fulfilling. Customers in hi-fi shops were asking salesmen when they could buy a DAT recorder; bank-

ers and board directors who had authorized investment in Britain's three compact disc factories (Nimbus in Wales, Thorn-EMI at Swindon and Discotec in Sussex) wanted to know why they had been misled into thinking that CD was a sound investment for the future.

Anyone known by their friends to have an inside knowledge of the audio business started getting phone calls asking whether what the *Sunday Times* had said was true. The trade body for the entire electronics industry, BREMA (British Radio and Electronic Equipment Manufacturers Association) filed a formal complaint with the Press Council. This is a rather toothless official body that controls the press in Britain.

Record companies and record industry trade bodies fumed and restated their commitment to CD.

Ken East, president of EMI Music's European and International Operations says: "This year, our CD unit sales will be four or five times greater than last year. Next year we can safely say double, perhaps triple. Our two plants are still only supplying a small percentage of our total world need. I've got absolute confidence in CD as a sound carrier—and that's based on the volumes we've already sold and the volumes we know, not just believe, but *know* will sell over the next three to five years."

Maurice Oberstein, chairman and chief executive officer of Polygram UK says: "CD is a wonderful, convenient, beautiful way of presenting music to the masses. When software supply

catches up with demand, I can see price stability and a huge variety of material. I expect that by 1987 it will cross that 5% threshold that has been quoted as important; it's an arcane figure people use as a rule of thumb. It's the accessibility of CD that makes it the mass market medium. It's unstoppable because it's so good."

John Deacon, director general of British Phonographic Industry Ltd, trade body for all the record companies, adds: "Our research shows that the CD market is currently expanding at five times the rate of the pre-recorded cassette when that was in its infancy—around 15 years ago."

Says Philips, the Dutch company that invented the system: "CD is selling faster than any other home entertainment product launched since the war."

Phil Race, the man behind the Discotec CD pressing plant, which was at the time of Black Sunday just coming on stream, told me bluntly, "After that article was published, I honestly thought it would be very difficult for anyone else to raise the money to open a CD pressing plant in Britain."

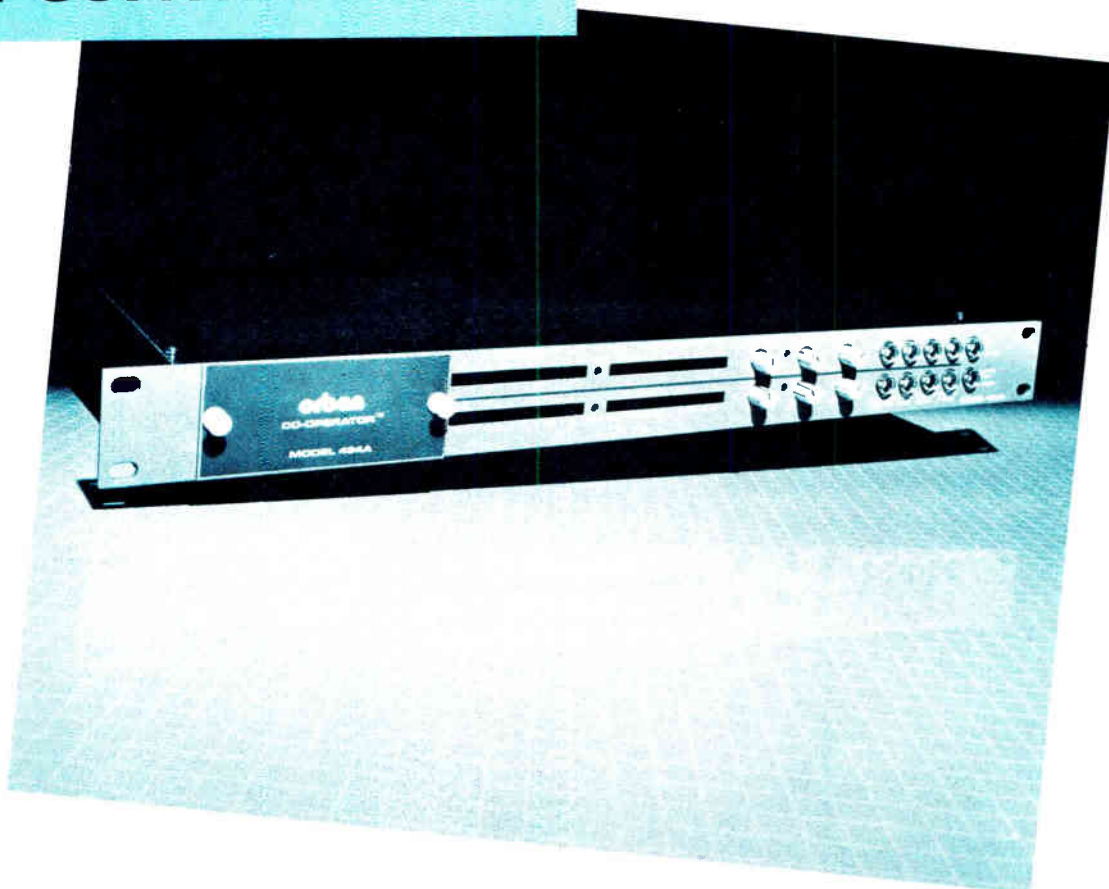
"Bankers and investors get their information from papers like the *Sunday Times*. They don't read deeper articles in the specialist press. So they don't know the other side of the picture."

Also, because English is fast becoming the *de facto* language for most European countries, stories in the British press can carry inordinate weight.

Inevitably, the *Sunday Times* folklore was later regurgitated by other publications. The *Times* (daily) said more or less the same thing, reporting that Japan was going to "kill off the compact disc market before development costs have been recovered."



# QUALITY CONTROLLER.



## THE NEW ORBAN CO-OPERATOR AGC SYSTEM

Introducing the *Co-Operator*: an integrated, easy-to-use Gated Stereo Leveler/Compressor/HF Limiter/Peak Clipper in a powerful and economical dual-channel package. The Co-Operator automatically rides gain, controls excessive high frequency levels, and limits peaks while protecting audio and video tape recorders, cassette, CD, and digital masters, and high performance sound systems (and their associated HF drivers and power amps).

Its simplified controls ensure top results—even from non-technical operators. Yet there is sufficient versatility so that you are never locked into a single "sound."

The Co-Operator rides gain subtly and intelligently—the way you would—to preserve the dynamic "feel" of the program material while effectively controlling levels. Or, if gain-riding is not desired, use it as a transparent, no-compromise safety limiter. Either way, it's always alert to safeguard audio quality. It contains a:

- Smooth leveler for transparent gain riding—without long-term distortion-producing overshoots
- Fast compressor and/or peak clipper can be activated to protect against short-term transients. Adjustable release time and release shape let you optimize processing for music or voice
- "Silence Gate" and compressor/leveler crosscoupling team up to prevent pumping and noise breathing
- HF Limiter with six switchable pre-emphasis curves from 25 to 150  $\mu$ s allow you to match the medium being protected and guard against sibilance overload

Ask your Dealer about Orban's new Model 464A Co-Operator—your subtle, automatic quality controller.



### Orban Associates Inc.

645 Bryant St., San Francisco, CA 94107 (415) 957-1067 Telex: 17-1480

Circle #037 on Reader Service Card

# CLEAR REASON

**For the music studio owner, no decision is more critical than choosing a console.** Both financially and creatively, the success of your operation may well depend on the capabilities and quality of the system you select, and the company that supports it. Clear reason, we suggest, to consider the SL 4000 E Series Master Studio System from Solid State Logic. But certainly not the only reason.



Consider, for instance, that only SSL has built-in track remotes on every channel, integrated with the industry's most versatile monitor fader and foldback facilities. Or that SSL alone provides pushbutton signal processor routing for each channel's noise gate and expander, compressor/limiter, high and low pass filters, and parametric equaliser —

plus switchable phantom power, patchfree audio subgrouping, AFL and PFL monitoring, fader start for external devices,

and stereo modules with balance and Image Width controls.

Consider that SSL makes the industry's only comprehensive studio control system — with integral synchronisation of up to five audio/video machines, concise English commands,



tape location by timecode, foot/frames, cue numbers or key words, and complete session list management. And that SSL alone offers extensive fader, group and mute automation and mix manipulation *plus* optional programmable parametric equalisation and panning, multi-repeatable Events Control, and Automatic Dialogue Replacement.



When quizzed about where the reporter had checked her facts, the paper admitted that she was a temporary employee who had since left.

The London *Standard*, a popular evening newspaper, announced that, "Hardly have people started spending hundreds of pounds on compact discs, than a new technology is on the way that could make CDs virtually obsolete." And a specialist car magazine announced that DAT "could blow CD systems out of the window."

Almost without exception, the specialist technical and audio press in Europe rejected the idea that DAT will kill CD. Journalists, including myself, have since argued the case in print, and on radio. DAT is an exciting new medium. Of course it will bite into sales of conventional analog tape as used in the home, professional radio and recording studios. It will also bite deeply into the hybrid digital systems, like Sony's F1 and 1610 processors as used with video tape cassettes. DAT is the ideal medium for CD mastering. It may also kill the 2-track versions of DASH. A synchronized gang of DAT cassettes could also prove an interesting—and probably cheaper—alternative to multi-track DASH. But at the domestic level, DAT looks like it will become an ideal partner for compact

disc, just as the traditional Philips audio cassette has made the ideal partner for vinyl LPs.

Whereas the Philips audio cassette started out as a cheap and cheerful low-fi audio medium, and has been upgraded over the last 20 years to reach the level of a Nakamichi system, DAT must start at the top end of the price range and move down.

It took 20 years for sales of pre-recorded music cassettes to outstrip LP sales in Britain. The breakthrough came in 1985, when British record companies sold 53 million LPs and over 55 million cassettes. The slow rise of cassette sales (in 1978 only 21 million were sold, compared to 86 million LPs) was due mainly to the fact that for years the European record industry regarded tape as an enemy. Record companies took little care over the quality of duplication. They released titles later on tape than on disc and made the cassette price unattractive. It was the public's discontent with LP pressing quality and the coming of the Walkman that changed industry attitudes and the pattern of sales. CDs can be used in cars and portables; LPs can not. But it is pointless to try to predict how soon (and whether) DAT will erode the sales of other pre-recorded music media—there are just

too many variables in the equation.

The author of the original *Sunday Times* piece subsequently followed through with a fuller article arguing that those who had criticized his view "lack any perceived desire to inform the public...if big business says 'praise CD boys and we will reward you with endless free trips to Japan' they are going to praise CD and woe betide anybody who rocks the boat and threatens this cozy existence...I predict in all confidence, DAT will quickly kill CD stone dead."

This puzzled the industry even more than the original article. The same Japanese companies that sell CDs are the ones that will be selling DAT, just as they are the same Japanese companies that have been selling both turntables and cassette decks. Why they should be developing a new product that they want to handicap by bribing journalists to praise CD is unclear!

Steve Harris of Marantz, the U.S. company that is now partly owned by Japanese investors and partly by Dutch Philips, puts it this way:

"Everyone is suddenly an expert on DAT, even though there are probably only around ten people in the country who have had an opportunity to actually play with a machine and know what it can do. It's not a threat to





Then consider that SSL's Studio Computer alone goes beyond mixing automation to provide Total Recall™ — a unique system, completely independent of the audio path, which stores all I/O module settings after each session. The new TR AutoScan function makes

it faster than ever to recreate headphone and monitor mixes, equalisation, or entire console setups with quarter dB accuracy and rapid verification. And SSL alone offers data-compatibility with more than 300 installations — in over 80 cities around the world.

Finally, consider a company whose record of practical innovation, ongoing development and in-depth technical support has earned repeat orders from many of the world's toughest customers — a company that other manufacturers use as a standard for comparison. We join them in urging you to compare. Our 40 page colour brochure on the SL 4000 E Series is a good place to start. It's yours for the asking, and it just might make your difficult decision a whole lot easier. Clear reason, may we suggest, to write or call us today.

## Solid State Logic

Begbroke, Oxford, England OX5 1RU • (08675) 4353  
200 West 57th Street • New York, New York 10019 • (212) 315-1111  
6255 Sunset Boulevard • Los Angeles, California 90028 • (213) 463-4444

CD—it's a threat to Nakamichi. I can see it having enormous impact on the studio world, however. Apart from master recording, every studio wants to give an artist something to take away. A DAT cassette would be the ideal medium.

"There are so many unanswered questions," Harris continues, touching on one of the many practical and technical points which the DAT scare-mongers in Europe have glossed over, "like, for instance, how long the tape will last. We know that ordinary video tapes used with the F1 or 1610 only last a few dozen times before there is significant drop-out. How long will a 1500 oersted DAT tape last?"

Tony Faulkner, one of Europe's top independent recording engineers, was working on prototype Sony digital systems long before they went on the market. Faulkner recently engineered the fast-selling recording of *South Pacific* for CBS. Much of his work appears on a new batch of budget price CDs now being released in the United States by MCA, through a licensing deal with the British firm Pickwick.

"This DAT scare is a scandal manufactured by publicity seeking journalists," says Faulkner. "It's the AIDS of the record business. CD has been suc-

cessful because the software and hardware industries have cooperated. When hardware companies try and go it alone they run into trouble. Remember quadraphonics?"

The go-it-alone approach has been forced on the hardware companies. I was in Tokyo in October 1985 for the annual hi-fi show. All the major manufacturers had planned to launch DAT and it was advertised in their advance publicity. But the trade body for the Japanese retail shops brought pressure to bear on the show organizers. They feared that the launch of DAT would confuse the public, which was then just beginning to embrace CD and had only recently been offered 8mm video. The show organizers responded to this trade pressure and told the manufacturers not to show DAT.

As a compromise, some of the manufacturers got together and arranged a semi-private showing at a hotel near the exhibition site in Tokyo. More pressure was brought to bear and only Sony demonstrated a DAT recorder, along with a prototype contact printer capable of making sandwich copies of DAT tapes at several hundred times normal running speed.

During the early part of 1986, Sony showed prototype DAT machines to broadcasters and studio engineers in

Europe, including the BBC in London. Sony also demonstrated DAT to engineers at the NAB convention in Dallas. No secret was made of the system potential although, for obvious commercial reasons, most of the Japanese manufacturers kept quiet about their marketing plans. All they would say was "Wait until the Tokyo show in October."

Then came the *Sunday Times* article and the panic. At the same time the record industry began to issue dire warnings about the darker side of DAT—its ability to make perfect copies of compact discs by direct digital dubbing, or near-perfect copies by analog dubbing.

Individually the record companies in Europe said that they would not release material on DAT cassette. The only thing that stopped them from issuing an all-industry boycott statement was fear of the U.S. anti-trust laws and the Common Market Treaty of Rome which bans cartel operation.

From its London offices, the IFPI (International Federation of Phonogram and Videogram Producers) has been talking with the EIAJ (Electronic Industries Association of Japan) via a middle man in Dusseldorf, Germany. The IFPI wants to persuade the Japanese manufacturers to build CBS Copy-

code anti-copy circuitry into all DAT recorders. This senses a trigger notch in Copycoded software and switches off the recorder to prevent analog copying. Direct digital dubbing from CD to DAT is prevented by making DAT domestic machines record only at 48kHz, which is a deliberate mismatch with the 44.1kHz sampling frequency used for CD.

The snag here is that in Europe the name CBS is not popular with audio experts. CBS is threatening to sue loudspeaker makers for using polypropylene cones. It was CBS who foisted the SQ quadraphonics system on an unwilling audio world, CBS who tried to corrupt LP recordings with the CX noise reduction system and it was CBS who has been trying to get European radio stations to use the FMX system. In each case there have been serious questions about compatibility. Now European audio buffs worry about whether the Copycode trigger notches can be heard. No demonstrations have been given to reassure them.

The issue for the IFPI negotiators has been complicated because a string of European governments have either put a levy tax on blank tape or pledged to do so. Clearly it is nonsense to put a tax on tape which legitimizes home

taping, and then sell recorders which will not record. As if to fire a warning shot across the bows of European legislators, at least two Japanese electronics companies have now shown prototype domestic DAT recorders, which can dub digits at 44.1kHz.

In the aftermath of Black Sunday and with so much politicking going on behind the scenes, the Japanese in Europe have clammed up on DAT. Anything said is only to trusted journalists, and usually in confidence. Sony in Britain took a considered decision not to show DAT at the important International Broadcasting Convention which was held at Brighton in September.

Although all the major electronics firms showed DAT at the October 1986 Tokyo Hi-Fi Show, there was no price or launch date. "We are ready; it's now a question of timing," said IVC.

The best considered estimate is a slow-burn launch for DAT in Japan for spring 1987, with a major European unveiling to coincide with the giant Berlin Funkasstellung (or Radio Show) which takes place every two years.

Philips remains largely silent on DAT. The company has a massive investment in CD player production, at its Hasselt factory in Belgium. With its

subsidiary Polygram, and U.S. chemical company Du Pont, Philips has an equally massive investment in disc production. The Polygram CD plant at Hanover in Germany is the largest in the world, now pressing 50 million discs a year.

Philips will say only that it has mastered DAT technology, and can manufacture recorders if necessary. Photographs of DAT prototypes, which were released prior to the DAT scare, are no longer available—in fact as far as Philips is concerned they no longer exist!

The West German company Grundig is now under financial control of Philips. Grundig pioneered tape in Europe and never invested in CD. "We have developed our own DAT technology," a Grundig spokesperson told me recently at their Nuremberg headquarters. "It will take us only six months to get into production. We shall have to make our decision next spring—six months before the Berlin Radio Show." Conveniently for Grundig, this looks likely to be exactly the time when the Japanese make their move and start selling DAT.

It is also the time when the AES meets in London, so there should be plenty of sore nerves to be touched. ■

*"...I love what Renkus-Heinz Smart Systems do for my audiences..."*

*Crystal Dayle*

**rh RENKUS-HEINZ**  
THE SMART SOLUTION

manufacturers of professional audio components and systems  
17191 Armstrong Ave. • Irvine, CA 92714 • (714) 250-0166 • TELEX 705568 (R H INC UD)

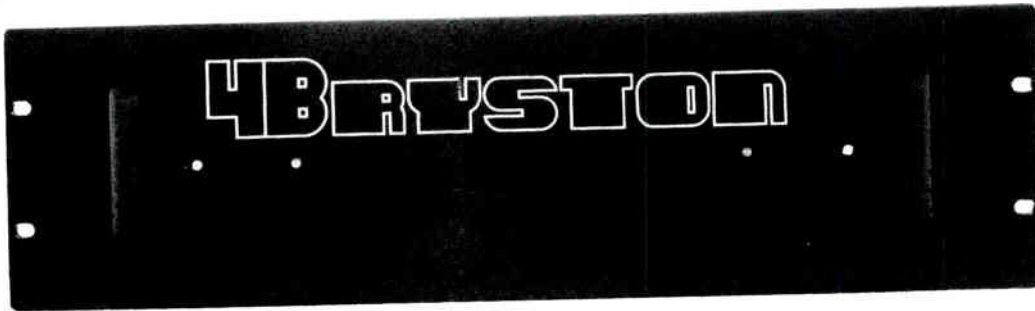
Circle #038 on Reader Service Card

Larry Schwartz—  
Sound Engineer

"I have finally found a speaker system to solve my touring sound problems. I needed a system that could handle all the different types of venues that Crystal performs at from clubs to arenas. With the Renkus Heinz Smart Systems, I'm covering more audience with fewer enclosures than I previously used. The smooth mid-range and natural sound of the smart systems allow me to mix Crystal's voice perfectly (Crystal clear)."



# BRYSTON



## BRYSTON POWER AMPLIFIERS CONTINUE TO DEFINE THE STATE-OF-THE-ART IN MUSICAL ACCURACY, LONG TERM RELIABILITY AND PRODUCT INTEGRITY.

**B**ryston design philosophy incorporates three general concepts.

1. Musical accuracy
2. Long term reliability
3. Product integrity

### MUSICAL ACCURACY

Musical accuracy is reflected throughout all Bryston power amplifiers and includes the necessity for wide-band transient accuracy, open loop linearity ahead of closed loop specifications, and power supply design as an integral part of the overall sonic and electrical performance of a power amplifier.

We have found that a simple carbonyl film resistor can contribute more static distortion to a signal than the entire remainder of the amplifiers circuitry combined.

We discovered that some parameters of transistors must be controlled as much as 1000 times more closely before their contribution to audible distortion is rendered negligible.

We discovered that under certain actual conditions of speaker loading amplifiers were incapable of yielding high-power transients without distortion.

Each of the various steps or stages in every Bryston amplifier, from

the input section to the output section, without exception, are designed to optimize the musical experience.

### STANDARDS OF RELIABILITY

**W**e consider this criterion to be exceedingly important. We have applied techniques and materials in our everyday construction of electronic equipment more typically utilized in the military and aerospace industries.

All components used in Bryston power amplifiers are specified for continuous duty at maximum power, with typical safety margins of 250%.

The power transistors used in all Bryston amplifiers are 100% tested for safe operating area, both before and after installation in the circuit. They are then taken to a "burn-in" table when they are given a capacitor load, a square-wave input signal, and set at slightly under clipping for a period of 100 hours. During this time, the input signal is cycled three hours on to one hour off, to exert additional thermal stress.

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.

As may be seen, Bryston takes very seriously the correct functioning and long term reliability of its products.

### INTEGRITY

**B**ryston contends that the term 'best' should apply to the honesty, pride and courage with which we conduct our business, as well as to the performance of our products.

For this reason, you will not find Bryston's products being cosmetically "updated" on a regular basis merely in order to keep the customer's interest, in something 'new'. If we make a change in the circuitry, it will be because, and only because, it yields a worthwhile performance or reliability improvement.

We feel that regular sweeping revisions to basic circuit design (accompanied by revised jargon) to be cynical marketing on the part of the manufacturer and insulting to the discerning customer.

In the United States:

BRYSTON VERMONT

RFD #4, Berlin, Montpelier, Vermont 05602  
(802) 223-6159

Circle #039 on Reader Service Card

In Canada:

BRYSTON MARKETING LTD.

57 Westmore Dr., Rexdale, Ontario, Canada M9V 3Y6  
(416) 746-0300

# THE RUSSIANS ARE STRUMMING! THE RUSSIANS ARE STRUMMING!

## Iron Curtain Gives Way to New Metal



Joanna Stingray outside the Kremlin in Moscow

by Dan Daley

The snow is piled in drifts on the cobbled streets of Leningrad, the mist rising from the banks of the Neva River giving way only to the leaden sky overhead. A young woman stands in the city's Metro station, clutching a phone number and looking for a man she knows only by reputation. Some might say legend.

Suddenly, through a sea of suspi-

cious eyes, one pair stands out, electric, looking straight at her. His long brown hair falls from beneath a furred cap. She stands motionless, mesmerized. They move towards each other, tentatively at first, as though one false move, one simple gesture, will give them away. She has found Boris.

Days later, she walks through the corridors of Moscow's Sheremetievo Airport. The customs handler looks her over with hard eyes. He rummages

through her bag, returning it with a grunt and waving her onto the plane. And nestled beneath the innocent-looking mementoes of a trip to a strange land, in with the wrapped teacups and Sacha bears, the tapes are safe.

For now.

A John LeCarre thriller? Perhaps another lost Ian Fleming gem found at last?

Hardly. This is real life. It's a story of rock and roll in the Great Socialist Worker's Paradise, and how Joanna Stingray, a singer/songwriter from Los Angeles, single-handedly punched a hole in the Iron Curtain and let the music out on a record called *Red Wave*.

The tale above is based on fact, as they say in the movies. Back in March, 1984, Joanna, 26, was getting over her initiation into the sleazier side of the music business—one of those, "You put up a few grand to make your record and we'll match it" deals that ended with a lawsuit and her EP being sent to the accountant's version of magnetic heaven.

Joanna's younger sister, Judy Ann, was about to go on an academically-sponsored tour of the USSR, and Joanna decided to join her to get her mind off the EP debacle. Enter Fate: "Right before I left, a Russian emigre here in Los Angeles called me and said I should get in touch with Boris Grebenschikov, who he said was the most famous rock musician in the Soviet Union," recalls Joanna. "I laughed at the idea of rock in Russia, but I took the number anyway."

Moscow was cold and gray, she found: "It was a place you go to once and never come back to." The tour group moved on to Leningrad, historically the center of Russian culture, Peter the Great's gateway to the West, immortalized by Pushkin and Tolstoi. But Grebenschikov's number was burning a hole in her pocket and her



# CMC 24<sup>\*</sup> MK II FEEL THE POWER!



## The **COMPUTER AIDED** **\*C.A.R.S. ROUTING SYSTEM**

with 32 banks of internal memory, gives instant recall of 16 track bus assignment and muting information (24 input channels and 16 monitor/input channels) through the onboard microprocessor.

Comprehensive monitoring and talkback systems keep you in command. A separate cue system, in addition to the 6 auxiliary Mix buses, allows simplified control of musicians headphone mixes. Improved electronic and mechanical construction offer new levels of performance over previous designs.

In addition, with optional Computer Interface/Sequencers, the CMC-24 may be controlled by an external source such as Keyboard, Drum Computer or Tape Track. Anyway enough talk, we believe the Excitement is in the Driving. . . We know you're ready!

For More detailed information on how the new CMC Series can bring your Mixing Capabilities into the Computer Age, contact your local authorized AHB dealer today.

\*Includes: MPS Power Supply.

Prices & Specifications subject to change without notice.

# AHB

**Allen & Heath Brenell (USA) Ltd.**  
Five Connair Road  
Orange, Ct. 06477 / (203)795-3594

Mixing **ART** With **SCIENCE**

Circle #040 on Reader Service Card

**Allen & Heath Brenell Ltd.**  
69 Ship Street, Brighton, BN1 1AE England  
Telephone: (0273) 24928/ Telex 878235

a cultural and economic Siberia, according to Joanna, forced to rely on fairly primitive equipment. One session that Joanna sat in on was typical of what *sub rosa* rockers have to endure. A Leningrad resident has converted his apartment into a 2-track studio. His last name, Vishna, translates in English as "Cherry," so it's informally known as Cherry Sound. One room is divided by a wall with a window in the center. The recording side has egg cartons on the wall as a sound baffle. The other side is a control room that houses a pair of 2-track decks of unknown make and vintage. The tape sits on the machine as a pancake with no flanges. After a period of rehearsal, the band plays all the musical parts together onto one 2-track. The singers then go to work, and the vocal signals and the previously recorded music tracks are mixed to the other 2-track simultaneously. The whole process is one big live bounce.

When Joanna sang harmony parts with one of the other singers, she found herself giggling at the way his Russian accent sounded as he struggled with the English lyrics. But she learned after a couple of passes that no one else found it funny: in this kind of a setup you can't punch, so a blown part means you have to start over again from the beginning.

What equipment there is is mainly of European manufacture, says Joanna, with a smattering of American and Japanese items when they're available on the black market. "That's the most expensive stuff to get," she points out. "The equipment is very primitive for the most part. They didn't have synthesizers until recently."

Part of Joanna's mission now is to help the bands get better equipment. She went to several companies in the United States and has found sympathetic ears at Yamaha, Fender and L.A.'s Guitar Center store. "There was one guitar player who saved for years to buy a Yamaha guitar on the black market for the equivalent of \$3000," she recalls. "The guitar retailed for about \$200 in the States. I brought back a picture of him with the guitar and showed it to Doug Buttleman of Yamaha and told him about the price the guy had paid. Buttleman nearly had tears in his eyes. He said, 'Here, take a drum machine. Take this, take that. Help these people!' Yamaha has provided her with their RX-11 digital drum computer, and when she brought it over to Russia, it might as well have come from another planet. She gave it to one musician, along with a pair of distortion and digital delay effects pedals. The next time she saw him he

was running the drum machine through the pedals, with exactly the results you might expect. "He comes up with these noises that he plays for me and after a couple of hours it drives you crazy," she sighs. "They're fascinated by this stuff. All they want to do is play with it."

(Russian rockers aren't all that unsophisticated, she adds. They read every western music magazine they can lay their hands on, including *Mix*, and they give her detailed descriptions of the equipment they'd like her to get for them. "They give me the make and model numbers, but they'd give me the serial numbers too if they could.")

### The Check's in the Mail, Comrade

Releasing an underground record in Russia is no summer cruise down the Volga. For starters, there's no vinyl or pressing plants available outside of official channels, so everything is released on reel-to-reel, though the cassette format is becoming more common as Walkmans make their way onto the black market. "Album" covers are photos taken by friends and pasted onto the tape boxes. Then it's back to the black market for sales, with copies of tapes passed like *samizdat* from one fan to another. What's known as "pirating" in the West is a standard distribution method for underground music in Russia. Copies of *Red Wave* smuggled into Russia sell for 200 rubles—\$250—on the black market.

Bookkeeping is simple: there aren't any royalties to keep track of. This little oversight doesn't bother the bands, though, says Joanna. "It doesn't take much money to survive in the Soviet Union. All they really want to do is play their music and have people hear it."

To make *Red Wave*, Joanna had to literally smuggle the tapes of the bands out of the country, a situation which didn't sit all that well with the Russian authorities. Joanna is prudently vague on the details of getting the tapes out. "It was like a scene from a James Bond movie," she shudders. She had attracted the attention of the KGB, who tailed her, wondering what she was up to, and the FBI, who she says also took a professional interest in her comings and goings.

"It certainly has affected my status," she says of *Red Wave*. "I was very nervous about whether they would grant me another visa after I learned that the KGB had gotten wind of the record through articles in magazines like *International Newsweek*. I did get my visa, but I'll never know if it was because the Soviet consulate in San Francisco didn't have me on their re-

fusal list or if Moscow realized that to decline my visa would create a PR problem for them."

Joanna has been trying to work more through official channels lately, talking with VAAP, the Soviet music publishing agency, about royalties for *Red Wave*. "You don't get anywhere if you don't play the Soviet's game," she says, explaining the fine line between pragmatism and principle she has to walk. (No royalties have been paid to the bands so far, says Joanna; all monies have been plowed back into the project. However, she did make a one-time financial settlement with VAAP for use of the songs. She also signed a document admitting that the record was released illegally, a move that was primarily designed to help Soviet officials save face after they realized *Red Wave* was a *fait accompli*.)

Some unofficial bands, eyeing the more sophisticated recording equipment at Melodyia, are discussing with officials the possibility of agreeing to some sort of official status, if they can do so with minimal artistic compromise. Boris Grebenshikov's Aquarium was the first to do so last November, and according to Joanna, such a move is significant since many underground musicians regard him as their spiritual leader.

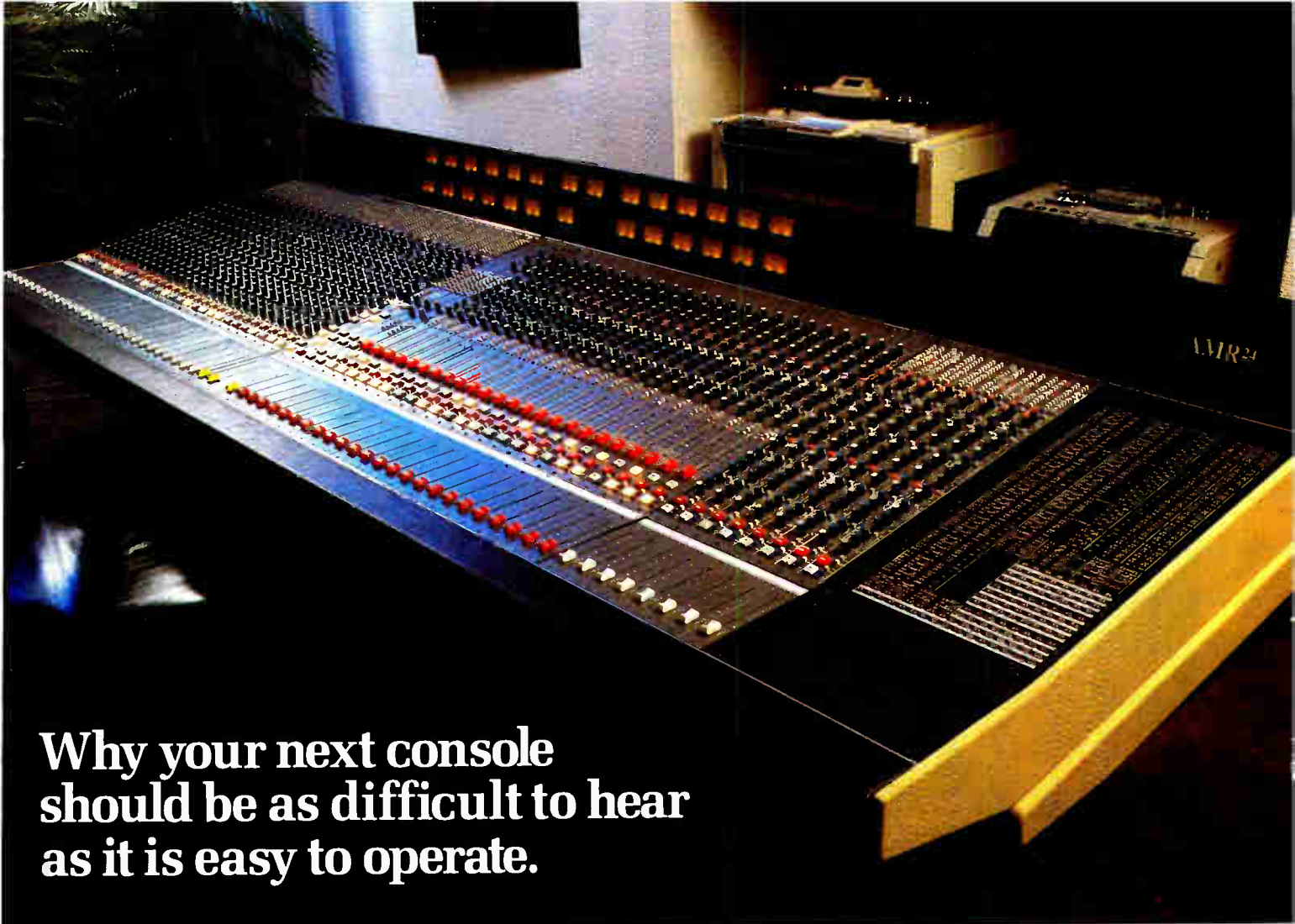
Joanna will be getting more familiar with official channels in the future. This April, she's getting married to Yuri Kasparyan, Kino's guitarist, in Leningrad. Love, she says, grew from an initial attraction based on the fact that they both dye their hair blond on top.

While marriage will both simplify and complicate her efforts to get Russian rock a wider audience, Joanna believes that the USSR will become more open to rock music, both because of the policy of *glasnost* (openness) initiated under party leader Gorbachev, and for other, more pragmatic reasons.

"They realize there's a lot of money to be made on rock and roll," she says. "I was over there with UB 40, who asked me to give them some pointers on dealing with the Russians when they played there. One thing the Soviets learned from that concert was that they made a lot of money on it, and they certainly are in dire need of foreign currency, especially dollars, and rock is a way to do that."

Joanna Stingray remains boldly optimistic. "You can change the world," she says. "I learned that from everything that's happened with this. And you can change the Soviet system, mainly because the people there want a change. And music is a great place to start." ■





## Why your next console should be as difficult to hear as it is easy to operate.

### The studio is more complex and less forgiving.

Electronic production techniques using MIDI and SMPTE sync require more control than a "wire with gain" can provide. But as functions and components accumulate, the console's signal path has grown more complex, and its audio performance has suffered. On analog recordings, higher levels of crosstalk, noise and intermodulation were an acceptable price for additional control. On digital multitrack, however, these flaws become glaringly obvious.

### Crosstalk blurs the stereo image.

Now that digital recorders have virtually eliminated crosstalk, this is an especially annoying problem. *The AMR 24 matches the channel separation performance of digital multitracks* because it employs balanced buses that eliminate crosstalk the same way mic inputs do. This radical design approach takes full advantage of digital's more coherent stereo imaging.

Balanced buses also eliminate the intermodulation that plagues the sound of conventional "virtual ground" mix amps. *The AMR 24's noise floor is constant whether you route one input*

*to a group, or thirty six.* So you can concentrate on the music without distractions from the mixer, even on digital multitrack.

### Features shouldn't degrade audio performance.

Automation widens creative possibilities — and narrows the margin for console error. For example, FET mute switches that are "silent" individually can produce audible glitches when grouped. The AMR 24's carefully controlled switching time constants eliminate this problem.

Every circuit in the AMR 24 has been calculated with equally close attention. Each stage has at least 22 dB of headroom; total dynamic range is over 100 dB. Even so, *unused stages are bypassed to produce the shortest effective signal path in every operating mode.*

Perhaps the AMR 24 is a product of extremist engineering. But as we see it, optimum audio performance, not simply a revised layout, is what makes a console automation- and digital-ready.

### The feel is familiar, the functions are unprecedented.

The AMR 24 facilitates innovative production techniques within a classically

split configuration. Master Input Status switches select mic inputs or line returns on all input channels simultaneously. In its mixdown configuration, the AMR 24 will handle up to 60 tracks, because the 24 Track Select switch changes the monitor returns to line returns normalised to your second 24 track (or to synchronised "virtual tracks" from synthesisers and samplers). The monitor returns have aux buses, solo and mute, plus four bands of EQ and long throw faders, so this flexibility is achieved with no loss of audio quality. For additional effects returns, the Fader Reverse function creates an additional 24 patch points through the cue send faders.

Imaginative design and uncompromising construction give the AMR 24 flexibility and sonic transparency that represent clear achievements: especially clear on digital recordings. For all the facts on this innovative console, send your business card or letterhead to:

**DDA**

**AMR 24**



Klark-Teknik Electronics Inc., 30B Banti Plaza North Farmingdale, NY 11735 (516) 249-3660

Unit #1, Inwood Business Pk., Whitton Rd. Hounslow, Middlesex, UK TW3 2EB



*Spirit's Shin Uetsuhara meets with record producer David Foster at the MTV Awards.*

## JAPAN: LEADING EDGE OF THE PACIFIC RIM

by Lou CasaBianca

It has been said that Japan is a riddle wrapped in an enigma. A courteous people and a beautiful country; a fierce trading competitor and a shrewd world power. An archipelago with 120 million people densely packed into an area the size of California, Japan produces the equivalent in per capita productivity and national income as the U.S. The people of Japan are exposed to all kinds of television news and commentary programs—a blend of programming similar to BBC/PBS on the educational stations, mixed with game shows, drama, situation comedies and sports, spiced with a barrage of computer animation and videographics-based spots on the commercial channels.

I am in Tokyo on my second visit, working with two major high technology companies in a film/video production which will become an inter-

active videodisc. Dealing with the nuances of Japanese culture, and the language in translation for scripts and meetings, has been a particularly challenging experience. The one thing that has impressed me most about this country is the people. They are exceptionally courteous and considerate. It started on the flight over. Japan Airlines service is almost compulsively attentive, a refreshing change from the human conveyor belt treatment of some of California's commuter airlines. The one-hour trip from the Narita Airport to the City of Tokyo Air Terminal serves as a primer on Japanese highways and drivers. Motor bikes zip in and out of traffic as if they have a special immunity to the laws of gravity and mortality. Central Tokyo has one of the world's more impressive skylines. As you walk through the neighborhoods, the laughter is infectious—there is a vibrancy, a joy of life expressed from young and old alike.

As a city, Tokyo feels very much like London. The cars and people move forward on the left side of the street. The city is old and new at the same time. High-rise structures are in some cases built right next door to buildings or shrines that may be hundreds of years old. As you walk through the downtown business districts, almost everyone is dressed in formal Western business clothing. But that's where the similarities to London stop, and the gap between East and West emerges. Needless to say, the language barrier is formidable indeed.

The flow of information is abundant. There is a uniform preoccupation with access to diverse and accurate information about all kinds of subjects, from the origin of the blues or jazz, to the esoteric implications of the tea ceremony or the kimono. You can find Western cultural influences in the food, the clothes, and the music. English is taught in the high schools and colleges. At the same time, the language and the cultural tradition are nurtured and protected.

One of the most recent imports to Japan is MTV, in an arrangement set up in 1984 with Asahi Broadcasting Corporation and Spirit Enterprise in Tokyo, which handles post-production. Spirit Enterprise specializes in the distribution and production of music programming to Japan for broadcast radio and television, cable and home video markets. The company was founded about 15 years ago by Akio Tamura, the president of the company, as a joint venture with Tadashi Sasaki of Jun Corporation (which, among other activities, owns one of the largest clothing chains in Japan). The first program distributed to Japan by the new venture was *Soul Train*. Other programming distributed over the years by Spirit includes *In Concert*, *Midnight Special*, *California Jam*, *The Rutles*, and many other specials and concerts. Spirit has also handled post-production and distribution for video disc and video cassette projects with Pioneer Laserdisc, Japan Victor, Sony, Toshiba, Pony and other companies in Japan.

I interviewed Shin Uetsuhara, producer and director for MTV in Japan, for *Mix*, for a revealing overview of the Japanese music and video scene.



# MICROVERB



**16 Bit Professional Quality Digital Reverb System.**

**16 Programs. Stereo in and out.**

**Accepts everything from guitars  
to +4 line levels. Free standing  
or rack mountable...This is it.**

**And it sounds great. Suggested Retail Price \$249.**



**ALESIS CORPORATION P.O. BOX 3908 · LOS ANGELES, CA 90078**

Circle #076 on Reader Service Card

(Thanks to Naotaka Saito for translation assistance.)

**Mix:** How long have you been with Spirit Enterprise?

**Uetsuhara:** About eight years. Before that I was with Tokyo Broadcasting System, where I first became involved with television engineering and technology. I also did freelance television commercial production. As I became more involved, I realized I was most interested in music production. Subsequently, I joined Spirit Enterprises which were specializing in this kind of work.

**Mix:** Have you produced Japanese music videos or are you primarily involved with programming?

**Uetsuhara:** I do not have much knowledge about Japanese music artists. I've been working principally on programming of American musical artists.

**Mix:** Who are the most well known Japanese music video directors?

**Uetsuhara:** There really is no word in Japanese for "music video director," and in fact because the budgets are so small, and there is so little work, the business is controlled by the producers. Also, there is very little time allowed to work on these productions and therefore very little creative freedom. Most of the music video work produced in Japan is for the networks, and is produced and directed by staff working for the networks, which do all kinds of other programming as well.

**Mix:** Is it fair to say that music video production is very tightly controlled because of this?

**Uetsuhara:** Yes, you could say there really is no independent video production scene in this country. However, there is a very open independent TV commercial market.

**Mix:** So, if someone's got a unique and recognizable production style they can break through and become successful in commercial production?

**Uetsuhara:** Yes. One of the most famous video clip directors in Japan is Kazami Kurigami, who started out as a still photographer, and moved into TV advertising. He recently did his first video for Island Records and Steve Winwood on "Freedom Overspill."

**Mix:** What kinds of music programming are available on Japanese TV?

**Uetsuhara:** We have the MTV program that is on from midnight to 1 a.m. Saturday and Sunday nights. There is also a network program called *Best Hits U.S.A.*, which is clips from *Solid Gold* re-edited into a new pack-

age for the Japanese market. On UHF there is a program called *Sony Music TV*, sponsored by Sony. It's popular music clips and interviews from the States, and runs two-and-a-half hours every Friday night. In addition, there are about 50 programs produced in each of the individual TV markets throughout Japan. These programs are in jeopardy of being eliminated because of the requirement for royalty payments for the use of clips by the record companies. Most music on Japanese TV is what you would call "middle of the road."

**Mix:** What would be considered a good rating for a music oriented program in Japan?

**Uetsuhara:** One percent would be typical. With MTV, however, there is a 4% rating. There are potentially many more viewers for music programs, but since there's very little TV programming available for them, and since much of it is not very interesting, they don't watch.

**Mix:** How do you reach those people? Do they go to concerts, watch videos at home, or use their Walkman?

**Uetsuhara:** Primarily, they go to a few concerts a year, rent video tapes and discs, and buy record albums and cassettes.

**Mix:** Can you describe the kind of radio programming available?

**Uetsuhara:** I feel the radio stations are not tuned in to the music market. For example, AM radio stations are mainly involved with Japanese pop artists and talk shows. By government regulation there's only one FM station per prefecture (there are 48 of these county-states in Japan). In Tokyo there's only one FM station in addition to the NHK. FM programming is very repetitive. It also is primarily talk, news, Japanese popular music, and only the current top American hits.

**Mix:** How would you describe the current concert scene in Japan?

**Uetsuhara:** The Budokan is the ultimate concert venue in Japan. At this point only American artists who are in the *Billboard* Top Ten are promoted in the Budokan. The promoters generally will use the U.S. Top Ten as the guide for bookings in this country.

**Mix:** Is there any club scene to develop or showcase artists?

**Uetsuhara:** There are clubs, but unfortunately, the Japanese artists playing in these clubs never seem to go beyond them. It becomes a job for them and very rarely are they able to go on to recording. If they come up

with a good song, it usually is turned into a pop track and reworked by the record company for a traditional Japanese artist. There are still many discos which are mainly concerned with being fashionable rather than with music. They concentrate on the volume and the lighting. Most discos are meeting places for the kids to check out each other's fashions.

**Mix:** Since television and radio programming are so limited, does software play a more important role in Japan?

**Uetsuhara:** Most kids really manage their money very carefully and try to get the most value out of it. Even though there's not much to watch on television, it's free. A live concert at the Budokan costs about 5000 yen (about \$30). Most people would rather spend that money on buying three albums than going to a concert. So most people only go to major concerts maybe three or four times a year, based on their own personal budget. Also, there is a difference between the records pressed in Japan and those imported from the States. The domestic records cost about 2500 yen (about \$15). The same album imported from the U.S. costs about 1500 yen (about \$9). There is a big difference between the U.S. and Japanese pressed albums. The Japanese version includes the English lyrics and credits translated into Japanese. Also, it includes background materials on the artist and the production. The import shops can usually only be found in the major cities. There has been a problem with rentals, which has decreased with the bankruptcy and withdrawal of the largest record rental company from the business.

**Mix:** Who would you say are currently the most active record companies in developing new artists in Japan, as well as promoting new artists from America?

**Uetsuhara:** I would have to say CBS-Sony. They have taken an in-depth approach from designing the record covers and creating an entire package for the artist. Their people can concentrate on the artists they select and work with the record, with contests and other kinds of retail promotions. Many of the other distributors have many, many labels with many artists. CBS-Sony seems to be able to concentrate better on its artists. Warner-Pioneer is good, and has many artists, but doesn't have as many people on their staff working those artists. Canyon-Pony distributes A&M Records and is part of another major company which distributes newspapers



# CARVIN MX2488 \$3995!

The American made mixer that leads in value!



Made in USA

The CARVIN MX2488 console offers the features, specs and performance you expect from a professional recording console—at a price that's unexpected! That's because CARVIN sells DIRECT, saving you about half the retail price—no commissioned salesmen or store overhead to pay.

The MX2488 is versatile. It handles every recording requirement with ease, from basic tracks to overdubs and mixdowns.

The MX2488 is professional—right down to its modular design and outboard rack power supply. A recent MX1688 test review quoted: "Total harmonic distortion at mid freq. measured only .025% while line inputs measured only 0.01%—very low for a console of this type."

If you want a transparent sound that fits into today's "digital" recording world, then the MX2488 is worth considering. Write for literature and a recent test review or send \$10 for the complete manual (100 pages) including schematics and circuit layouts.

## MX2488 RECORDING FEATURES

- Eight track studio control center
- Quick tape playback & rough mix capability
- Three band parametric EQ with defeat
- Complete cue mixing facilities
- Four auxiliary busses with pre-post switching
- Two effects returns with panning and soloing
- Patch jacks and direct outputs on each channel
- Solo & mute on all input & output channels
- Built-in talkback system & monitor dimming

## FACTORY PRICES

		LIST	DIRECT
MX2488	24x8x2	\$8995	\$3995
MX1688	16x8x2	\$6950	\$2995
MX1644	16x4x2	\$4595	\$1695
AN-16	16ch Anvil case	\$ 395	\$ 269
AN-24	24ch Anvil case	\$ 469	\$ 299

Order Direct Today—Visa, MasterCard  
Factory Hours: Mon.-Fri. 8:00-4:30 Calif. Time

Call TOLL-FREE  
800-854-2235 (Calif. 800-542-6070)

"Having lived with the Carvin MX1688 for a couple of weeks before reluctantly sending it back to the manufacturer, I can attest to the fact that it is truly targeted at the professional recording engineer or sound reinforcement engineer."  
"It is obvious that the people who designed this unit spent a lot of time in both recording studios and at concerts where sound reinforcement is both critical and complex."  
Len Feldman—db magazine  
September/October—1986

# CARVIN

Dept. MX77, 1155 Industrial Ave.,  
Escondido, CA 92025

Circle #049 on Reader Service Card

Free Catalog ☐ \$10 enc. for MX88 manual ☐  
Name \_\_\_\_\_  
Street \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
MX77

# IF YOU'RE IN VIDEO PRODUCTION...

**I**f you're in video production, you know that your business is changing as never before. Not only are new kinds of equipment making your job both easier and more exciting, but new markets and media are bringing new opportunities your way....

Music video, stereo television, and the marriage of video and audio mean more business and greater potential for growth. If this is your field, you should be reading MIX. Because MIX has been on top of the audio/video revolution almost since its inception, bringing vital information to recording and teleproduction pros alike. MIX has facilitated greater awareness and cooperation, and helped members of two diverse production communities feel at home with one another....



PHOTO: ROBERT SPECTER



PHOTO: MICHAEL MENDELSON

If you're one of these modern production professionals, **YOU'RE IN THE MIX!** If you're not a MIX subscriber, don't delay: use the coupon in this issue to subscribe today. The audio/video revolution is just beginning!

## ...YOU'RE IN THE MIX



and other products. They have somewhat the same problem.

**Mix:** How is the video music software business doing in general?

**Uetsuhara:** Usually, most fans would prefer to buy records than video software. So the market is not that great. However, jazz and material for older fans is beginning to sell in larger quantities, probably because they have more money to spend. Most videos are rented rather than purchased. I would say, for the most part, the market for video software in Japan is really in feature films, not music. There is a demand for good quality concerts and specials for broadcast.

**Mix:** Which studios would you characterize as "world class" in Japan?

**Uetsuhara:** CBS-Sony in Tokyo would qualify as the studio with the most advanced technology—Neve boards, with Studer and Otari machines. Sony released their first PCM digital recorder to this studio. While there may be state-of-the-art equipment available, the "ears" of the engineers are not that great. Many Japanese artists will go to Los Angeles, New York or London to have access to the best engineers. There is also Sound City, which has audio and video recording, and film and video editing. Pony-Canyon also has another good recording facility.

**Mix:** One of the trends in U.S. recording is the "home studio." Since a great deal of recording is now digital the signal can be recorded direct to tape. Is this becoming a factor in Japan?

**Uetsuhara:** This is also becoming a trend in Japan. More and more artists are going into this form of production as well. Most of the recording done by Japanese artists is instrumental. Most record companies consider the vocal talent and the lyric writing ability to be minimal. In many cases, if the musical track is good the record company will convert the music to a Japanese pop form called *kayokyô*. This has the effect of destroying the talent and not allowing music to grow naturally. Instrumental music has allowed artists like Kitaro and Tommita to gain a world audience. Part of this is cultural protectivism, part of it is control by the record companies.

**Mix:** Outside of NHK and the other broadcast facilities, what are some of the more advanced video production facilities in Tokyo?

**Uetsuhara:** Imagica. They have Grass Valley paint box, ADO, Scanimate, Mirage, Grass Valley switcher. Eizo House has squeeze zoom, ADO and most of the other tools required for

high quality video production.

**Mix:** What are some of your future goals in this field?

**Uetsuhara:** Well, I would like to direct music videos for American recording artists. I think there are more creative and innovative techniques that have yet to be used in music video production. I don't see the opportunities in Japan with Japanese artists. There are skills that I have acquired in making commercials and editing programming that I think will be very useful in video music production. At the same time I would like to see more of the valid contributions that Japanese culture has made to the world be incor-

porated in more projects.

**Mix:** That reminds me of a comment I heard about the difference in life perspective the Japanese have in part because of sleeping and living lower to the ground. It seems that the new generation is adapting to Western furniture and food, and for better or worse will look at the world slightly differently than earlier generations.

**Uetsuhara:** Yes. Also, jobs may not be as secure for this generation in the future, and this may contribute to a more experimental attitude toward life. Risk taking is part of what it takes to grow and create innovation in music or in technology. ■

## SIX ADVANTAGES OF A STUDIO CONDENSER WITHOUT A SOUND OF ITS OWN

**1** The MC 740 Studio Condenser is ideal for critical analog and digital recording situations because it is virtually inaudible — no self-noise, coloration or sonic footprint of any kind.

**2** All five of the MC 740's pickup patterns have equally uniform and identically transparent frequency response curves — a unique achievement for a large diaphragm condenser design.

**3** Like our ribbon mics, the MC 740 eliminates the icy, strident quality typical of condensers to reproduce voices and instruments with uncharacteristic warmth and intimacy.

**4** Unlike other condensers, the MC 740 is free of exaggerated sibilance, graininess or distortion.

**5** The MC 740 is exceptionally sensitive, yet also withstands extreme SPLs (up to 144 dB with the 10 dB attenuator in circuit).

**6** Typifying Beyer's world-renowned accuracy, the MC 740 reveals the subtle differences between instruments and ambient environments.

If the advantages implicit in the unconventional design of the MC 740 are important to you, arrange for a hands-on audition of this remarkable instrument by contacting your Beyer dealer or writing us direct at:

Beyer Dynamic Inc.  
5-05 Burns Avenue  
Hicksville, NY 11801

ACCURACY IN AUDIO

beyerdynamic

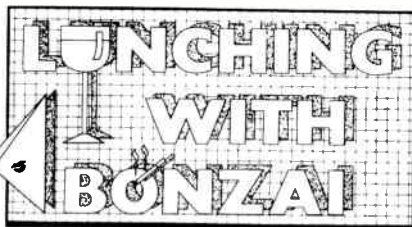


PHOTO: MR. BONZAI

# KITARO

## COMES DOWN FROM THE MOUNTAIN

"There is old energy that comes from somewhere, and passes through us. Creating music is using this energy to communicate with an audience."



by Mr. Bonzai

To most of the world, Kitaro—the man—is an enigma. He lives and records far from Tokyo, isolated in the mountains. Kitaro first earned widespread popularity in 1980 for music he composed for *Silk Road*, an hour-long TV documentary about the overland trade route from Europe to Japan. The program was so well-received that it became a series and ran for five

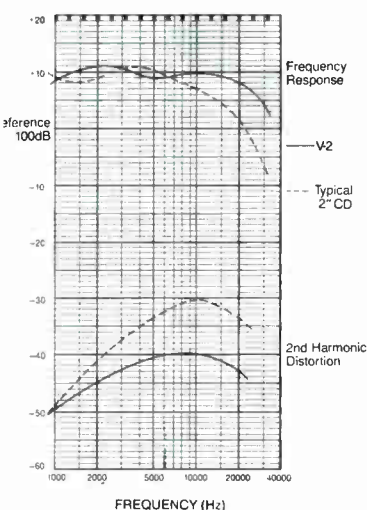
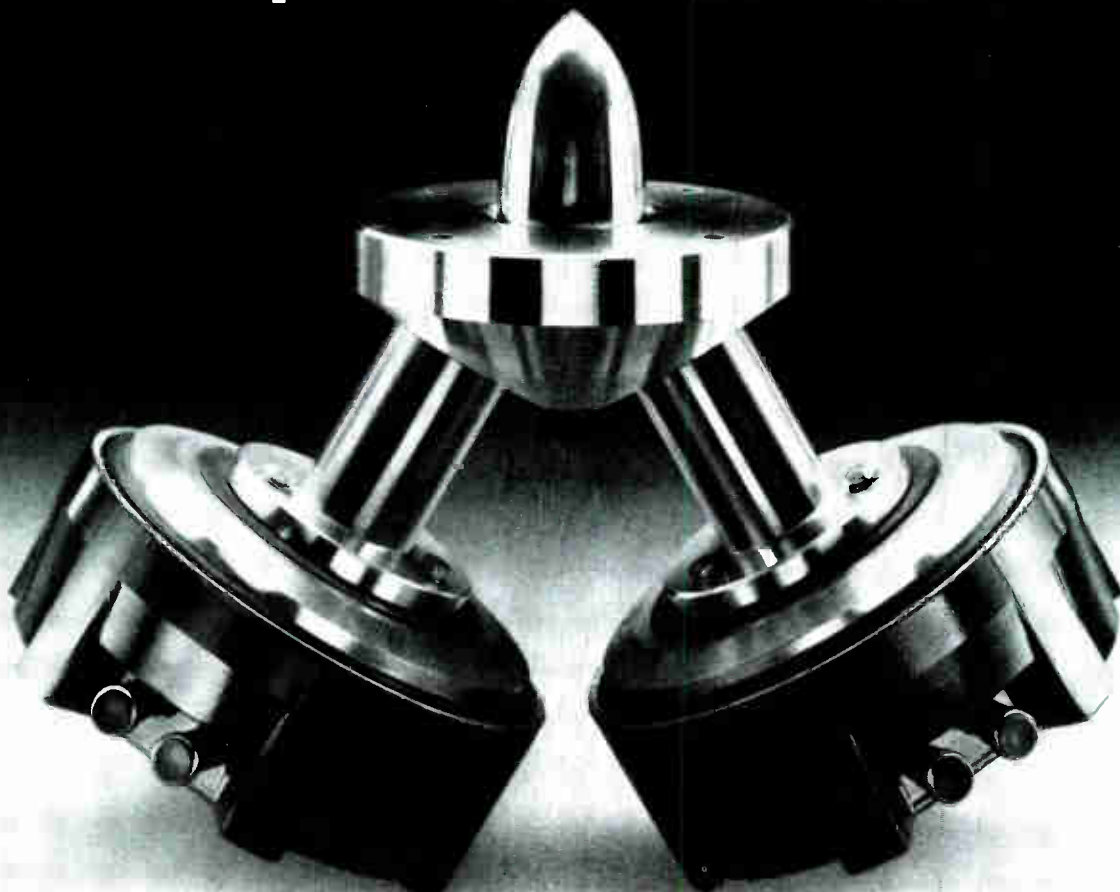
years. Kitaro sold millions of albums and became an international figure.

The son of farmers, he began his musical career in high school. A fan of American R&B, his first instrument was the guitar. He formed the Far East Family Band, released two albums, and later began his exploration of synthesized music. His work creates a mood of natural contemplation, breathing with his appreciation of nature.

Kitaro recently signed with Geffen Records for worldwide distribution of his new album, *Tenku*, and previous releases. During a recent visit to Los Angeles with his manager Eiichi Naito, I suggested that we lunch at Katsu, an elegantly simple Japanese restaurant known for its artful atmosphere and the best sushi in town. Chef Katsu gave



# We don't mind looking a bit ridiculous if it helps make live sound sublime.



Curves have been smoothed for purposes of comparison.

Engineering live sound means solving a multitude of "impossible" problems. Every audience — and every artist — expects great sound. Unfortunately, venues rarely cooperate with those expectations. Fortunately, Turbosound goes to any lengths to develop effective solutions to sound reinforcement problems — even when that entails a total re-examination of fundamental principles.

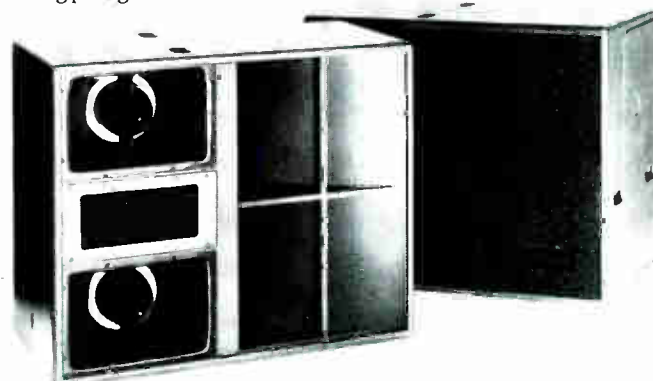
Our determined refusal to rehash the conventions of enclosure design has led us to develop several patented design principles. And to produce unusual-looking loading techniques like our unrivalled TurboMid™ and TurboBass™ devices. Our search for a solution to the dilemmas of HF projection and distortion has now produced the radically advanced V Series.

V Series combines aspects of manifold technology with Turbosound loading techniques to blend the outputs of multiple drivers gradually, minimizing phase cancellation. The first realization of the V Series principle is the V-2 shown here. Available initially for the T-3 flare in our world-travelling TMS-3 full-range enclosure, this central focussing device couples two custom-built 1" drivers. It extends the TMS-3's HF response to a true -3 dB at 20 KHz, reduces harmonic distortion dramatically and paves the way for the

soon-to-be-released UHQ system, incorporating Turbosound Flash-light™ technology.

The V-2 also solves "impossible" problems of intelligibility without artificial electronic enhancement or extraneous ultra-HF devices. It transmits every nuance of the performance to every seat in the house. And makes live sound more "lifelike" than it's ever been.

Finally, we'd like to point out one more important fact about this unique advance in professional audio performance — the ridiculous-looking part goes *inside* the box.



Only Turbosound is Turbosound.®  
**Turbosound**

Circle #055 on Reader Service Card an EdgeTech company  
LONDON • NEW YORK • TOKYO

\* TurboMid™ and TurboBass™ devices are covered worldwide by Principle Patents, not simple design patents. Principle Patents covering V Series have been applied for.

The concepts embodied in these designs are, therefore, entirely unique. See Turbosound literature for full information.

Turbosound, Inc. 611 Broadway, New York, New York 10012 (212) 460-9910 Telex 230199 IMC TURBO-USA TURBOSOUND LTD. 202-208 New North Road, London, N17 8L (01) 226-0099 Telex 265412 IMCTURBO-UK

**Worldwide agents:** Australia: Creative Audio Melbourne Tel: (03) 354-3987 Austria: Audiosales Moeding Tel: (236) 888145 Belgium: T.E.M. Dilbeek Tel: (02) 509-1823 Canada: Omnimedia Corp. Tel: (514) 636-9971  
China: Wo Kee Engineering Hong Kong Tel: (5) 249073-5 Denmark: Per Meistrup Productions, Karlslunde Tel: (02) 151300 France: Regissime Paris Tel: (01) 4396-5050 Greece: Alpha Sound Athens Tel: (01) 363-8317  
Holland: Ampco Maarssebroek Tel: (30) 433134 Hong Kong: Tim Lee Music Co. Hong Kong Tel: (3) 722-1034 Indonesia: PT Auvindo-Merien Prima Jakarta Tel: (011) 323029 Israel: Barkai Ramat-Gan Tel: (03) 735178  
Italy: Audio Link Parma (0521) 598723/4 Japan: EdgeTech Tokyo Tel: (03) 295-4731 Korea: Bando Pro Audio Seoul Tel: (01) 405-9665  
Norway: Nordtek Equipment Oslo Tel: (02) 231590 Singapore: Swee Lee Singapore Tel: (03) 235-1595 Spain: Lexion Barcelona Tel: (03) 203-4804  
Sweden: Intermusic Stockholm Tel: (08) 778-1512 Switzerland: Sinec Schönenwerd Tel: (041) 3747 Thailand: Bangkok Cine-Graphic Center Bangkok Tel: (02) 314-3570 K.C.M. Bangkok Tel: (02) 222-4712  
UK: Turbosound London Tel: (01) 226-0099 USA: Turbosound New York Tel: (212) 460-9940 W. Germany: Adam Hall Usingen Tel: (6081) 16031



text that conveys the flavor of Kitaro's words and meaning.

Keiko explained to me that Kitaro likes to take alternating hot and cold baths in the wintertime. Afterwards, he feels empty, but "empty isn't zero—it is full with nothing."

Bonzai: What music would you like played at your funeral?

Kitaro: (laughs) Funeral?...whose?

Bonzai: Your funeral.

Kitaro: *Mochiron*...naturally, I would like to hear my music.

Bonzai: What did your parents give you as a child?

Kitaro: My parents were farmers and I lived in a regular farmhouse. I don't have one particular image, but I lived close with nature every day. My parents watched after me gently, but I can't point to one particular gift.

Bonzai: Did they encourage your music?

Kitaro: Not at all. When I was a child I liked sports—I never thought about making music.

PHOTO MR BONZAI

us his special attention, preparing an elaborate meal and serving us personally. Kitaro spoke bilingually and our conversation flowed easily from

Japanese to English, with Keiko (Mrs. Bonzai) providing translation and timely insights. Afterwards, she and I worked together to create an English

Bonzai: Can you remember the first music you heard?

Kitaro: The first music I heard was folk songs, traditional music. When I

# dynafex®

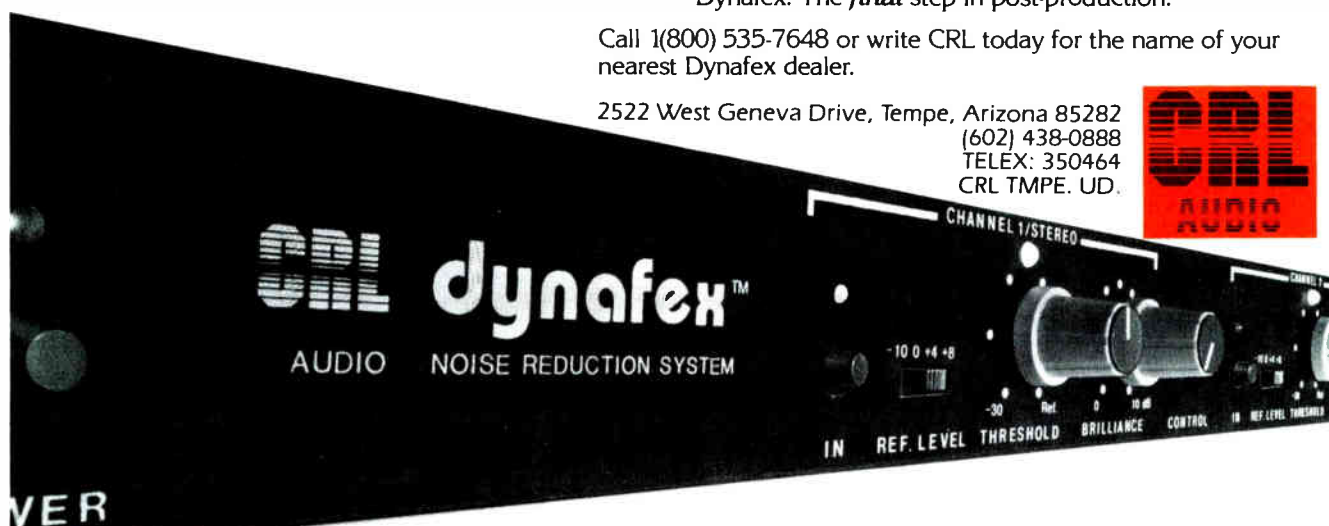
**Because  
it's a  
noisy world.**

- Up to 30dB noise reduction (better than many compressor/expander systems)
- Works after the fact – no encoding or decoding required
- Simple, trouble-free operation
- Effective on any audio program material.

Dynafex. The *final* step in post-production.

Call 1(800) 535-7648 or write CRL today for the name of your nearest Dynafex dealer.

2522 West Geneva Drive, Tempe, Arizona 85282  
(602) 438-0888  
TELEX: 350464  
CRL TMPE. UD.



Circle #056 on Reader Service Card



# STACK ATTACK

*combining creative power...*

## ME10D

Midi digital delay, 0 to 1 second delay time, harmonize octave up, and octave down, midi thru button, delay on, delay time and level control

## ME1SF

Midi digital fader/parallel box, 1 in, 4-thrus with extension jack to couple multiples, level control for each output, works off velocity, channel separator, allows individual channel thru outputs

## ME20A

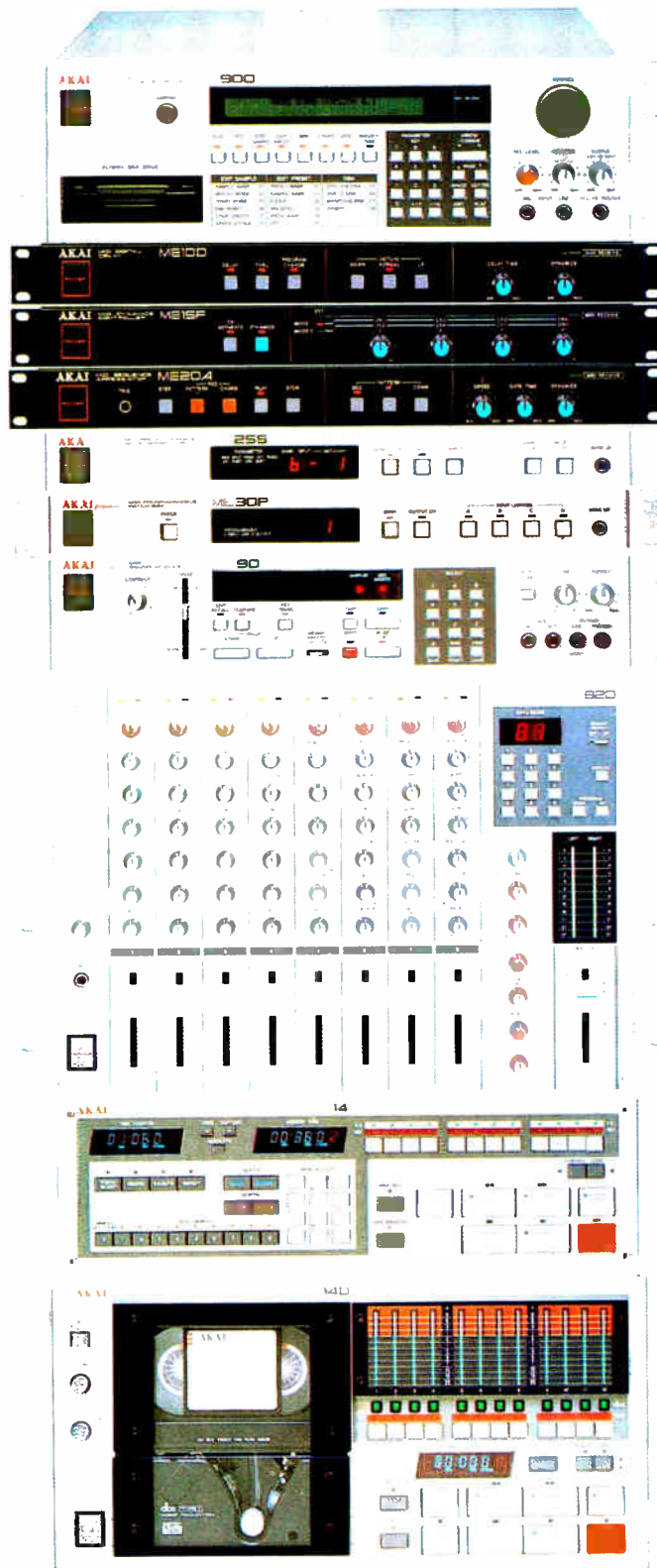
Midi digital arpeggiator/sequencer, 1096 notes of arpeggiation, sequencer, step write, chord or monophonic, gate control, level control, up, down or sequence patterns

## ME2SS

Programmable MIDI note separator, allows nonsplit keyboard to act as master keyboard controller with up to 4 split regions, 64 user programmable memories, 1 MIDI in, 2 MIDI out, 1 MIDI thru, programmable parameters split points, program change, octave shift, and modulation wheel/pitch wheel enable

## ME30P

Programmable midi patchbay, 15 internal memory banks, 4 midi ins, 8 midi thrus, 1 footswitch for channel select, input channel select, output channel midi assign and program select



## S900

8 voice polyphonic digital multipoint sampler, 32 sample points, 40kHz sampling frequency, 1 meg of memory, 1 shot, looping, alternating, ADSR control, velocity crossfade, velocity switch, RS 232 port, midi in/out/thru, external record trigger, mic line inputs, 8 individual voice line-outs, stereo left/right out, mix out, voice output 13 pin jack, 3 EIA rack spaces, built in 3.5" disk drive

## VX90

Rack mount midi polyphonic synthesizer, 6 VCO's, stereo chorus, arpeggiator, noise, 2 envelope generators, sampler editing system, 100 user programmable memories, pitch bend and modulation wheels, edit compare switch, LCD display, cassette interface

## MPX820

Midi controlled fully programmable 8 channel audio mixing console, 100 internal memory programs for effects sends, pans, auxiliaries, and fade time from 40 milliseconds to 15 seconds, frequency response 20Hz to 20kHz +.5, -.7dB, THD .04%, EIN -128dB, crosstalk 70dB adjacent channels, 3 band EQ, 8 input channels with XLR mic 1/4" line inputs, effects send, monitor send, rack mount package, EIA 7 spaces, faders 100mm with DC control voltages

## MG14D/ML14 Multi-Track Recorder

14 track rack mount recorder/rack mount programmable auto location system, multi point auto punch-in and out, multi point auto mute, automatic repeat, defeatable DBX type one, 50Hz to 20kHz, S/N 94dB, 115dB dynamic range, 12 segment LED input metering, auto tape loading systems, +4dB XLR in and out, -10dB phono in/out, remote full function auto location control unit, wow and flutter .03%, THD .05% at 0 VU, cross-talk, adjacent tracks better than 55dB

**AKAI**  
professional

Creative At Heart.

• FOR A COMPLETE DEMONSTRATION VISIT YOUR LOCAL AKAI PROFESSIONAL DEALER OR WRITE: AKAI PROFESSIONAL P.O. BOX 2344 FORT WORTH, TEXAS 76113

Circle #057 on Reader Service Card

began to hear popular music, I became interested in the guitar and wanted to learn how to play. I thought The Beatles were great, and R&B—my favorite was Otis Redding.

**Bonzai:** What did his music mean to you?

**Kitaro:** A warm feeling—very spiritual.

**Bonzai:** Who are the great musicians today?

**Kitaro:** Every musician who tries to explore is great. I feel that I am exploring—I am not perfect yet, but I am always trying to do more and more.

**Bonzai:** If you could meet anyone in the world, who would it be?

**Kitaro:** I want to meet many kinds of people. On this visit to America I had a very interesting meeting with Vangelis and John Anderson of Yes. Their music is different from mine, but it was fun—we met as friends, not only musicians. I hope to meet many other types of artists, musicians—from many countries, and to exchange cultures.

**Bonzai:** What is the most important question you can ask yourself?

**Kitaro:** I am constantly checking myself—always trying to clean up inside. I talk to myself—"Is this the right way? What am I doing?"

**Bonzai:** "New age" music is a common label these days, but I've heard your music referred to as "new science." What does this mean?

**Kitaro:** Who said "new science?"—Oh, I said that. It really means *shizen*—nature. There is big energy and we move in it. This is a principle that I try to understand and use in my work. It

means more than science, though; it means spirit—a return to the spirit. It is science; it is spirit; it is religion—everything. Finally, these concepts become one. There is old energy that comes from somewhere, and passes through us. Creating music is using this energy to communicate with an audience. Like being a messenger. This is "new science."

**Bonzai:** So, it's "old science," as well.

**Kitaro:** Yes. I wonder about this "new age" music. I don't think everyone understands. For me, it is a new philosophy, a new lifestyle—looking forward to the next human beings. That's all.

**Bonzai:** I've heard that you have an outdoor concert once a year and play the giant "wadiako" drum.

**Kitaro:** Yes, near my home at the base of Mt. Fuji.

**Bonzai:** Can anyone come?

**Kitaro:** I don't publicize the concert. It is for my neighbors and friends. Not many people know about it. I try to communicate my appreciation of the environment where I live, of Fuji-san. I hope to invite Vangelis and other artists to join with me next August at the Full Moon for a musical gathering.

**Bonzai:** Would you describe your studio?

**Kitaro:** My studio has 24 tracks—an Otari MTR-90. I am using a Sound Workshop console, but next year I will buy an SSL. I have Dolby noise reduction and Lexicon reverb, and an EMT echo plate. I use a Kurzweil, and a

Yamaha DX7 synthesizer. I have many MIDI devices and sequencers, and also a Minimoog, a Roland Jupiter 8—and an old Korg. Vangelis told me he uses a Korg, too—it is a favorite of mine. The Minimoog is just a little synthesizer, but the sound is so big. Many musicians don't use the Moog now, but I like the sound.

**Bonzai:** What about your home?

**Kitaro:** It is in the countryside at an elevation of about 3000 feet. My house is a 200-year-old farmhouse. I have remodelled and inside is my studio, and a fireplace, and a pool table. The house has a thatched roof.

**Bonzai:** And a big bathtub?

**Kitaro:** Big enough for four or five people.

**Bonzai:** In America your music is thought of as meditative music, but I've heard in Japan that it is party music.

**Kitaro:** I think the meaning is different....

**Bonzai:** My feeling was that most parties in America are so noisy that no one really talks to each other—that "party music" in Japan meant music that creates an atmosphere of communication.

**Kitaro:** That is a good image.

**Bonzai:** Ki-ta-ro means "very happy man?"

**Kitaro:** Yes.

**Bonzai:** Did you choose this name?

**Kitaro:** It was a nickname I was given in high school.

**Bonzai:** Do you know the old *shamisen* master, Chikuzan Takahashi? We met him recently on his first tour of America.

**Kitaro:** I know his music, but we haven't met. I don't have many relationships with musicians in Japan. Many musicians in Japan—I don't mean Chikuzan—are only interested in the show, to make a name and to make money. Their meaning is superficial. If people are making music, they should have a philosophy of life. I think carefully about making music, because it influences people. If I didn't care about the world I could make any kind of sound, but I feel we should create circumstances that are peaceful, that protect us from a panic feeling toward life. Trouble can pass smoothly. We should think about the next age and make a good circumstance. If we don't, the world will get worse.

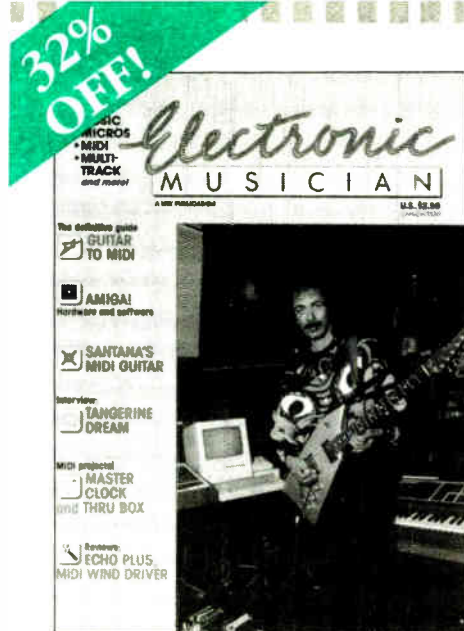
#### *Kitaro in concert*





Electronic  
MUSICIAN

Subscribe Today!



**SAVE OVER \$7<sup>00</sup>**  
off the ~~\$22~~ basic rate

- ☐ **YES!** Send me 12 issues of **Electronic Musician** for just \$14.95.
- ☐ **Save me more!** Send me two years (24 issues) for only \$27.95.
- ☐ Bill me    ☐ Payment enclosed  
(Outside U.S. add \$10/year)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

1886



**SAVE OVER \$7<sup>00</sup>**  
off the ~~\$22~~ basic rate

- ☐ **YES!** Send me 12 issues of **Electronic Musician** for just \$14.95.
- ☐ **Save me more!** Send me two years (24 issues) for only \$27.95.
- ☐ Bill me    ☐ Payment enclosed  
(Outside U.S. add \$10/year)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

1886



**SAVE OVER \$7<sup>00</sup>**  
off the ~~\$22~~ basic rate

- ☐ **YES!** Send me 12 issues of **Electronic Musician** for just \$14.95.
- ☐ **Save me more!** Send me two years (24 issues) for only \$27.95.
- ☐ Bill me    ☐ Payment enclosed  
(Outside U.S. add \$10/year)

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_

1886

**BUSINESS REPLY MAIL**

FIRST CLASS PERMIT NO. 2994 BERKELEY, CA

Postage will be paid by addressee

*Electronic*  
MUSICIAN5615 W. Cermak Rd.  
Cicero, IL 60650NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES**BUSINESS REPLY MAIL**

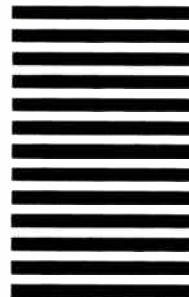
FIRST CLASS PERMIT NO. 2994 BERKELEY, CA

Postage will be paid by addressee

*Electronic*  
MUSICIAN5615 W. Cermak Rd.  
Cicero, IL 60650NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES**BUSINESS REPLY MAIL**

FIRST CLASS PERMIT NO. 2994 BERKELEY, CA

Postage will be paid by addressee

*Electronic*  
MUSICIAN5615 W. Cermak Rd.  
Cicero, IL 60650NO POSTAGE  
NECESSARY  
IF MAILED  
IN THE  
UNITED STATES



# THIS MONTH IN ELECTRONIC MUSICIAN...



Pick up the newest issue of *Electronic Musician* at your favorite music store, or, better yet, subscribe today and don't miss a single issue. Save 50% off the newsstand price—you will receive 12 issues (one year) of *Electronic Musician* for only \$14.95!

Get the best information available on the latest technology. Get *Electronic Musician*.

*Electronic Musician*,  
a Mix Publication  
2608 Ninth Street,  
Berkeley, CA 94710



## COMPUTERS AND SOFTWARE

**A Practical MIDI Application for the Atari ST** by Thomas Beutel  
Meet "Groovestore," a BASIC program that stores drum pattern data in your ST.

**Humanizing Sequences** by Jim Johnson  
Does sequenced music have to sound mechanical? Not if you follow Jim's advice.

**Ten Software Tips** by Craig Anderton  
Here's how to get more comfortable with your software.

**CZ Patch Librarian** by Tim Dowty  
Type some lines into your Commodore-64 and presto—instant CZ patch librarian!

**Software Sequencing Tips** by Jeff Kerschmer  
Heed these hints if you're just entering the wide world of sequencers.



## RECORDING

**Tape Basics** by Kim Dorell  
Want to get the right sound? Then choose the right tape for the application.



## MIDI

**The 15 Most Common MIDI Misconceptions**  
by Leslie Fradkin and Elizabeth Rose  
Save yourself trouble by finding out what MIDI can, and cannot, do.



## INTERVIEW

**Crazy at Conny's** by John Diliberto  
Who's Conny Plank? Kraftwerk, Cluster, Ultravox, Eurythmics, and many other prominent artists know.



## DO-IT-YOURSELF

**Build the Alpha Digital Drum** by Howard W. Cano  
Build your own digital drum sound module for under \$40.

**Service Clinic: More Questions and Answers**  
by Alan Gary Campbell  
More invaluable answers to common questions.

**The Slide Pot Ribbon Controller** by C. R. Fischer  
Turn an ordinary slide pot into a ribbon controller and save money.



## BASICS

**Batteries for Electronic Music Applications**  
by Alan Gary Campbell  
Everything you need to know to make batteries work for you.

**Music in Publishing** by Peter Hirschfeld  
The latest installment of our series on music-related careers.



## REVIEWS

**Roland MPU-101** by Dean Heinbuch  
**Digidesign Softsynth** by Geary Yelton  
**Mimetics Soundscape** by Jeff Burger  
**Akia XZ100** by Craig Anderton

# Are You A Slave To Your Machines?



## Free Yourself With The *Human* CLOCK<sup>T.M.</sup>



NEIL ZLOZOWER

If you've ever tried playing live with a sequencer or a drum machine, you know what it's like to be a slave to your machines. The rigid tempo just doesn't feel right. Or, if you've ever tried adding sequenced material to a prerecorded track then you know what it's like to be the prisoner of your computer.

Free yourself with the HUMAN CLOCK<sup>TM</sup>.

The HUMAN CLOCK takes rhythmic pulse output

from your drummer, bass player, rhythm guitarist or keyboardist and through an exclusive Kahler<sup>®</sup> process called REAL TIME PREDICTION<sup>TM</sup>, calculates live tempo and converts it to a midi-clock output that moves and changes with your tempo! Instantly and naturally.

The HUMAN CLOCK lets you make music the way YOU want to, not the way your machines force you to.

Experience the freedom at your Kahler<sup>®</sup> dealer. The HUMAN CLOCK<sup>TM</sup>.

**AN AMERICAN  
INVENTION BY<sup>TM</sup>**

**Kahler<sup>®</sup>**  
MADE IN USA

APM P.O. Box 9305 Anahiem, CA 92802

AN AMERICAN INVENTION BY



Circle #058 on Reader Service Card

Visit Our **NAMM** Booth #365

PAT. APPL'D FOR



My idea of "new age" music is that we should have a philosophy, and an appreciation of traditional ways, and we should also think of the future. If people think that our generation will be the end, then there is no hope for the next generation. Most people, especially young musicians in Japan, don't think of the next generation for the world. Maybe they are so young that they aren't aware of their effect on the future. We should have freedom, and move beyond destruction. In past times, we have had many kinds of destruction. We should move on.

We should be aware of what we give to others. If someone listens to



music, maybe their ideas will change. The responsibility comes to me. It relates to my feelings about Otis Redding, for instance. He is dead now, but there is still a big influence. So I can't do my work easily; I must act carefully.

Often, musicians will come to me and want to have a session. I usually say "*sumi masen*," I am sorry—I can't do it. If their meaning is shallow, then it is corrupt. If they just want to have fun, then they should do it by themselves.

**Mrs. Bonzai:** Before our trip to Japan last year we contacted Geffen Records for your biography, because we hoped to meet you for an interview. They said it was nearly impossible. We had an image of you as a mysterious hermit recording in isolation on Mt. Fuji.  
**Kitaro:** This is an image people have

of me. Perhaps it keeps me free from those who have no real reason to meet with me. But I am not isolated from the world—on this trip I met with some great artists who I hope will join me for some special concerts. I have invited them to come to Japan. In April I am planning a performance in Kyoto to commemorate the 400th year of Chio-in Temple. The concert will be in the temple's garden. There will only be one performance, and I hope to make a film of the music and the ceremony. I have been asked to perform for the entire night and I hope to have other musicians join the performance. This may be the end of my performing in Japan, and I am thinking of moving here afterwards. But I will do my music on the mountain in August. This is my celebration and my prayer for Mt. Fuji. That's all. There is a gathering of dancers and *ikebana* [flower arrangement] artists. It is a festival, with wadaiko drumming. There are many festivals throughout Japan at this time of year. I begin at sunset and continue drumming until I see the sun rise. It is kind of a trance experience. We must feel something to play through the entire night. My dream is to have this festival happening at the same time throughout the world—Mt. Fuji time, not Greenwich time.

**Mrs. Bonzai:** In Los Angeles, we have been to many wadaiko drum festivals, with performances by California groups and by Japanese groups.

**Kitaro:** It has become very popular, but true wadaiko is much more than just technique. Something happens when the drumming continues all night long. There is a struggle with one's self. The energy is great. The experience moves a person beyond their individuality—you can play on and on. It is difficult to describe—it is like a meditation. I am not a professional wadaiko drummer, but I feel the drum. The tradition comes from village people who wanted healthy crops and protection for their homes.

Many people think that I am a distant and serious person, who only says profound and heavy things. But I am not this way. I like sports, I play around like a child. I am not a serious, difficult person to understand. It sometimes makes it hard to talk to people because of this long-haired image of a master. I am a natural man, a human being. I am not pretending to be a big guru.

I have a friend that I met when he was on a 1000-day walking journey—it's a trek that takes about seven years, because you walk 80 kilometers each day for a few days and then stop at a shrine, and then continue on. I walked for three days—no food, no water—and I felt a death feeling, like I was



dying. Obviously, it created a change in me.

**Bonzai:** You are most famous in Japan for your music for the *Silk Road* television series about China—how did you come up with that music?

**Kitaro:** I hadn't visited China yet. I just composed from my own image of China. I didn't study photos or videos of China. Later, I visited and saw the real China. I had finished the music, and I was relaxed. I could travel freely, without thinking of my work. And still now, I feel that the music is good and not so different from the real China. It fits. I know that there is always much more than the media image we have of foreign places or peoples. I saw the dirt—more than the clean view. I don't believe the media.

**Bonzai:** Do you have any advice on nutrition?

**Kitaro:** Everybody should eat sushi! (laughs). I fast from time to time. I'll tell you about the four-day fast...

**Bonzai:** Ah, "The Kitaro Diet"...

**Kitaro:** (laughs) Yes—on the first day breakfast is tea and salad. The lunch menu is just tea, and milk. Dinner is water with lemon juice. Water only on the second and third day—but not too much. The brain becomes clear and there is no useless movement. Every move has a purpose. A realized person moves slowly and only with a purpose. We shouldn't waste energy. In the tea ceremony there is no useless movement, so we can see one continuous current in the movement. If the movement is quick, we can't feel the current of the ceremony.

**Mrs. Bonzai:** While you are fasting, do you stop your normal activity?

**Kitaro:** No, I continue with my usual daily life. On the fourth day, breakfast is lemon water, and then later tea, and milk. In the evening, salad. After fasting, gradually return to your regular diet and habits. If you do this fasting, I think you can extend your lifespan by ten years. ■

# EUROPE

## ◻ NEXT IN LINE FOR ◻ STEREO TV

by Richard Dean

Last September, the UK government approved a BBC-developed system for stereo sound TV which, if all goes according to plan, could be running by late 1988 or early 1989.

It certainly won't be the first time that the much-maligned TV soundtrack has been elevated to a more dignified position alongside increasingly complex and cleverly manipulated pictures. Germany and Japan started the ball rolling several years ago, and the U.S. joined the stereo fray in early 1985. But it will be the first system to broadcast stereo in digital form.

The official endorsement follows the results of detailed compatibility checks in the interference-blighted mountains and valleys of Wales, and more recently a full-scale test service from South London's Crystal Palace transmitter on BBC2.

This continues for the benefit of receiver manufacturers and to broaden staff experience, and shortly will be extended to BBC1 transmissions from the same site. Stereo soundtracks from films are played where available—which amounts to around two or three a week—with library music from compact disc at other times.

### Routine Refurbishment

In contrast with stereo radio on FM/VHF, where the service painfully rolled out from London over several years, the BBC wants to have 60-70% of the UK covered from the start. Both BBC and ITV are adding stereo installations in the course of routine refurbishment as far as possible, to dissipate costs.

According to a BBC spokesman, the upgrading of the Corporation's vast studio facilities—a continuous process likened to the painting of the Forth Bridge—has resulted in half of Television Centre's eight major production studios in London now being ster-

eo-capable, with the regional centers to follow. Meanwhile, virtually all the major studios of the so-called "Big Five" program-providing companies within ITV use stereo consoles.

By a fortunate coincidence, the BBC's most important transmitters are about to come up for renewal. To realize its target coverage for the 1988/9 launch, the Corporation could have as few as seven antennae to replace. But it's a different story for ITV, whose transmitters are built and maintained for an annual turnover-related rental by the IBA (Independent Broadcasting Authority).

In June, the IBA signed a deal to begin the replacement of its entire TV transmitter network, now nearly 30 years old, at an ultimate cost of £40 million spread over ten years (today's prices). The good news is that only main transmitters need be upgraded—the relay stations used to echo the signal around the country need no adjustment—and the more modern designs will save the network an estimated £350,000 per year in electricity. The bad news is that work is not due to start until 1988—the date when the British Radio & Electrical Manufacturers' Association says its members hope to start selling the first stereo TV sets. So the BBC seems likely to have a significant lead over its commercial rivals; its hi-tech transmitter at Crystal Palace already covers some 20% of UK homes taking relay stations into account.

### Distribution Debate

There's also some uncertainty about how ITV should distribute the sound to the transmitters. They currently use landlines leased from British Telecom to convey transmitter sound separately alongside vision cables.

The BBC has its own system of distribution called Nicam 3 (Near Instantaneous Companding And Multiplex) which uses sound-in-sync (SIS) techniques to allow sound and vision to



pass down one line. A short (4.7 $\mu$ S) burst of digital audio is inserted into end-of-line video scans, using 14-bit words compressed to 10-bit and sampled at 32kHz. This neatly ties in technically with their digital links used on trunk routes for radio.

Nicam was rejected for ITV on the basis that converting to and from digital for monitoring across its entire network would be too difficult or expensive. Another argument against SIS is that the loss of one line means losing both picture and sound, although modern transmitters can automatically generate phone-programmable fault apology captions. But it has since been adopted for the UK's relatively recent and, more importantly national, Channel 4 network.

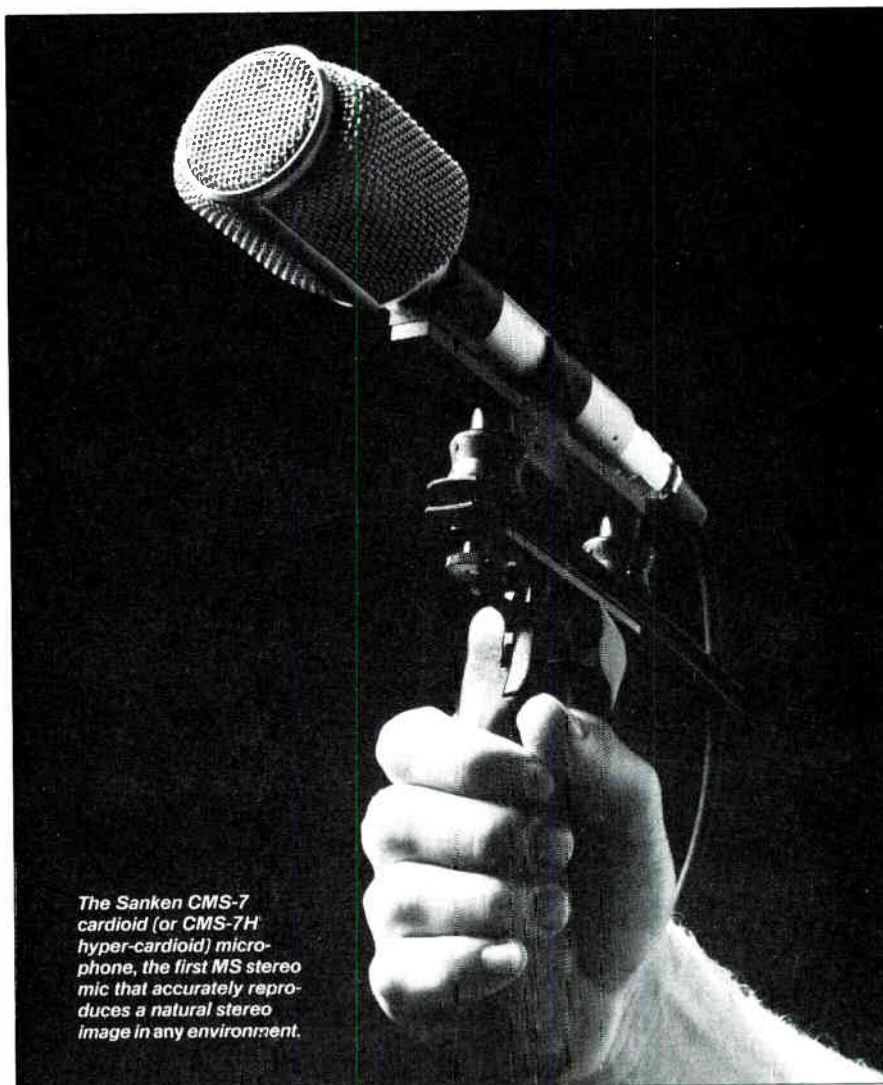
Many observers also thought Nicam would never have the bandwidth to carry stereo. But by using extra compression techniques, the Corporation's engineering researchers, in collaboration with Pye TVT, managed to shoe-horn four levels of digital data instead of the normal two into the same time slot, for extraction as a separate channel at the other end, again to the same 32kHz/compressed 14-bit format.

ITV isn't sure whether to rent extra cables to carry stereo, or change across to a sound-in-sync system, which would actually save a small fortune on existing mono audio line rentals. But higher caliber and thus more expensive cables may be required to carry sound with vision.

If ILR (Independent Local Radio) is anything to go by, commercial TV stations will wait until a strong demand exists before paying for more or higher quality lines. Only two programs are networked on ILR—news, which goes out to all stations from the ILR news agency IRN on the hour, and *The Network Chart Show* once a week.

*The Chart Show* is the jewel in ILR's crown, designed to compete on a national basis with BBC Radio One's established *Pick of the Pops*, with the same coverage in high-quality FM as well as Medium Wave. News goes out via a special distribution circuit linking all ILR stations.

The shared news link is mono, as you might expect. But so too is *The Chart Show* in most regions outside London, because it's sent down the same news network. Hiring a special stereo line would be too expensive according to the IBA. They say a once-weekly line booking would take them onto the premium rate occasional-user rate card. They question whether it really matters to the target audience. And anyway, they say they've received no complaints.



*The Sanken CMS-7 cardioid (or CMS-7H hyper-cardioid) microphone, the first MS stereo mic that accurately reproduces a natural stereo image in any environment.*

## TRUE STEREO IN A PORTABLE MICROPHONE!

Sanken, maker of the world-acclaimed CU-41 CD-recording microphone, is pleased to announce the new CMS-7, the first portable MS stereo condenser mic that accurately captures a natural stereo perspective in any environment. Ideal for TV and radio broadcasting, motion picture making and studio recording. Its corrosion-free titanium diaphragm is immune to temperature and humidity changes, and performs superbly in adverse conditions. Battery power supply/switchable matrix box, which clips to your belt, carries an aperture control for focusing the stereo perspective. For more information, please contact:

**LOS ANGELES** Audio Intervisual Design  
Tel: (213) 469-4773

**NEW YORK** Martin Audio Video Corp  
Tel: (212) 541-5900

**NASHVILLE** Studio Supply Co., Inc.  
Tel: (615) 366-1890

**CANADA** Gould Marketing, Inc.  
Tel: (514) 342-4441



Japan's most original microphone maker

Sole export agent Pan Communications, Inc.  
5-72-6 Asakusa, Taito-ku, Tokyo 111, Japan  
Telex 2423934 KNMPCM/Telephone 03-505-5463  
Telefax 03-505-5464/Cable Address PANCOMMJP

Circle #051 on Reader Service Card

## Stereo TV—The Systems

The U.S. uses a multiplex system similar to normal Zenith/GE stereo radio. This superimposes an AM carrier containing channel difference (left minus right) onto the existing FM mono carrier. A simple sum and difference matrix on stereo sets derives separate left and right channels while mono sets are unaffected. One of the prime movers in the initiative was NBC, which decided to break the consumers-waiting-for-programs/programmers-waiting-for-consumers conundrum by boldly re-equipping its studios with stereo broadcast consoles from SSL.

Several years earlier the Germans had decided not to multiplex, but add an extra FM carrier to broadcast TV for stereo. Italy and Austria, as well as Australia, now seem likely to follow this so-called dual-FM route. The BBC favored dual-FM for a time, too. Then the EBU approved the MAC family of standards with digital sound, and up to eight channels at that, for future DBS (direct broadcast by satellite) transmissions. Also, compact disc began to gain momentum. So attention turned to digital techniques.

As with any dual-carrier format, the German system can cause pattern interference as the two frequencies "beat" on screen. So the second carrier's amplitude has to be reduced. This in turn impairs coverage.

Another problem is buzz on sound, to which the U.S. system is also vulnerable. But to make matters worse, if on a dual-FM system the extra carrier is a difference signal (L-R) as with Zenith/GE, the buzz conspicuously pitches its tent on one side of the soundfield. So the Germans send only right-channel information on the extra carrier and use a different matrix. This way, any buzz sits on the center where it's less likely to be noticed.

In contrast, Japan adds difference information to the existing FM carrier, as with Zenith/GE multiplex. But this is done with FM rather than AM techniques. Never seriously considered in Europe, this "FM/FM" format is thought to suffer less from crosstalk than the German and U.S. systems; a vital parameter in a country like Japan where the stereo facility is used for bi-lingual dialog. Every aspiring Japanese—in other words the sort of people who can afford stereo TV—wants to learn English.

The BBC system resembles dual-FM, with the second carrier 6.552MHz above the vision RF. But the crucial difference is that the signal modulating this carrier is digital instead of analog, using a technique called Quad-

rate Phase Shift Keying (QPSK). Also the -20dB secondary carrier contains the complete stereo signal and does not depend on matrixing with existing mono. It has the same resolution and sampling rate as Nicam 3: compressed 14-bit at 32kHz. The BBC ultimately plans to install sampling-rate converters in each studio, to enable sound to pass from CD and other digital sources to the home without ever dipping into the analog domain.

Because QPSK-stereo is digital, crosstalk is zero, which bodes well for the don't-knows among multi-lingual continental Europe. Standards differ slightly: while the UK has only been allotted UHF for TV (no VHF), it has some 8MHz clearance between stations compared to the tighter 7MHz of mainland Europe, which also uses PAL B and PAL G rather than the UK's PAL I variant. But so far tests in Scandinavia, which is committed collectively to adopting digital techniques for a future stereo TV system, show that the system can cope with PAL B.

The reasons for Scandinavia's digital commitment are obvious enough. In Finland for example, a significant proportion of people speak the tongue of their former Swedish rulers. The current solution is to run English-speaking movies with obtrusive tiers of dual-language captions. But a dual-language soundtrack wouldn't be much better if each channel had someone else babbling away in the background. So Finland is particularly keen among the Nordic group to implement the crosstalk-free QPSK-stereo system as an audio solution to its language headaches. Indeed with talk of a launch sometime this year, it could become the first nation to start public broadcasts.

It's even worse in countries where literacy is low. Hong Kong, which uses the UK PAL I standard, has to cater to English and Chinese viewers. Written Chinese is famously difficult to learn, let alone caption, so the language barrier is vaulted almost entirely with dubbing. The upshot is that movies have to be screened twice. Apart from anything else, a dual-language soundtrack allows stations to deliver bigger audiences to advertisers more cheaply. Tests with the BBC's stereo equipment began early in 1985.

Other countries, like New Zealand, are attracted to the system more on the basis of high-quality stereo reproduction. Apart from its frequency response, stereo separation and dynamic range, BBC engineers claim that soundtrack interference manifests itself as noise rather than the more distracting line-frequency-related hum of other systems. The French are meanwhile working on their own stereo system to overcome the difficulties of add-

ing an extra carrier to the SECAM TV standard. Little is known about this embryonic project, but it is believed to involve digital sound.

As internationally-exchanged programs become increasingly likely to carry a soundtrack in stereo, some sort of stereo-image guidelines may soon have to be agreed upon in the interests of compatibility, especially for drama or musical dialogue. One answer is to lock vocals onto a virtual center, in the style of the hard center of a cinema. But the two media have little in common either in scale or environment.

Movement or positions on-screen are more likely to be reflected to some extent on the soundtrack, and experience so far indicates that this will mostly be achieved with panpots rather than Blumlein mic placement or UHJ/Ambisonic Soundfield techniques.

The question is, how much panning? According to BBC Television Centre sound chief Jeff Baker, who recently gave a talk on stereo TV sound to the UK's IEEE (Institute of Electrical & Electronic Engineers), vocal panning should be restrained within the central third of the soundfield.

One argument is that a wider movement might ridicule the limited dimension of domestic TVs. But there's also the question of mono compatibility—even with the BBC system, where the stereo signal is autonomous from normal mono—because lines to the transmitters will be shared on the grounds of cost. So mono sets will receive the sum of the stereo pair, as with radio and other stereo TV systems. Too much panning could distort the sound balance on older sets.

A number of other questions remain as to whether the mix should change on close-up, and does the engineer adopt the best-seat-in-the-house maxim of radio concert coverage, or attempt to follow the vision mixer with a more "realistic" soundfield?

Several pop producers have already expressed an interest in the impact-enhancing possibilities of broadcasting high-quality surround-sound on the BBC digital system. Options exist on the bitstream for alerting sets to stereo/multi-lingual modes, or even downloading data in the manner of teletext, which could equally be used to flag home surround-sound decoders.

You need a Dolby Stereo cinema encoder, joystick panpots (to emulate the 70mm rear-stereo version), and rear monitors. Which is almost enough to make those pioneering studios that backed Quadraphonic in the early '70s wish they hadn't ripped out all their old rear monitors and joystick panpots when the concept flopped on steam vinyl disc. ■



**\$395...**  
**PRO-Verb**  
**The Leader**  
**in Digital**  
**Reverberation.**

- **100 Presets**
  - 50 Natural Reverb
  - 10 Gated Effects
  - 10 Reverse Effects
  - 10 Chorus Effects
  - 10 Echo Effects
  - 10 Delay Effects
- **1 High Rack Mount Case**
- **Professional Phone Jacks**
- **Midi Interface**
- **Wide Range of Algorithms**

Suggested Retail  
**\$395**



It Has To Be A Work Of...

**ART**

Applied Research & Technology  
215 Tremont Street  
Rochester, New York 14608  
716-436-2720  
Telex: 4642793 ARTROC

Circle #052 on Reader Service Card



**SERIESTEN** Nothing is quite so disappointing as an unfulfilled expectation. For fifteen years the people who make sound mixing desks have told you that they were going to build you a fully automated mixing desk. Just the thoughts of such a machine are enough to get your creative juices flowing.

Remember...Instead of what you've asked for, others have only given you fader and mute automation. No one but Harrison has ever given you more. Some have lulled you with complex machine control systems. Others have tantalized you with preliminary DSP systems. Many have offered you no more than a fast line and a low price.

Now, Harrison offers you something refreshingly different. It's absolutely what you have asked for, what you've been

promised, and we're calling it Series Ten. Series Ten is the world's first fully automated mixing desk. Everything is automated, dynamically, with frame accuracy.

Harrison has redefined the way mixing desks are made in order to accomplish what others have been unwilling even to attempt.

The front panel controls are inputs for a unique and powerful multiple processor system in each Series Ten module. Your commands from the front panel update a comprehensive data base which controls all parameters of the signal handling system of the Series Ten.

Because the Series Ten is always controlled from this data base, we can accurately reproduce even the most subtle nuance of your work anyplace there is a Series Ten mixing





desk, anytime.

There are no VCAs in a Series Ten mixing desk. We found it necessary to develop a whole new family of audio control devices and techniques to accommodate the extraordinary requirements of Series Ten.

The signal handling system is capable of giving you back your mix exactly as you originally heard it on any Series Ten mixing desk. It accomplishes this without ever passing your precious signal through anything other than state-of-the-art amplifiers and digitally-controlled attenuators, ever.

Series Ten from Harrison—It's what you wanted.

*imagine*  **Harrison**

Harrison Systems, Inc. • P.O. Box 22964  
Nashville, TN 37202 • Telephone (615) 834-1184 • Telex 555133

Circle 40 on Reader Service Card

ABSOLUTE





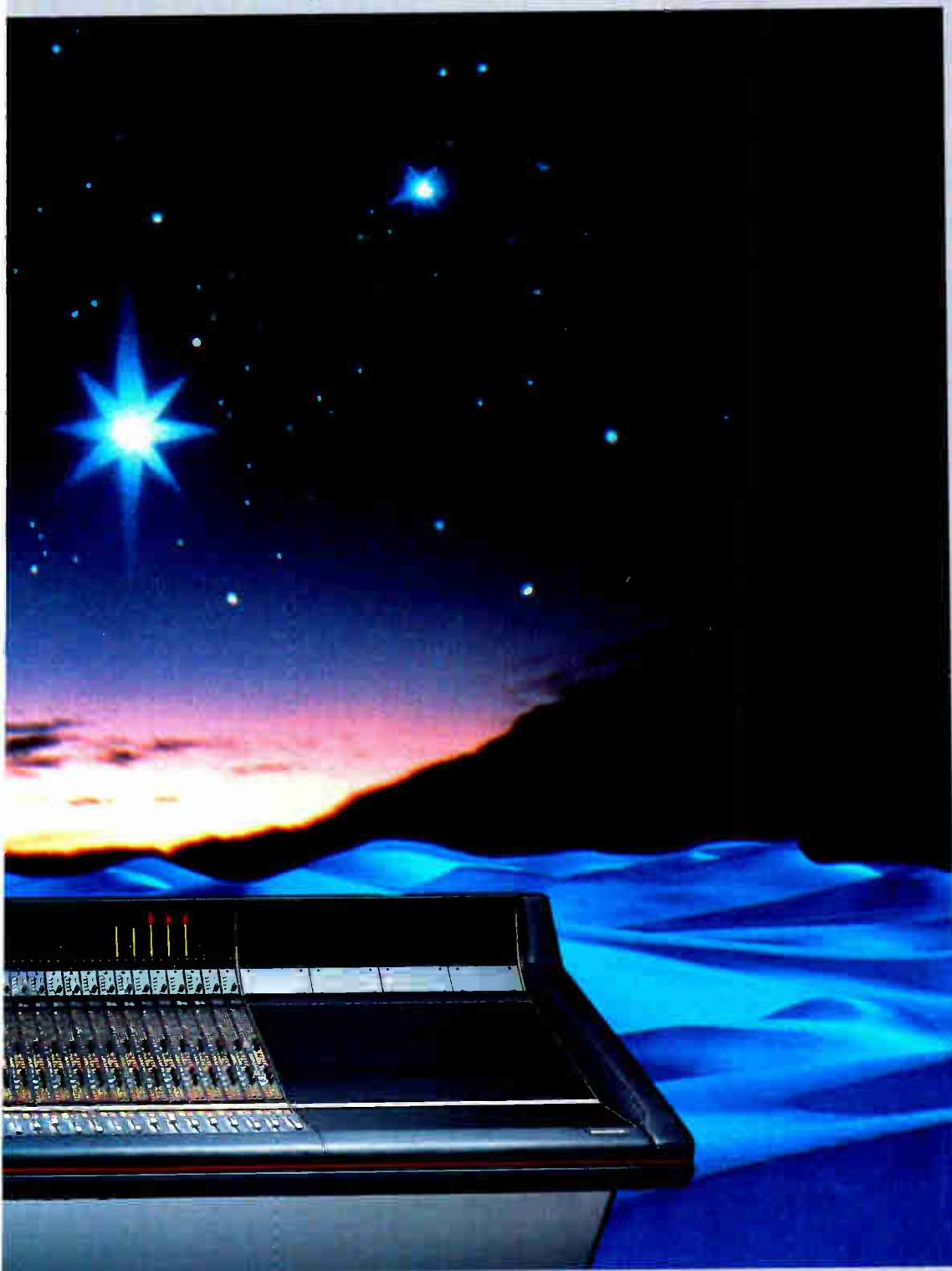
After logging many solo musical miles, and a multitude more with the likes of Frank Zappa, David Bowie, Paul Simon, Laurie Anderson, King Crimson, and the Talking Heads, guitarist/producer Adrian Belew decided to check in for a sample of Royal Recorders' fabled royal treatment. His experiences with the studio began in earnest with work on his album "Desire Caught by the Tail", and went on to include group efforts with a new band, The Bears. Today, Adrian admits it was love at first sight, and to consummate the relationship, he has joined the Royal court by becoming their artist/producer in residence.

Besides their formidable array of equipment capable of recording 80 independent tracks, Adrian enjoys the natural beauty surrounding Royal Recorders at Southern Wisconsin's Americana Lake Geneva Resort. Formerly one of Playboy's premier Midwestern clubs, recreational accommodations ranging from golf to skiing, plus a complete physical fitness center are available at the Americana, and are at the complete disposal of Royal Recorders' clients.

"Creatively, the atmosphere here is perfect, especially if you work best away from the trappings of normal hectic life," Adrian says. "Add to that the copious amounts of the best equipment around, a studio with unparalleled acoustics, and a managing staff that couldn't be more cooperative, and I feel confident in saying that there is no finer studio."







desk, anytime.

There are no VCAs in a Series Ten mixing desk. We found it necessary to develop a whole new family of audio control devices and techniques to accommodate the extraordinary requirements of Series Ten.

The signal handling system is capable of giving you back your mix exactly as you originally heard it on any Series Ten mixing desk. It accomplishes this without ever passing your precious signal through anything other than state-of-the-art amplifiers and digitally-controlled attenuators, ever.

Series Ten from Harrison—It's what you wanted.

*imagine*  **Harrison**

Harrison Systems, Inc. • P.O. Box 22964  
Nashville, TN 37202 • Telephone (615) 834-1184 • Telex 555133

ABSOLUTE

# VIVA LE STUDIO!



PHOTO: NEOFILM MONTREAL

Andre Perry Video Command Center

by Linda Jacobson

On the edge of a lake-dotted mountain town lies Le Studio, a world-famous hideaway that musicians cross nations and oceans to visit. The people who run Le Studio are themselves transported from all over the world—Great Britain, the United States, Israel, and the cities of Canada. Their guests speak French and English, not to mention the languages of music, video, film and television.

Le Studio is the brainchild of producer Andre Perry, who, some say, wants to create the Taj Mahal of the recording and production industry. At the very least he has created the poshest and most technically sophisticated facility in Canada. Perry's musical

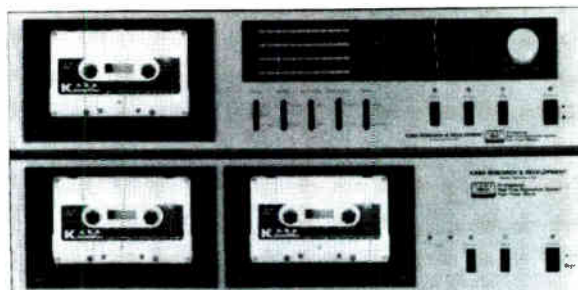
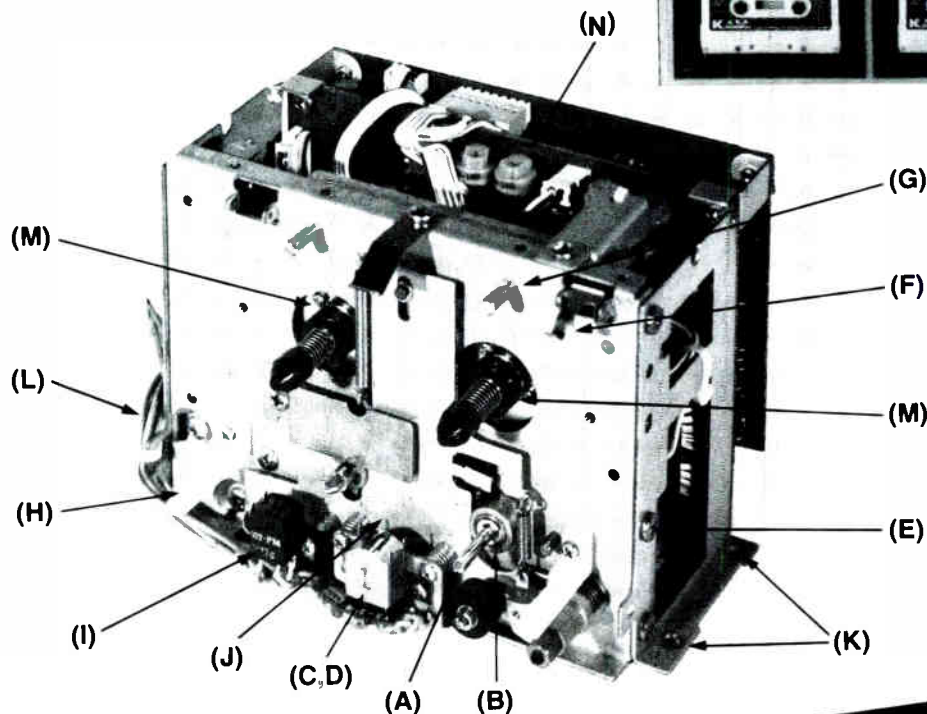
career began in the '50s. He was a jazz drummer in Quebec who particularly appreciated the art and science of recording. In 1962, Perry opened a basement studio in suburban Montreal and set about establishing a reputation as a creative, technological wizard. After John Lennon and Yoko Ono asked Perry to record "Give Peace a Chance" during their 1969 "Bed-In" at a Montreal hotel, the growing recognition of Perry's talent paved a path to Le Studio. He set it up in '74 on a 300-acre estate an hour north of Montreal, amidst the ski resorts of Quebec's Morin Heights.

Today, Andre Perry's 48-track Le Studio and his newer venture, Andre Perry Video, are Morin Heights' largest income earners. The region's restaurants and bars have grown accus-

tomed to serving famous pop and rock faces who have frequented Le Studio, such as the Bee Gees, Chicago, Cat Stevens, Bryan Adams, Rush, and Asia. David Bowie recorded his *Tonight LP*, The Police their *Synchronicity* album, and Sting, his *Dream of the Blue Turtles* here. In Le Studio itself, dozens of gold and platinum records adorn the walls. The 1350 sq. ft., futuristic-looking studio is set in a structure so plush, contemporary, and innovative that it's been featured in an interior design magazine. The cedar-walled building has curving, pastel pink walls, lush interior landscaping, finely finished oak trim and skylights. The guest accommodations are appointed with VCRs, fireplace, grand piano, video games, jacuzzi; even a housekeeper. The complex overlooks Perry's own



## A TOUR THROUGH THE UNIQUE 10,000 HOUR LIFE TRANSPORT



No. 1 of a series —

Some reasons why KABA, the ultimate in real time and 2X  
**CASSETTE DUPLICATION**  
IS ATTRACTING SO MANY USERS (and customers to those users)



KENNETH A. BACON ASSOCIATES  
Toll Free (800) 231-TAPE

24 Commercial Blvd., Novato, CA 94947  
in CA call (415) 883-5041

**A** — Extra large diameter capstan results in a stiffer beam, less deflection. Larger circumference means better traction, less tape slippage.

**B** — Ball bearing capstan results in less wear, longer life.

**C** — Dedicated record-only head eliminates compromises made in multi-purpose head designs.

**D** — Sendust head is rated at 3000-5000 hrs. life.

**E** — Massive flywheel armature of printed circuit brushless DC motor and the capstan are one direct-drive assembly.

**F** — Cassette interlock switch stops capstan motor when there is no cassette in the transport.

**G** — Stainless steel reference points assure precision alignment of cassette shell.

**H** — Locking guides grip cassette firmly against lower alignment surfaces.

**I** — Erase head is programmable to erase side A, B or both.

**J** — 3-point head mount plate keeps heads firmly locked after setting but allows easy front adjustment or replacement without removing transport.

**K** — Modular transport comes out easily by removing 4 screws and disconnecting 4 connectors.

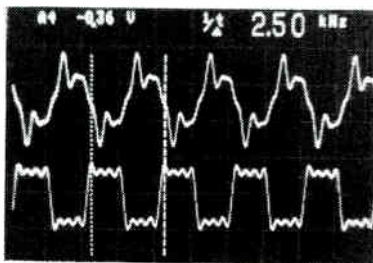
**L** — Head cable assembly detaches with 4 color-coded connectors.

**M** — Direct drive, brushless DC printed circuit motors provide take-up, hold-back and rewind torque.

**N** — All transport function electronics are contained in the transport module assembly.

Circle #059 on Reader Service Card

# FATIGUED by DIGITAL?



Commercial digital multi track 2.5kHz square wave response of 3 channels cascaded with standard anti-aliasing filters (top) and Apogee linear phase filters (bottom)

Whether your digital system is tape or tapeless the sound you hear is colored by harmonic dispersion in your existing low pass filters.

Retrofit the Apogee linear phase pin-compatible filters in your digital machine and hear the difference.

**APOGEE**  
ELECTRONICS CORPORATION  
1517 20th St., Santa Monica, CA 90404 (213) 828-1930

Circle #060 on Reader Service Card

# STRATE GATE

BUILT LIKE A BRICK  
HOUSE

- Attack time from 2 microseconds to 0.4 seconds
- World's fastest gate
- Hold time between 5 milliseconds and 5 seconds
- Release between 5 milliseconds and 3 seconds
- Audio inputs and outputs are via electronically balanced XLR's
- Internal or external sourcing
- VCA-based gates

**Electrospace**  
Electrospace Developments Limited The Sound of Quality

Exclusive U.S. Agent:  
Peninsula Marketing & Imports  
21213 B Hawthorne Blvd., Suite 5086  
Torrance, California 90509 USA  
Telephone: (213) 373-1009

Circle #061 on Reader Service Card



Andre Perry (right) and Yael Brandeis put Le Studio on the Montreal Stock Exchange, with the help of Rene Jarry (left), VP of Geoffrion Leclerc brokerage.

Lake Kateri. No, it doesn't come cheap, but then again, the Canadian dollar is weaker than the American dollar, and there's no sales tax in Canada.

The major reason for Le Studio's success, says Perry, is his good relationships with people. These people include not only clients (whom he prefers to call "guests"), but his talented, 40-member staff. They're all here because of Perry's ability to predict the needs of the production market; another reason why Le Studio is a leader.

A couple of years ago, Perry's foresight whispered "video," and Andre Perry Video was born. Located in a separate building, the video operation interfaces completely with the audio center next door. A technical director, creative director, two Bosch FGS-4000 operators and two Quantel Paintbox operators—along with Perry himself—provide the talent and skills necessary to produce dazzling video projects for music, TV, and commercial clients. Montreal recording artist Michel Lemiux went there to conceptualize a video, which Le Studio actualized; they tracked and mixed the music, shot Lemiux's performance on the video facility's 30' x 37' shooting stage, spectra-keyed it on-line (using the Ampex AVC 33 Production Switcher), created backgrounds (using the Bosch and Paintbox), and then edited it (on an ISC Superedit 41). Says Perry of the ethereal computer animation that characterizes this and other projects: "The people doing it are becoming more sensitive, more poetic. If Bach would be around, or Stravinsky, or any of the great composers, they would use it."

Since opening two years ago, Andre Perry Video has created many music videos, major commercials, network television IDs and promos, and industrial video programs, and edited a one-hour TV special for the Kennedy Foundation. The video side of Perry's business has grown so quickly that it now accounts for 80% of the company's sales.

This past year, Perry installed some equipment that further enhances his video facility—Canada's first Quantel Mirage video effects unit, and an option-packed Synclavier. To help raise funds for these and other enhancements, the Andre Perry Group Canada, Inc. went public last August, offering over one million shares at \$3.50 per unit on the Montreal Stock Exchange. Within two days, 3000 investors snapped up the issues. (Those investors included Le Studio employees, who received interest-free loans from their boss so they could enjoy some trading activity.) As a result of the sale, the Andre Perry Group invested three million dollars in studio renovation and new gear.

To accommodate the Synclavier, Le Studio had to transform one of their two lounges into a Synclavier Suite. This suite—Le Tapeless Studio—handled three major projects in its first month of operation: a musical, multimedia presentation starring Michel Lemiux, sponsored by the Canadian government; sound effects creation and soundtrack mixing for *Dynamen*, a CBC network TV series (29 half-hour shows); and the soundtrack for a CBC-TV gangster movie, *And Then You Die*.



---

## Some say that Andre Perry wants to create the Taj Mahal of the record- ing and production industry.

---

Lately Le Studio's been hosting a lot of synthesizer-based bands. Thanks to the recent addition of a machine room, they can now bring all their keyboards and MIDI toys into the control room. In fact, the popularity of synths, programming, and MIDI pre-production has changed the nature of Le Studio's booking schedule.

Yael Brandeis, executive vice president of the business, who's been working with Andre Perry since 1965, told *Mix*, "We've done a lot more Canadian acts this year than we've ever done before. One reason is because we're doing many more shorter sessions. Before, Canadian acts couldn't get in here because they wanted short sessions and we were always booked for months at a time by international artists. But now, because the bigger acts are doing more pre-programming on synthesizers, they're doing shorter sessions. So there's more of a turnaround. This gives the Canadian acts more opportunity to come in here."

Canadian acts who have booked Le Studio in the past year include Glass Tiger, Corey Hart, who recorded *Steals the Fire* there, Kim Mitchell (whose *Shakin' Like a Human Being* went platinum in Canada) and Montreal artist Luba. As you read this, Men Without Hats are in Le Studio.

Le Studio is not only located in a resort, but in a region where two distinct cultures, French and English, live side by side. Add to this the recording artists who visit from all over the world, and you have a cultural melting pot.

When asked to differentiate Le Studio from other recording facilities in the States or London, chief engineer Paul Northfield spoke about the artists' use of technology: "There are people that take the high-tech approach to

music, and those that are more traditional, Nashville types, that don't do wild things with sounds. That's the simple, refined, elegant approach. English bands are more concept-oriented—they're not always great groove players, so in the studio they tend to use innovative approaches and more experimental sounds. North American acts have a much better player's base, so in America the engineering supports more solid musical arranging. American bands can play clubs a lot and work to get rhythm sections that really smoke. That happens much less in England, so they do more crazy things to make up for the fact that they have great ideas but can only play with two fingers. In Le Studio, we see more of that style, because we have so many English acts through here, and because I'm English."

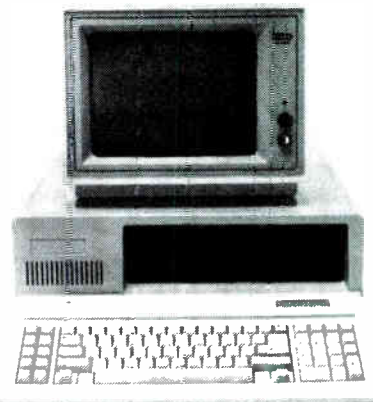
Northfield emigrated to Canada eight years ago at age 23 from London, where, as an engineer, he freelanced and also worked at Advision. His past clients include Yes and ELP. Soon after his first visit to Le Studio while freelancing for Polygram, he was asked by Perry to return for good.

Northfield also programs keyboards, a talent he developed while helping Geddy Lee program Oberheim sounds for five different Rush albums which Northfield engineered. Later, while guest engineer Hugh Padgham handled Bowie's *Tonight* project, Northfield programmed the synths for it. The fact that his job includes sound design and programming brings up another reason he's committed to Le Studio.

"We bounce ideas off each other and inspire each other," he says. "When we do music that involves graphics stuff, we have big discussions to organize what type of music tracks will work best with what effects. We did a bank commercial that had a completely synthesized score and completely synthesized graphics, using the Bosch. It was really fun to design sounds to match the visuals."

Northfield, who calls himself "somewhat bilingual," engineers many projects which include French voice-overs or vocals. He says, "the French have a really different culture, and this gives you a more balanced look at people in general. For example, the French have an incredible love of food, which affects their entire approach to life. Even in the lowest budget sessions, they'll take three-hour dinner breaks and spend large fortunes eating. Whereas with some English sessions, where people can afford to spend fortunes on food, they order in pizza."

"The French have a real spirit for living—they're more poetic and emo-



Complete with midi interface

## More than just a Sequencer.

**F**inally a serious sequencer for the midi Musician. *Computer Music Systems* specializes in IBM compatibles. With over 10 years experience in the music and computer business, we have the advantage of being able to design a complete midi visual sequencing system for you.

This is no bare bones system either! The CMS system has an unparalleled list of features too numerous to list in this ad.

Call for the complete brochure and start your serious midi system today!

Call Toll Free  
**800-322-MIDI**

**CMS**  
COMPUTER  
MUSIC  
SYSTEMS

714/594-5051

382 N. Lemon Ave., Walnut, CA 91789

Circle #062 on Reader Service Card



*If a tree falls in the forest, chances are you won't hear it if you're in Le Studio.*

tional in the way they write, and lyrics are really important to them. Far more significant than lyrics are in English music. The French are more interested in making a statement. But their language doesn't groove, so it's much harder to sing rhythmically, which affects the way the music works best. Some of the best stuff is where the romanticism and poetry of the language is really integrated in the music. This changes the way you work in the studio. For a long time, with French music you had to put up the vocals really loud at the expense of everything else. But their music is maturing and their arranging techniques now are more appropriate for the language, so that's changing."

There's another important difference between recording in the States or London and recording in Canada—money. Americans can save between 10% and 30% when they work in Canada.

This was the point made by Yael Brandeis, when we asked her to compare Le Studio with recording facilities outside of Canada. She adds, "Otherwise, the equipment is the same. We've got the SSL, the Urei speakers, the JVC digital recording, the Studer 24-track, the same kind of equipment that you see anywhere else. What makes one studio distinguished from another is the way it's set up, the attitude of the people, the players behind the system. How people are received, how they're treated. But otherwise there's no basic difference, we are so close to each other, Canada and the United States."

Brandeis states that Le Studio's philosophy is to offer not only technical talent and support, but a large variety of integrated, creative services which are all interactive. "When a project comes here, the whole studio is devoted to it," Brandeis says. "Our people

## *Perry's dream is to set up a string of facilities across North America, interconnected by satellite.*

work together with the artists and the producer, and the whole staff contributes to the project without holding back. Just the fact that somebody has taken the effort to come all the way out here warrants that.

"Above everything else, people are our most important resource. Our system is very flexible and easy to live with, so there's a very positive attitude here. You don't feel like, oh well, another hour up, time for the next session.

"Also, we have a reputation for being ahead of our time in audio, and we're continuing that in video. Not only in technology, but visually, in the working atmosphere, the way everything is laid out. We're very systems-oriented; it's not a bunch of rooms, each room doing its thing. It's very harmonious. Most of our projects go through every room—we shoot something on the shooting stage, then it goes into computer graphics for background, then into the Synclavier room for sound effects, and then to the audio studio for music. Then we edit it all in post-production. Each element is part of a whole. We're going to continue that in Washington."

Andre Perry's original focus was musical recording; but as the industry changes, so does Le Studio. Witness

the advent of a video production facility and Synclavier, and the move into soundtracks and computer graphics for advertising, television, and corporate markets. Adapting to change is what keeps you up front.

Now, Perry's dream is to set up a string of similar facilities across North America, all interconnected via satellite, which Perry says is "the wave of the future." His first step is in the direction of the U.S. capital, a move that surely will augment his international clientele. The new Andre Perry facility in Washington D.C. opens this summer.

The world's first communications supermarket is the new Mediaplex in Washington, a few blocks from the White House. Mediaplex is located in the three-towered Lafayette Center, which also includes a glass-domed, special events facility. Mediaplex will be the home of various technical facilities, supplies, and talent, a place where you can shop for any kind of communications piece, from TV commercial to teleconference to four-color brochure. The goal of Mediaplex is to attract film and video production facilities and talent to Washington. Its flagship tenant is, of course, Andre Perry.

Washington's no musical town, so the Andre Perry Group will focus on video production and post-production. The Group's team of video experts includes VP and general manager Douglas Weiss, a Washington resident and former Capitol Video president, and director of engineering John W. Nash, another Washingtonian, formerly with CBS-TV. Perry and Brandeis will join them often. The Group recently finalized architectural plans for a video, computer graphics, and audio post-production facility that they claim rivals any in L.A. and New York. It will offer videotaping and multi-track digital recording, half-inch and one-inch video editing, a Synclavier suite, film-to-tape transfer, and tape duplication. The whole shebang will be linked by satellite to Le Studio.

Once the Washington facility is up and running, the Andre Perry Group begins work on their next outpost. A year ago they had plans for a video facility in Austria, but decided against it, primarily because of communications difficulties. Today, although they will say they're looking for a second site in the States, Brandeis adds, "We're not ready to announce where. Things change so quickly in this business." She did say that it *wouldn't* be in a major metropolitan area; "Look at New York and Los Angeles—there's enough there already. This business is becoming decentralized, and that's our head space." ■



# KAWAI Acoustic Pianos with MIDI



## Built from the ground up.

Kawai...the world's leader in acoustic piano technology proudly introduces the music industry's FIRST line of factory equipped MIDI acoustic pianos.

Kawai's MIDI control design isn't some MIDI "add-on" or "after thought" arrangement. MIDI specifications include velocity response, channel and tone patch number assignment, variable split point setting, and programmable memory presets that store and recall all parameters at the touch of a single button. The two independent MIDI channels can be controlled in either split or dual mode: enabling individual control of up to 32 MIDI instruments. Best of all — these fine Kawai acoustic pianos have MIDI designed and

built-in AT THE FACTORY from the ground up.

So if you've always wanted to direct a veritable orchestra of sound right from your piano, the time has come. Visit your nearby Kawai dealer today for a demonstration; and realize your dream of making modern sounds the way you've always made traditional ones...from the keyboard of an exciting new Kawai acoustic piano with MIDI.

**Kawai America Corporation**  
Department MX  
P.O. Box 0438  
24200 S. Vermont Ave.  
Harbor City, CA 90710-0438

**KAWAI**  
The Master Builder

# EUROPEAN MANUFACTURING

## and the World Market

by Al Swanson

Brighton, England, is a charming Victorian resort city, overlooking the English Channel, altogether a wonderful spot to hold the International Broadcasting Convention. The city has plenty of boutiques, beer, bed & breakfasts, and a beautiful beach. It also has an occasional bombing, like at the 1984 IBC, when the Prime Minister was staying at the Grand Hotel (on other business). But Mrs. Thatcher had other things to do this time, and all was tranquil.

The scene *inside* (the Metropole Hotel—the venue for most of the exhibits) was somewhat less placid, for the IBC is one of Europe's largest trade shows, halfway between SMPTE and NAB—in scope if not in real estate. This is to say, everyone who's anyone in the industry shows up.

I was there also, to soak up (in addition to the aforementioned beer) rumors, gossip, and any other information I could regarding the state and future of all things audio and video on the Continent, plus implications for the same in the U.S.

Whew. Handling such an unwieldy subject requires a few organizational constraints, so I will break, roughly, my comments into three areas: how the present market in Europe is constituted; how European manufacturers propose to satisfy this market while maintaining some level of worldwide influence; and how this all translates into specific products for the near and not-so-near future.

To begin with, the European market for audio and video products is dominated to a large degree by government-run broadcasting networks, with many of their policies and practices established internationally. Equipment purchases made by such organizations have a great impact on manufacturers. (Independent studios have comparatively little influence—even though the aggregate monetary value of their purchases is considerable, the *individual* clout quotient is proportion-

---

"For a Swiss company, Studer is considered to be relatively large, with some 1500 employees. Sony, on the other hand, might have that many engineers working on a single project."

---

ately low.) Moreover, those who authorize purchases for the mega-broadcasters are most often several bureaucratic steps away from those who pay the bills (and, in any case, the money

spent is the taxpayers', not the stockholders'). Thus, there is no particular impetus for the suppliers to keep hardware costs low. It is much more important for them to meet complex international specifications. Then, too, it should be noted that these purchasing personnel are generally engineering types who have risen through the ranks—which is to say that they may not have been on the front line of hardware use for several years. As a consequence, there is a strong tendency to emphasize familiarity over innovation.

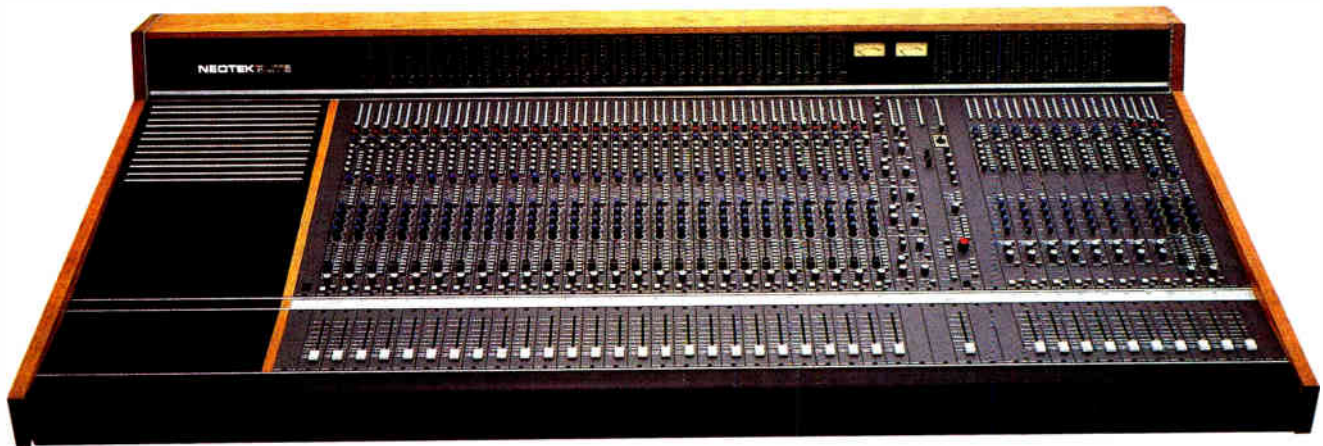
(There are, of course, pluses and minuses to all this. On the one hand, we can see that engineering creativity takes second place to bureaucratic requirements. On the other, the system frees broadcaster Smith, for instance, from having to keep up with broadcaster Jones in terms of the number of new toys he has.)

Now, how does this affect European domestic manufacturers, who, nevertheless, wish to be worldwide players? Item: The world's largest market for A-V products is North America. Item: A major segment of that market is made up of independent studios who "need" new gadgets, new fodder for the hype machine, on almost a monthly basis. Item: "Purchasing agents" for these studios are more often than not the owners of said institutions. Taking all this into account, it obviously behooves any would-be world player to take into account novelty, hype value, and low cost—all of which are, to the North American market, considered at least as important as *performance*, and much *more* important than *longevity*.

But low-cost hardware with frequent bell-and-whistle updates is precisely what traditional mainline European manufacturers are not geared up to produce. Says Marcel Groos, audio-video products manager at Kudelski (most famous for the manufacture of Nagra tape recorders), "We are, to put it bluntly, incapable of building anything other than exceptionally fine equipment that performs very well



# flexibility...



Audio consoles were once designed for particular applications. You decided up front what type of clients you were going after, and then picked a console accordingly, keeping your fingers crossed that the clients would approve.

Today things have changed. A studio's survival requires flexibility. A console built for music recording becomes cumbersome when faced with video post or MIDI dates.

These challenges are met by the design of **ELITE**. A true dual-channel system delivers the flexibility you demand in a package that is easily understood. Direct Digital Interface connects the digital logic system of the console directly to the GPI lines of any video editor, and with MIDI Direct you can slave the console to a sequencer just as if it were a synthesizer. The console itself provides sixty-four input faders and thirty-two sends to handle the most complex date.

Compare the **ELITE** to any other console. You'll find an operating system that goes far beyond the limitations in other designs and sonic performance which extend the reputation of Neotek consoles as the best in the world.

Prepare for the future. Join the **ELITE**.

**NEOTEK CORPORATION**  
1158 West Belmont Avenue, Chicago, Illinois 60657 312-929-6699

© 1985 NEOTEK CORP

Circle #008 on Reader Service Card

indeed for many years and costs a lot of money."

A main concern is the lack of flexibility. "For a Swiss company," says Studer's Bruno Hochstrasser, "we are considered to be relatively large, with some 1500 employees. Sony, on the other hand, might have that many engineers working on a single project. On a development level, how can we compete with that?"

Stefan Kudelski himself acknowledges the problem: "We do not have the production capacity needed to build large numbers [of tape recorders], and we do not have the engineering staff necessary to develop many different products at the same time. Cost is only a question of numbers. Therefore, what we build will never be cheap, and we must be prepared to concentrate on only a small part of the market."

"Specifically," continues Groos, "this means that we are planning to go after the 'elite market' [i.e., television and major post-production studios] in a big way. However, there are some potential problems with this. We have always been able to market our products on the basis of our reputation. But because our reputation is not as well known in this 'elite market,' it will be necessary for us to learn to sell things to it. And this is where we do not have

a lot of experience."

Of course, development of "elite" products demands a massive R&D expenditure—particularly when the window of marketability is small, which is often the case with broadcast equipment. A competitor can reasonably say, "Sure, they have the best product today, but why not wait until next month, when you can get from us an even more advanced product?" And the risk is high. Hochstrasser points out that Studer needed to go in with Sony in the development of DASH technology, because "besides the benefits of technology sharing, we could not afford to decide by ourselves on the format, only to have the world choose something else before we could finish building a machine."

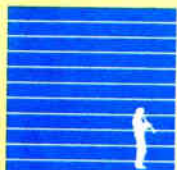
This fact of economic life would seem to favor large, vertically integrated conglomerations, although it doesn't always have to. According to Neve's marketing director, John Andrews, sometimes smallness is advantageous. "There are three parts to the development of a commercially successful product. First, you have to identify a market niche, secondly you create something to fill it, and thirdly, you have to sell it. It is true that a very large engineering staff is desirable during the second stage, and a well organized marketing department is

necessary during the third, but discerning a need in the first place is often the province of individual visionaries. Neve has always been good at identifying the needs of the user early on. Also, to begin work on a new desk, for instance, does not in our case require running a bureaucratic maze before final approval is given."

Nevertheless, Neve now feels compelled to play it both ways, and recently became a subsidiary of the multinational electronics giant, Siemens. Neve's digital console, while admittedly fulfilling an important need (and giving the company a large head start in DSP technology), represented R&D expenses far in excess of what was originally anticipated—and, more to the point, what could be comfortably handled. Now, says Andrews, Neve will have the capital backing necessary to continue and expand its DSP research, plus access to the parent company's own considerable technical and worldwide marketing experience.

Neve is not the only company trying to solve its R&D dilemma via the merger route. A cross-cultural case in point is the purchase by AKG, a financially stable, conservative old-line (European) manufacturer, of the small-but-innovative (American) Ursa Major. What AKG has gotten from

TECHNICAL SUPPORT



FOR YOUR CREATIVITY

669 Bedford Road  
Carlisle, Massachusetts 01741



B L U E J A Y  
R E C O R D I N G S T U D I O

(617) 369-2200

Circle #064 on Reader Service Card



this union is access to the smaller company's microprocessor technology; the ADR Digital Reverb and Effects Processor now carries the AKG logo.

A somewhat different, more "open," marriage was recently formalized when Solid State Logic joined the UEI group, Quantel's parent corporation. Neither company needed the other's money—both have a strong profit ratio and excellent capitalization. Rather, the chief benefit of their merger is expected to be one of long-term engineering synergism: Quantel is planning for, and has largely implemented (with its Paintbox and Harry systems), the "all-digital video studio," while SSL has become increasingly involved with console designs useful for video post-production.

Our recent buzzword among console manufacturers is the "virtual," or "assignable," console, wherein many control elements (potentiometers and switches) are programmable, so that many functions can be assigned, often remotely, to one control set or another. This type of design has widespread desirability to broadcasters, and most builders catering to this market have developed or are developing some sort of assignable console. However, SSL's founder Colin Sanders points out that this sort of design is fraught with problems if realized using available analog technology. On the other hand, there is a long technical row to hoe (mostly having to deal with real-time operational speed) before large, complex desks, such as SSL is famous for, can be implemented with all-digital designs. Therefore, SSL is heavily committed to digital signal processing R&D—which, not-at-all-incidentally, will undoubtedly be abetted fruitfully by a corporately conjugal relationship with Quantel, although each company says that it will pursue largely separate careers for the near-term.

Yet another cooperative approach was taken by two certifiable behemoths. Unfettered by U.S. antitrust considerations, Bosch and Philips have formed a third company, Broadcast Television Systems, mostly for the purpose of promulgating MAC (Multiplexed Analog Components) television transmission standards. A little background is in order. Accepted MAC standards would encompass several different, yet theoretically compatible schemes (even with existing receiving equipment)—to accommodate cable transmission, direct (satellite) broadcast, pay TV, multiple high fidelity audio channels, and high definition television (HDTV). Therefore, two purposes could be fulfilled: 1) to execute an evolutionary end run around the limitations of PAL, SECAM

(the present European), and perhaps even NTSC (the present North American and Japanese) systems; 2) serve as a pan-European way to avoid having to accept the Japanese MUSE system for NDTV (which, like NTSC is based on 60 Hz, and is therefore not compatible with the 50 Hz European systems).

Thus, the idea behind the formation of BTS, is, according to a Philips executive, that with two industry heavyweights cooperating in the development of standards, hardware, and research, enough momentum will be established that all other manufacturers and governments will necessarily fall into line. This would have the further effect of encouraging European producers to come up with more and

better programming, since neither MUSE nor ordinary NTSC material (the U.S. is currently the major worldwide software supplier) will translate particularly well into 50 Hz high definition MAC.

What does this all mean for the future? Well, it does not mean that prices of European products are coming down much if any, nor does it mean that the high-brow Continental manufacturers are likely to begin catering to the basement studio trade, although some of their products may begin featuring a few more items useful to the masses. What is probable is that we will see much more international market research (don't be surprised if you are regularly asked about your

## NOISE REDUCTION FOR UNDER \$10.

MIXING CONSOLES

SWITCHES

MICROPHONE  
CONNECTORS

SNAKE CABLES

BATTERY CONTACTS



ALL PLUGS & JACKS  
(XLR, PHONE, PHONO, DIN, MIDI, ETC.)

PATCHBAYS

FADERS, POTS

TERMINAL STRIPS

SPEAKER TERMINALS

### CRAMOLIN®

Even the finest equipment in the world can't guarantee a noise-free recording. One "dirty" connection anywhere in the electrical path can cause unwanted noise or signal loss.

### "MORE THAN A CONTACT CLEANER"

**CRAMOLIN®** is a fast-acting, anti-oxidizing lubricant that cleans and preserves all metal surfaces, including gold.

When applied to metal contacts and connectors, **CRAMOLIN®** removes resistive oxides as it forms a protective molecular layer that adheres to the metal surfaces and maintains maximum electrical conductivity.

#### CRAMOLIN® - USED BY THOSE WHO DEMAND THE BEST:

Bell & Howell  
Boeing  
Capitol Records

Hewlett Packard  
John Fluke Mfg.  
McIntosh Labs

MCI(Sony)  
Motorola  
NASA

Nakamichi  
RCA  
Switchcraft

SINCE 1956

## CAIG LABORATORIES INC.

1175-O Industrial Ave., (P.O. Box J) - Escondido, CA 92025-0051 U.S.A. • (619) 743-7143

Circle #065 on Reader Service Card

# LEARN MUSIC THE WAY ARIF MARDIN DID. AT BERKLEE.



"Each time I go back to Berklee, I am reminded of how the school continues to offer its students the very best whole music experience. There is so much of today's music in the curriculum—and their studio facilities are outstanding. Berklee students are trained for a career in today's music industry. The student-alumni roster speaks for itself."

—Arif Mardin

*Grammy Award-winning producer and arranger Arif Mardin is Vice President of Atlantic Records and has produced albums for Chaka Khan, Howard Jones, Aretha Franklin, and Melissa Manchester, among many others.*

Berklee has helped produce thousands of professionals who now enjoy successful careers in all aspects of today's music business. For a current catalog, contact the Berklee Admissions Office. Call toll-free: 1-800-421-0084 (9 a.m. to 5 p.m. EST). In Massachusetts call: 617-266-1400. Or write: BERKLEE, Admissions Office, Dept. MX10, 1140 Boylston Street, Boston, MA 02215.

## Berklee

COLLEGE OF MUSIC  
Where careers in music begin.

Circle #066 on Reader Service Card

studio habits), and more mergers or other cooperative ventures involving both R&D and commercial aspects. Regarding that latter point, any major new product, such as a digital video recorder, will likely be "second-sourced" before its development begins, since no manufacturer wants to be left twisting in the ill wind of white elephantitis. As far as broadcast standards are concerned, look for increasing polarization between Europe on the one hand, and Japan/North America on the other; this polarization will undoubtedly affect equipment design and marketing strategies to some extent—just how much remains to be seen.

Concerning specific products, here are my predictions:

- 1) New professional digital recorders from the Continent are probably at least a year away, may well be a completely different format than what we've seen so far, and possibly be announced by a consortium of manufacturers.
- 2) The development of full-capability digital disc (and other quasi-random access) recorders will proceed slowly, lagging behind similar efforts in America and Japan, although editing systems using Winchester-type disc storage are coming on strong, largely for use in video sweetening studios.
- 3) We will see several assignable, or partially assignable, analog consoles during the next few months, with small-scale digital desks following closely. Larger digital units will be rare for several years.
- 4) Software intensive items, such as reverberation and delay units, and other effects boxes, may not, unlike the mass produced units from elsewhere, get less expensive, but will attain high plateaus of versatility as the control programs become increasingly sophisticated.

Finally, regarding the future of the industry as a whole, a few comments by Colin Sanders seem to sum things up well: "The traditional distinctions between audio recording studios, video production houses and broadcast production facilities have begun to fade. As each industry seeks to diversify the services it offers and to improve its technical and competitive capabilities, it has begun to 'borrow' the techniques and the technology developed by the other sectors. As a result, a much broader and larger service industry is emerging, which could be described as the communications productions industry. It embraces all aspects of sound and vision production for electronic media." ■



# ALL THAT GLITTERS IS GOLD



## TANNOY®—S.G.M.—SERIES

---

Tannoy is pleased to release their SGM-Super Gold dual concentric studio monitors, a take off from their world famous SRM-Super Red Monitors released in 1979.

With the new SGM series of studio monitors the Tannoy research team has produced some radical new thinking in the area of the much studied crossover network. The result

is a range of loudspeakers which seem traditionally based and bare 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).

---

### JOIN THE GOLD RUSH AT YOUR NEAREST TANNOY DEALER!

**TANNOY NORTH AMERICA INC.**

300 GAGE AVE., UNIT 1, KITCHENER, ONT., CANADA N2M 2C8 (519) 745-1158, TELEX: 06955328

Circle #067 on Reader Service Card

**Most mikes  
make you  
sound like  
everybody  
else.**

**You deserve  
something  
a little  
better.**

This little mike gives your talent a big hand. Because it insures that your vocal sound comes through intact. The carefully-tailored response curve anticipates typical sound systems and hall acoustics. With an ATM5R the audience hears more YOU and less microphone.

With its advanced cardioid construction, the ATM5R gives your sound mixer more freedom to raise your vocal level to whatever loudness the music demands. Regardless of nearby monitor or side speakers. And without having to resort to drastic EQ "tricks" that distort your tone. Or the need to "force" your voice, just to be heard.

The ATM5R easily handles your dynamic range. And it doesn't change your vocal sound when you stray a little off mike. Yet it firmly rejects sound coming from the back. The ATM5R concentrates on you, so that you can concentrate on your performance.

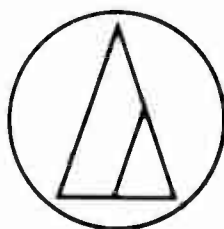
Handling and cable noise are also better controlled than with most microphones. And the small size of the ATM5R means less bulk between you and the audience.

You know how great you sound in the studio. Now you can put that same sound on the road. Test sing the ATM5R at your Audio-Technica sound specialist today.



**The new  
ATM5R  
Condenser  
Cardioid**

Actual  
size



**audio-technica**

1221 Commerce Drive, Stow, Ohio 44224  
(216) 686-2600

Circle #068 on Reader Service Card

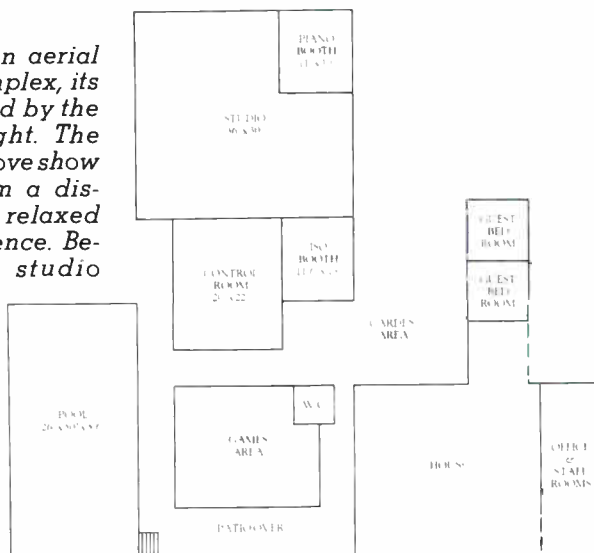




# AIR MONTSERRAT

## THE BEST OF BOTH WORLDS

*Above left is an aerial view of the complex, its layout identified by the diagram at right. The other photos above show the studio from a distance with its relaxed poolside ambience. Below is recent studio client Boy George, working on his debut solo album at Air Montserrat.*



**Y** by Diana Wendling and Stacy Baird

ou wouldn't think that a great amount of work could be accomplished while tucked away on an island in the West Indies. You might conclude that a tropical clime and secluded beach coves are not exactly conducive to cutting edge creativity and on-schedule productivity. You could completely dismiss the notion of spending time and money in an environment where the temptation is to lie in the sun rather than lay down a track. But then, you wouldn't be fully aware of how a particularly unique and fully self-contained recording studio operates. You would, in a sense, be missing the boat

—CONTINUED ON PAGE 109



PHOTO: ANDRE CSILLAG





After logging many solo musical miles, and a multitude more with the likes of Frank Zappa, David Bowie, Paul Simon, Laurie Anderson, King Crimson, and the Talking Heads, guitarist/producer Adrian Belew decided to check in for a sample of Royal Recorders' fabled royal treatment. His experiences with the studio began in earnest with work on his album "Desire Caught by the Tail", and went on to include group efforts with a new band, The Bears. Today, Adrian admits it was love at first sight, and to consummate the relationship, he has joined the Royal court by becoming their artist/producer in residence.

Besides their formidable array of equipment capable of recording 80 independent tracks, Adrian enjoys the natural beauty surrounding Royal Recorders at Southern Wisconsin's Americana Lake Geneva Resort. Formerly one of Playboy's premier Midwestern clubs, recreational accommodations ranging from golf to skiing, plus a complete physical fitness center are available at the Americana, and are at the complete disposal of Royal Recorders' clients.

"Creatively, the atmosphere here is perfect, especially if you work best away from the trappings of normal hectic life," Adrian says. "Add to that the copious amounts of the best equipment around, a studio with unparalleled acoustics, and a managing staff that couldn't be more cooperative, and I feel confident in saying that there is no finer studio."





Adrian Belew...



gets the Royal treatment.



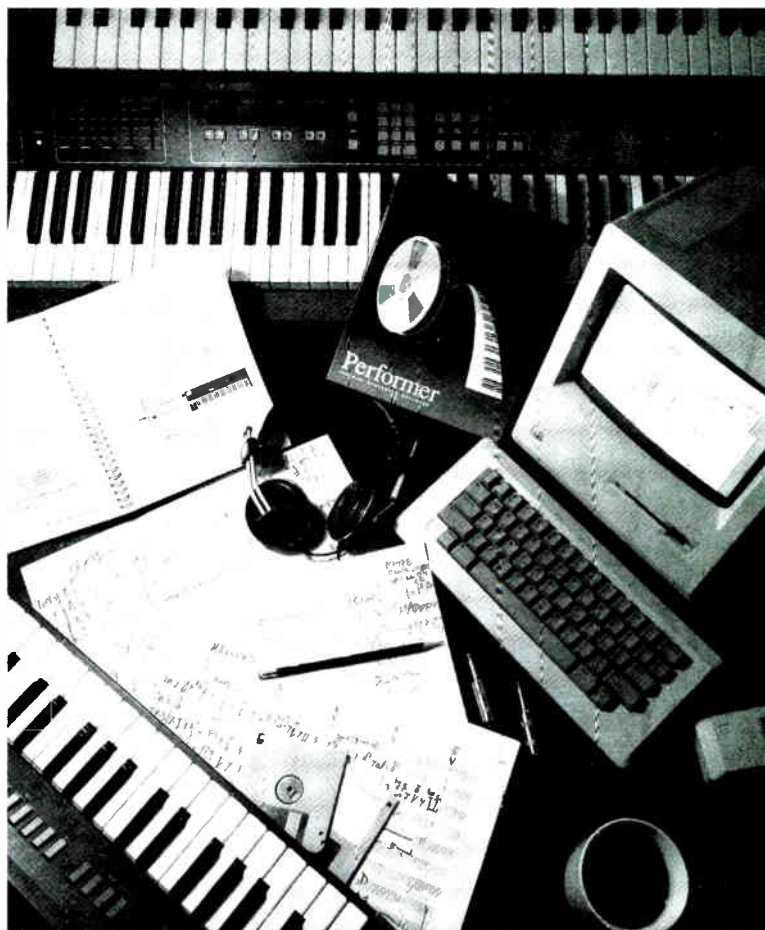
LAKE GENEVA, WI (414) 248-9100

Circle #069 on Reader Service Card



They searched for the best sequencer...and found

PERFORMER



**P**erformer for the Apple Macintosh has the specs to set it apart from other sequencers: 50,000 note capacity, 200+ tracks, 480 parts-per-quarter note beat resolution, real-time and step recording of *all* MIDI events as well as MIDI sync and song pointer.

**W**ith Performer, you can edit single events, entire regions—even *non-linear data*—including durations, velocity, controller information and more. Create crescendos and fades in seconds. Program filter sweeps. And change from legato to staccato and back. Performer is also compatible with the Professional Composer manuscript printing program.



Circle #070 on Reader Service Card

**A**nd best of all, Performer's on-screen "tape deck" controls are easy to use. If you're familiar with multi-track recording, you'll be cutting tracks within minutes.

**K**eyboard Magazine says, "...the attention to musical detail evident throughout Performer is remarkable." Find out why Performer is the sequencer of choice for music professionals everywhere. Write for a free brochure or call us at (617) 576-2760 for the Performer dealer nearest you. Our address is Mark of the Unicorn, Inc., 222 Third Street, Cambridge, MA 02142.



# YOU'VE BEEN WAITING FOR!

## Studio Designers and Equipment Suppliers

More than 500 studio designers, acoustical consultants, audio/video equipment dealers and installers. The most comprehensive directory of its kind.

### *Chips Davis* LEDE DESIGNS, Inc.

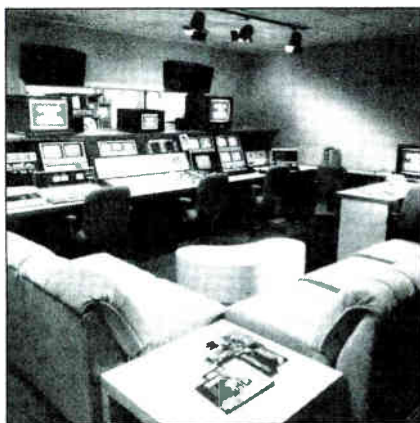
CHIPS DAVIS LEDE DESIGNS, INC.  
Las Vegas, NV and San Rafael, CA

CHIPS DAVIS LEDE DESIGNS, INC.  
SD, AC  
3364 Clandara, Las Vegas, NV 89121  
(702) 731-1917  
Contact: Chips Davis  
2169 Francisco Blvd. J-1, San Rafael, CA 94901  
(415) 459-2888  
Contact: Jerry Jacob  
Services offered, credits, specialization: Chips Davis designed and built the first LEDE control room in 1978 in Las Vegas, NV. Since then, Davis has defined and set the standards for LEDE and LEDE-type monitoring environments. Davis' research and continued commitment to the scientific principles involved have made him the acknowledged expert in the field. Among Chips Davis-designed facilities you might wish to visit are: Tarpan Studio, San Rafael, CA; Crescendo Audio Productions, San Juan, PR; Radio-TV Caracas, Caracas, Venezuela; Audio Archives, Syracuse University, Syracuse, NY; NBC Training Center, NY; ABC, NY; Sounds Inter-

change, Toronto, Ont., Canada; MBC Center, Winnipeg, Manitoba, Canada; NBC PPS 1, CRs 2 and 4 Burbank, Brooklyn 2, Brooklyn, NY (Bill Cosby Show); National Public Radio, Washington, DC; JBL, Columbia Academy, Vancouver, BC, Canada; Granny's House, Reno, NV; Starstudio, Hamburg, W. Germany. Services offered: design, consultation, seminars and training, TDS™ measurements, electronic and product design consultation, marketing and management services as well as on-site supervision and turnkey services.

## Video Production and Post-production Facilities

Nearly 1,000 video production companies, including post-production/editing, on-location production, and audio post-production for video. Listings give personnel, rates, and equipment.



PRODUCERS COLOR SERVICE, INC.  
Southfield MI

PRODUCERS COLOR SERVICE, INC.  
VIDEO COMMUNICATIONS  
DIVISION  
VPP, OLVP, VPP/E, APPV  
24242 Northwestern Hwy., Southfield, MI 48075  
(313) 352-5353  
Manager: Bruce Calmer  
EQUIPMENT  
Synchronizer: EECO, Time-Lynx  
Switchers/editors: (4) CDL 480; GVG 300/3.  
Cameras: (2) Sony BVP-3; Ikegami EC35, ITC 730; Bosch FDL60 telecine.  
Audio recorders: Ampex MM-1200, ATR-100; MCI 110B; Otari MTR-90 II, MTR-20, MTR-12; Dolby and dbx noise reduction.  
Audio mixers: Solid State Logic SL-4000B, 24-channels and SL-6000E, 32-channels (computer assisted consoles).  
Other major equipment: (5) on-line edit salons (CMX 3400/3400 A-M?); (3) ADOs; 2-channel Vidifont V; Quantel Paint Box; Ultimatte; (2) audio post suites with SSL consoles; 1-inch VTR mix-to-

pix; full complement of EFX; (3) stages, 150 x 100, 50 x 60, 40 x 40.  
Rates: On request.  
Direction: Commercials—national and network—for major Midwest agencies, automotive and retail. High-end industrial production and post-production for tape and videodisc release (affiliated with Technidisc Inc.) High quality film-to-tape transfers. Ten years video EFX experience. Six years experience in audio post for video.

Important note: At the request of listees, some entries in the Directory include only company name, address, phone and person to contact. However, the majority of facilities include detailed information as shown.

## Audio, Video and Music Manufacturers

The names, addresses and phone numbers of over 500 manufacturers of equipment for professional applications in audio, video and music production.

KLIPSCH AND ASSOCIATES, INC.  
P.O. Box 688, Hope, AR 71801  
(501) 777-6751  
Contact: P. Woody Jackson, Nat'l Sales Manager  
Products manufactured: Audio

## See order form next page



Important note: At the request of listees, some entries in the Directory include only company name, address, phone and person to contact. However, the majority of facilities include detailed information as shown.

# ORDER NOW AND SAVE ONE-THIRD OFF THE RETAIL PRICE!

CP6800

**SOUNDTRACS**

A British company dedicated to the design and manufacture of one of the broadest ranges of mixing consoles in the World. We offer ten individual models in over fifty versions to suit your specific requirements.

The choice is yours.



#### Features

SMPTE/EBU Time Code triggering of patches, events and muting. Channel, group and monitor muting automation. Eight external events controllers. Accuracy to 1/25th seconds. Visual display of track sheets and console status. Floppy disk storage of information. Optional hard copy information print out.

#### Applications:

**24 Track Recording.**  
**Video Post Production.**  
**Broadcast Production.**  
**Theatre and 'On Air'.**

#### Exclusive U.S. distributor:

**AKG ACOUSTICS, INC.**  
77 Selleck Street, Stamford, CT 06902  
Telephone: (203) 348-2121



# APRS AT 30



PHOTO DOUG MCKENZIE

by Terri Anderson

**T**he formation of the APRS in 1956 announced that recording in the UK was an established profession in its own right, and that it expected of itself professional standards—to be first defined and then adhered to.

It, incidentally, made it clear that there was a sufficient number of professional studios to form such an association, and that those studios were taking a long-term and wide-angle view of their business. The APRS has since grown to encompass professional audio equipment manufacturers as well as studios.

Many British professional recording businesses see the APRS as a collective voice with which to speak to government, press, clients and other industry organizations. The first time that the collective voice was heard was when the APRS, very soon after its formation, successfully fought the imposition of purchase tax on the discs which were originally part of a client's recording package (they paid for recording time and a certain number of

finished discs).

These days, APRS is speaking with the British Overseas Trade Board (from which it consistently wins the right to administer government subsidies for overseas exhibitions), with the Department of Trade & Industry; with the Treasury on the always vexed topic of high tax levels, which push recording artists into living abroad and recording outside the UK; and most recently with the British Home Office and Department of Employment. These latter discussions have been on the subject of permits for overseas (non-EEC) visitors wanting to work in UK studios; the APRS is pressing increasingly hard for shortening of the eight-week application period, which studios believe is particularly deterring many U.S. artists from working in the UK.

The APRS long ago perceived a need for a regular course to which working engineers could come for a refresher. The APRS Engineers Course is now in its 13th year. It has lengthened by popular demand from the original two days to a week, and has added more hands-on workshops cov-

ering such topics as digital editing, test equipment, analog mastering in comparison with digital, noise reduction systems, classical and pop mix-down. Several years ago an extra preliminary evening was added, for those who wanted a quick trip back to Ohms Law and other basics—useful for those who were about to plunge into five solid days of instruction and demonstration in a language which was foreign to them.

The mix of "students" varies from year to year, but has increasingly leaned heavily towards film and TV and radio broadcast, video production, and maintenance (from equipment manufacturers). Education chairman, Clive Green, believes that this reflects the little attention paid to audio engineering training in the visual media; and the whole industry's voracious appetite for maintenance skills.

The APRS Engineers Course is held at the University of Surry, which offers the only Tonmeister degree course in the UK. The long association with the University led to the setting up of the annual Jacques Levy Memorial awards

*Photo above: APRS executive members and VIPs gather for the opening reception at the London Olympia 2 Exhibition Centre (seated, left to right): Leo Abse, member of Parliament; Peter Brook, member of Parliament; Bill Foster, APRS Committee member; Philip Rase, APRS member; Bob Hine, APRS Committee member; (standing, left to right) Edward Masek, APRS treasurer and organizer of '87 APRS show; Phil Dudderidge, APRS Committee member; John Deacon, director general BPI; Stuart Nevison, APRS member; Colin Sanders, APRS member; George Martin, APRS president; Mike Beville, APRS Committee member; Tim Cuthbertson, APRS Committee member; Ken Townsend, APRS Committee chairman. (Not shown is Philip Vaughn, new APRS secretary general, who replaces Edward Masek.)*

# Why Leading from Tape

## **The Synclavier Tapeless Studio™ is available today!**

Start with the industry-proven Synclavier Digital Audio System. Now available with a 32 track digital sequence recorder, 32 megabytes of high-speed RAM and on-line storage support for up to 2000 megabytes of sampled sounds.

The Direct-to-Disk System can be added at any time. Operation is simple! The system is controlled by the Synclavier's keyboard control panel. The easy-to-use interface provides all standard tape recorder functions, and more!

The finest quality 16-bit A/D conversion processes and output filtering technology available are combined with variable "stereo" sampling rates of up to 100kHz to offer audio fidelity unequalled by any other system.

The Direct-to-Disk System stores large volumes of digitally coded information on formatted winchester hard disks. Once stored, this information can be accessed randomly at any point in the recorded program material. This random access technology provides virtually instant rewind and sophisticated editing features that would be impossible using conventional technology.



Finally the true potential of the digital studio can be realized. No longer are you limited to storing and retrieving digital data on media designed for outdated tape technology. The Direct-to-Disk Multi-Track Recording System by New England Digital uses multiple, high capacity, winchester hard disk drives for data storage.

When comparing the Direct-to-Disk System with standard tape-based digital recording there is a dramatic difference. For example, the Direct-to-Disk System does not need error correction. Its negligible error rate contrasts sharply with tape-based digital recorders which require error correction software to compensate for error rates of up to 180,000 bits per hour. This dramatic difference in data integrity illustrates New England Digital's commitment to quality and audio fidelity.

Expanding the system is simple. Start with as few as 4 tracks for overdubbing vocals or live instruments onto your Synclavier sequences; add on more tracks and recording time as needed. With configurations of up to 16 tracks and almost half an hour of recording time large multi-track projects can be easily completed. With the Synclavier's advanced hardware and software architecture, you always have the option to expand.

We invite you to stop by any one of our offices, worldwide, for a complete demonstration of this amazing product.



# Studios Have Changed to Direct-to-Disk™

**"The Synclavier,® combined with the new Direct-to-Disk™ Multi-Track Recording System, provides us with the most compact, reliable, upgradeable, and high fidelity recording environment available today. For video-post, Foley, or music recording, it's a product which offers us tremendous benefits, both sonically and financially."**

Murray Allen, President, Universal Recording Corporation

Using today's advanced computer technology, the Synclavier Tapeless Studio now offers more than just the ability to synthesize and create music. Now you can record "live audio"

simultaneously onto as many as 16 separate tracks. Dialogue, effects, vocals, and/or music tracks can be SMPTE synchronized and edited with word processing-like control at a single workstation.

The fidelity, speed, and flexibility of this system make the Synclavier Direct-to-Disk Multi-Track Recording System truly the most powerful digital audio system available today.

For a complete information package, including an audio cassette demonstrating the Synclavier and the Direct-to-Disk System, send \$5.00 to New England Digital Corporation, Box 546, White River Junction, Vermont 05001.



Synclavier is a registered trademark of New England Digital  
Direct-to-Disk and The Tapeless Studio are trademarks  
of New England Digital  
© 1986 New England Digital  
All specifications are subject to change without notice.

Seattle: 206/623-7860 London: 202-4366 Tokyo: 416/868-0528

Circle #075 on Reader Service Card

to Tonmeister students—in memory of the late long-serving and inspirational chairman of the association.

The APRS has also produced a handbook for engineers, *Sound Recording Practice*, now being revised for publication of its third edition with Oxford University Press.

The Technical sub-committee, chaired by Bill Foster (of London's Tape One Studios), also organizes pro-audio demonstrations and discussions on technical subjects for members. Recently Dolby demonstrated SR; and another event invited debate on DATs and what standards and formats the UK industry would want in the next generation of machines—and the first generation of professional DAT cassette recorders. Another seminar which created considerable interest was on ambisonic surround sound, organized jointly by the APRS and the British Technology Group.

Competition must be, and be seen to be, free; any hint of collective price fixing is out of the question. The APRS, however, can and does regularly exhort members to charge the full and proper rate in relation to facilities offered. There is full recognition of the need for the trade body to encourage an understanding that higher standards must mean higher rates—and those, in turn, mean better service from APRS member studios.

In the service of these members the APRS organizes occasional credit control meetings. These are deliberately informal—open to all studio members, with no taking of minutes and an understanding that business discussed will remain privy only to those who attend. Cases of non-payment by clients are taken up by the executive at the request of member studios (it has long been found that a suitably stern letter from the secretary is extremely effective). Beyond that, the APRS has written a set of terms and conditions, copyrighted to the Association, designed to ensure that studios have control over masters until fees are paid. This document was a positive response to a test case fought (and eventually lost on appeal) by one member studio against a debtor.

For the Association's manufacturing members there are two main, and major, aids to export offered. One is the annual sponsorship of UK companies to attend the European AES Convention. This is done with the APRS undertaking a "Joint Venture" with the British Overseas Trade Board, to collect and distribute practical details for exhibitors. The other main thrust to the export drive is the annual APRS Show. It grew from a very small gathering of manufacturers, on APRS



PHOTO: PAUL SPENCER

*DIR satellite link live from London's Abbey Road Studios to the States. Left to right: DJ Jack the Wack, engineer Tim Mulligan, producers Richard Robinson and Peter Kauf, Sting, and host Lisa Robinson.*

initiative, in 1968 through four changes of venue, to the biggest-ever show at London's Olympia 2 exhibition hall in 1986. This show is attracting more exhibitors annually, and pulling in increasing numbers of overseas visitors. APRS '86 had 2500 square meters of stand space booked five months before the event. The show is the greatest recurring achievement of Edward Masek on the Association's behalf, and after retirement he has agreed to act as consultant organizer for at least one further show.

"The UK has an exceptional recording studio and equipment base," says outgoing APRS chairman Mike Beville of Audio & Design (who is to be succeeded by Ken Townsend of Abbey Road Studios). "Embodied in APRS is a unique, friendly relationship between studios, producers and suppliers, based on mutual respect and a genuine concern for the well-being of the business as a whole."

## APRS MEMBERS LIST

### The Association of Professional Recording Studios of the United Kingdom

*Note: Studio track capability is indicated in parentheses before each listing.*

(24-48) **ABBEY ROAD STUDIOS**  
See also EMI Recording Studio:  
3 Abbey Road  
London NW8 9AY 01 266 1161

(24) **ABBOT STUDIO**  
1 Seahill Road  
Saughall, Chester 0244 881738

(24-48) **ADVISION LIMITED**  
23 Gosfield Street  
London W1P 7HB 01-580 5707

(24-48) **AIR RECORDING STUDIOS**  
214 Oxford Street  
London W1 01-637 2758

(24) **AMAZON STUDIOS**  
15D Sloppgate Lane  
Simonswood, Liverpool L13 4YA  
051 546 6444/0434

(24) **AOSIS**  
10a Belmont Street  
London NW1 01 267-4680

(24) **ATMOSPHERE RECORDING STUDIOS**  
6-10 Lexington Street  
London W1R 3HS 01-734 7443/4

(24) **AUDIO INTERNATIONAL RECORDING STUDIOS LTD.**  
18 Rodmorton Street  
London W1H 3FW 01-486-6466

(2) **BARCLAYS BANK**  
(Video Communications Section)  
Park House, Station Road  
Teddington, Middx TW11 9AD 01-943 2421

(24-48) **BATTERY STUDIOS**  
14 16 Chaplin Road  
London NW2 5PN 01-459 6899

**BBC TRANSCRIPTION RECORDING UNIT**  
Kensington House  
Richmond Way, London W14 0AX  
01 743 1272

(24) **BERRY STREET STUDIOS**  
1-3 Berry Street  
London EC1 01 253 9719

(24) **BERWICK STREET RECORDING STUDIOS LTD.**  
8 Berwick Street  
London W1V 3RG 01-734 5750

(16) **BGS PRODUCTIONS**  
Lathame Road  
Strathaven, ML10 6EE 0357 21130

(24-48) **BRITANNIA ROW RECORDING STUDIOS LTD.**  
35 Britannia Row  
London N1 8QH 01 226 3377

(2) **CABALETTA RECORDING**  
Fowlmores House, High Street  
Fowlmores, Royston, Herts SG8 7SU  
0763 92453

(24-48) **CBS RECORDING STUDIOS**  
31 37 Whitfield Street  
London W1 01-636 3434

(24) **CHIPPING NORTON RECORDING STUDIO**  
28 30 New Street  
Chipping Norton, Oxon OX7 5WJ  
0608 3636

(2) **CLAUDIO RECORDS**  
124 Lower Richmond Road  
London SW15 1LN 01-785 3666

—CONTINUED ON PAGE 120





# SERIOUS

High quality, professional performance, versatility, rugged metal construction with performance and feature extras. It's AMR System I.

- 4 Channel Multi-Track Cassette Recording System
- 28 dB of Headroom
- Solid metal construction
- Overdubber™ Multi-function pedal remote control (optional)
- Monitor Mixer section
- 6 x 4 mixer for tracking and overdubbing
- 10 x 2 mixing capability for mixdown
- 3 Band EQ (with sweepable mid-range) on each input
- Peak Hold Level Indicators
- Electronic Stopwatch
- Insert "patch" jacks on each input
- Pan Pots on each input (assignable to tracks 1-2, 3-4, or L-R)
- Overdub, Ping-pong and mixdown without patching or changing signal cables
- Mute switch on each input
- Auxiliary master send control
- Assignable Auxiliary master return
- High Power internal headphone amplifier
- Dolby® B and C Noise Reduction
- Solenoid operated transport function controls
- Zero Stop and Zero Play
- Interconnecting cable harness (included)
- Manufactured in the USA.

If you are serious about your multi-track recording, the AMR System I offers the features and performance found in large and expensive professional recording equipment. See the AMR System I at your local AMR multi-track dealer and hear the difference.

Circle #073 on Reader Service Card

Dolby® is a Registered Trademark of  
Dolby Laboratories Corporation

## AMR™

AUDIO MEDIA RESEARCH / ROUTE 2, HWY. 503/DECATUR, MS 39327 / (601) 635-2244

**"the American  
Sound"**

—FROM PAGE 118, APRS LIST

**(24-48) COMFORTS PLACE STUDIO**  
Comlorts Place, Tandridge Lane  
Nr. Lingfield, Surrey  
0342 892538 823046

**(24) CRESCENT STUDIOS**  
144 Walcot Street  
Bath BA1 5BL 0225 62286

**(24-48) CTS STUDIOS LIMITED**  
The Music Centre, Engineers Way  
Wembley, Middx HA9 0DR 01-903 4611

**(1) J.R.T. DAVIES**  
1 Walnut Tree Cottage  
Burnham, Bucks MK286 4811

**(24-48) EDEN STUDIOS LIMITED**  
20-24 Beaumont Road  
London W4 01-995 5432/3

**(24) EEL PIE RECORDING**  
The Boathouse, Ranelagh Drive  
Twickenham, Middx TW1 1QZ 01-891 1266

**(24-48) EMI RECORDING STUDIOS**  
See also *Abbey Road Studios*  
3 Abbey Road  
London NW8 9AY 01-286 1161

**(24) FARMYARD STUDIO**  
Bendrose House East, White Lion Road  
Little Chalfont, Bucks (studio) 02404 3773  
(office) 02404 2812

**(24) FITZ RECORDING STUDIOS**  
63 Charlotte Street  
London W1 01-636 4840

**(48) FLEETWOOD MOBILE**  
41 Kingswood Lane  
Warrington, Surrey CR3 9AB 01-651 5108

**GATEWAY STUDIO**  
1 Salcott Road  
London SW11 6DQ 01 350 0340

**(24) GENETIC SOUNDS**  
Wood Cottage, Streatly Hill  
Streatly, Reading, Berks RG8 9AB  
Goring (0491) 873042

**(24) GOOD EARTH PRODUCTIONS**  
59 Dean Street  
London W1 01 734 0864

**GREEN ROOM PRODUCTIONS**  
Pond Cottage, The Green  
Harefield, Middx UB9 6NP 0784-58793

**(2) GRIFFITHS HANSEN (RECORDINGS) LTD.**  
Sicom Conference Services  
69A Parkhall Road  
London SE21 8EX 01-670 9351

**(16) GROSVENOR RECORDING STUDIOS**  
16 Grosvenor Road, Handsworth Wood  
Birmingham 20, West Midlands  
021 356 9636

**(24) GUARDIAN RECORDING STUDIOS**  
26-27 Front Street  
Pity Me, Durham 0385 62396

**(24) GUERRILLA**  
16 Blomfield Road  
London W9 1AD 01-286 0642 &  
01-299 9224

**GUILD RECORDS**  
The Ware-house, Portsmouth Road  
Sond, Woking, Surrey GU23 7DB  
0483 223706

**HART STREET STUDIOS**  
4 Hart Street Lane  
Edinburgh, Scotland EH1 3RN  
031 557 0181

**(24) HOLLYWOOD STUDIOS**  
38-40 Upper Clapton Road  
London E5 8BQ 01-806 0071/4

**(24) HORIZON RECORDING STUDIOS LIMITED**  
Horizon House, Warwick Road  
Coventry, West Midlands 0203 21000

**(24) HYDEPARK RECORDING STUDIOS**  
120 Coach Road, Templepatrick, Ballyclare, Co. Antrim  
BT39 0HR, Northern Ireland 074-94 32711  
(evenings) 074 943162

**(16-24) ICC STUDIOS**  
(International Christian Communications)  
4 Regency Mews, Silverdale Road  
Eastbourne, Sussex BN20 7AB 0323 26134

**(24) IMPULSE SOUND RECORDING STUDIO**  
71 High Street East  
Wallsend, Northumberland NE28 7RJ  
0632 624999

**IRISH INTERNATIONAL STUDIOS**  
(Outlet Recording Studios)  
48 Smithfield  
Belfast 1, Northern Ireland 0232 22826/7

**(24) JACKSON MUSIC GROUP**  
The Studios, 13 Denham Way  
Rickmansworth, Herts 0923 772351

**(24-32) JACOB'S STUDIOS**  
Ridgway House, Runwick  
Nr. Farnham, Surrey 0252 723518

**(24) JAM RECORDINGS LIMITED**  
106 Tollington Park  
London N4 3RB 01-272 2906

**(24) DICK JAMES MUSIC LIMITED**  
James House, Sallsbury Place  
Upper Montagu Street, London W1H 1FJ

**(24) R.G. JONES STUDIOS**  
Beulah Road  
London SW19 3SB 01 540 9881

**(24) KINK PROPERTIES LTD.**  
84/86 Tottenham Lane  
London N8 7EE 01-340 7873/4757

**(16) KIRKLAND PARK STUDIOS**  
See *BGS Productions*

**(24) LANSDOWNE RECORDING STUDIOS**  
Lansdowne House, Lansdowne Road  
London W11 01-727 0041/2/3

**(24) LILLIE YARD RECORDING STUDIO**  
6 Lillie Yard, 19 Lillie Road  
London SW6 01-385 9299/6254

**(DISC) LINGUAPHONE INSTITUTE TECHNICAL SERVICES**  
Beaver Lane, Hammersmith  
London W6 9AR 01 741 1655

**(24-48) LIVINGSTON STUDIOS LTD.**  
Brook Road  
Wood Green, London N22 01 889 6558

**(2) LYRITA RECORDED EDITION**  
99 Green Lane  
Burnham, Bucks SL1 8EG 06286 4208

**(24) MAISON ROUGE RECORDING STUDIOS LTD.**  
2 Wansdown Place, Fulham Broadway  
London SW6 1DN 01 381 2001

**(24-48) MARCUS MUSIC UK**  
49 53 Kensington Gardens Square  
London W2 4BA 01-229 9595/7752

**(16-24) MARK ANGELO RECORDING STUDIO**  
27 Britton Street  
London EC1 01-251 2376

**(24) MARQUEE STUDIOS**  
10 Richmond Mews, Dean Street  
London W1 01 437 6731

**(8) MARTAK SOUTHERN LTD.**  
86 94 High Street  
Alton, Hants 0420 88011

**(24-48) MAYFAIR STUDIOS**  
1, A Sharpleshall Street  
London NW1 8YN 01 486 7746

**(8) MIDLAND FILM PRODUCTIONS**  
Premiere Studios, Harrison Road  
Birmingham, West Midlands B24 9AB  
021 373 0450

**(24) MILO MUSIC LTD**  
43-46 Hoxton Square  
London N1 6PB 01 729 4100

**(4) MULTICORD**  
1-3 Ravensworth View  
Dunston, Newcastle 0632 609209

**(24) MUSIC WORKS STUDIOS**  
23 Benwell Road  
London N7 7BL 01-609 0808

**(16) NETWORK MUSIC & MEDIA**  
Network House, 22A Forest Road West  
Nottingham NG7 4EQ  
0602 384714/708622

**(16) NORTHERN SOUND SERVICES LIMITED**  
Broad Chare, Quayside  
Newcastle-upon-Tyne NE1 3EB  
0632 26304/5

**(24) NUPTOWN RECORDINGS**  
Crutchfield Manor, Ascot Road  
Hawthorne Hill, Bracknell, Berks  
(office) 0344 885223 (studio) 0344-866059

**(24-48) ODYSSEY RECORDING STUDIOS**  
26-27 Castlereagh Street  
London W1H 5YR 01-402 2191

**(24) THE OLD BARN RECORDING STUDIO**  
39 Crompton Road, South Croydon  
Surrey CR2 7HD 01 680 9222

**(24) OLD SMITHY RECORDING STUDIO**  
Post Office Lane  
Kempsey, Worcs WR5 3NS 0905 820659

**(24) OLYMPIC SOUND STUDIOS**  
117 Church Road  
London SW13 01-748 7961

**(24) PARK GATE STUDIO**  
Calsfield, Nr. Battle, East Sussex TN33 9DT  
04246 2151/3394

**(24) PLUTO STUDIOS**  
36 Granby Road  
Manchester 1 061-228 2022

**(24) POLYGRAM STUDIO**  
Slanhope House, Slanhope Place  
London W2 01 402 6121

**(24) POWER PLANT**  
169 171 High Road, Willesden  
London NW10 01-451 3727

**(24) PRO LONDON WORKSHOP**  
15 Saint George Street  
London W1R 9DE 01 499 8686

**(24) PRT STUDIOS**  
40 Bryanston Street  
London W1 01-402 8114

**(24) 'Q' SOUND STUDIO**  
1487 Melton Road, Quornborough  
Leicester LE7 8FP 0533-608194/608813

**(2) RADIO LUXEMBOURG (LONDON) LIMITED**  
38 Hertford Street  
London W1Y 8BA 01 493 5961

**(16) RADIOTRACKS LTD.**  
35 Portland Place  
London W1N 3AG 01-637 2114  
(bookings) 01 580 5663

**(24) RAK RECORDING STUDIOS**  
42 44 Charlbert Street  
London NW8 01-586 2012

**(24) REDAN RECORDERS**  
23 Redan Place, Queensway  
London W2 4SA 01-229 9054

**(8) REDWOOD RECORDING STUDIOS**  
15 Neal's Yard Neal Street  
London WC2H 9DP 01-836 1825  
01 240 8568

**(16) (REL) STUDIOS**  
40 Sciennes, Edinburgh  
Scotland EH9 1NH 031-668 3366

**(24) RIDGE FARM STUDIOS**  
Capel, Nr. Dorking  
Surrey RH5 3HG 0306 711202

**(24) ROCKFIELD STUDIOS**  
Amberley Court  
Monmouth, South Wales 0600 2449

**(24) ROUNDHOUSE RECORDING STUDIOS**  
100 Chalk Farm Road  
London NW1 8EH 01 485 0131

**(24) SAIN (RECORDIAU)**  
Cyt Ilandwrog, Caernfon  
Gwynedd, Cymru 0286-831 111

**(24-48) SARM STUDIOS**  
Osborn House, 9-13 Osborn Street  
London E1 6TW 01 247 1311

**(24-48) SARM STUDIOS (WEST) LTD**  
The Zif Building, 8-10 Basing Street  
London W11 1ET 01 229 1229

**(16) SARNER AUDIO VISUAL**  
32 Woodstock Grove  
London W12 8LE 01 743 1228 (10 lines)

**(24) S A.V. STUDIOS LTD.**  
26 Harrison Street  
London WC1H 8JG 01 278 7893/5

**(24) SELECT SOUND STUDIOS LTD**  
Big M House, 1 Stevenage Road  
Knebworth, Herts SG3 8AN 0438 814433

**(24) SNAKE RANCH STUDIO**  
90 Lots Road  
London NW10 01 352 6194/8988

**(8) SNELGROVE'S**  
3 Third Acre Rise  
Botley, Oxford 08676 2733

**(24) SOHO STUDIOS**  
187 Wardour Street  
London W1V 3FA 01 437 2394

**SONET STUDIO LONDON LTD.**  
121 Ledbury Road  
London W11 2AQ 01-229 7267

**(8) THE SOUND DEPARTMENT**  
38 Niton Road  
Richmond, Surrey TW9 4LH 01-876 3620

—CONTINUED ON PAGE 123



普遍通用

# Universell

## Rethinking the synchronizer

That was our first step in unraveling the machine communication and control problems that complicate your work. What makes LYNX the only truly universal synchronizer and machine control interface is an innovative design that uses distributed processing and a unique approach to software architecture. TimeLine's U.S. technology is so advanced, LYNX actually overcomes the "impossible" language barrier between audio machines and video editors.

## Hands-on, not hands-and-knees

The transport synchronizer/resolver interfaces with your tape machine in one step through the front panel menu

No DIP switches, no rotary switches. No opening the unit to change ROMs. No complicated alignment procedures. Simply hook up the cable and push two buttons.

Even the LYNX can't repair tapes or transports. But when peripheral problems do occur, LYNX has diagnostic messages and status indicators to help you track them down and get back to work fast. LYNX even reads, generates, resolves and translates timecode and pilot

## Take control

Next time you catch yourself daydreaming about how easy life would be if your tape machines could finally talk to each other, try a LYNX. See how TimeLine's universal machine control interfacing, intuitive front panel operation and outstanding reliability (our first production unit is still in constant use) can make all your audio and video transports work together — and make them all work for you.

**TIME***LINE* TimeLine, Inc.  
270 Lafayette Street  
New York, NY 10012 USA  
(212) 431-0330



---

# **MIX, THE ONLY BPA-AUDITED PROFESSIONAL AUDIO AND RECORDING MAGAZINE, GIVES YOU MORE QUALIFIED BUYERS FOR YOUR ADVERTISING DOLLAR**

---

*Take a look at the numbers from our BPA audit statement for the six-month period ending June, 1986 (figures from May issue):*

- 31,302 qualified subscribers — more than any other pro audio magazine. (As of September, 1986, this number has increased to 31,771 — not counting nearly 7,000 copies distributed by audio/video retailers and newsstands.)
- 10,979 subscribers (35 percent) gave Recording Studio as their primary business.
- 4,103 subscribers (13 percent) were in Video/Film.
- 2,471 subscribers (7.9 percent) were independent engineers and/or producers.
- 2,157 subscribers (6.8 percent) were in Broadcast.
- 2,143 subscribers (6.8 percent) were in Sound Reinforcement.
- The 31,302 *Mix* subscribers were involved in a total of 53,716 business activities. This indicates both the diversity of the audio marketplace and the buying power of *Mix* readers.

DON'T TAKE OUR WORD FOR IT. If you're not currently advertising in *Mix*, call today for information on how you can make your advertising dollars go farther in upcoming issues of *Mix*.

---

**MIX — THE WORLD'S LARGEST AND MOST EFFECTIVE  
AUDIO AND MUSIC PRODUCTION MAGAZINE!**

---

National Editorial, Advertising and Business Offices: (415) 843-7901  
FAX: (415) 843-9540  
Southern California Advertising Office: (818) 709-4662



**Mix**  
THE RECORDING INDUSTRY MAGAZINE



—FROM PAGE 121, APRS LIST

(24) SOUND DEVELOPMENTS LTD.  
Spencer Court, 7 Chalcot Road  
London NW1 8LH 01-586 1271

(24) SOUTHERN STUDIOS  
10 Myddleton Road  
London N22 4NS 01-889 6166/888 8949

(24) SPACEWARD LTD.  
The Old School  
Stretham, Cambs CB6 3LD 035-389 600

(2) SPEECH PLUS RECORDINGS  
32 Pages Walk  
London SE1 4SB 01-231 0961/2

(24) STRAWBERRY RECORDING STUDIO (UK) LTD.  
3 Waterloo Road, Stockport  
Cheshire SK1 3BW 061-480 9711/2

(24) STRONGROOM LTD.  
The Bank, 120 Curtain Road  
London EC2A 3PJ 01-729 6165

(8) STUDIO REPUBLIC LTD.  
47 High Street  
Pinner, Middx 01-868 5555

SUTTON SOUND LTD.  
111A Westbourne Grove  
London W2 4UW 01-262 9066

(24-48) SWANYARD STUDIOS  
12-27 Swan Yard, Islington  
London N1 01-364 3737

(DISC) TAM STUDIO  
13A Hamilton Way  
London N3 01-346 0033

(DISC) TAPE ONE STUDIOS  
29-30 Windmill Street  
London W1P 1HG 01 580 0444

(24) TAPESTRY STUDIO  
67 First Avenue  
Mortlake on Thames  
London SW14 8SP 01-878 3353

(DISC) TAPE TO DISC SERVICE  
32 Schoolhill, Aberdeen  
Scotland AB1 1JX 0224 23557

(24) TERMINAL 24 RECORDING LTD.  
Unit 4, 9A Amelia Street  
London SE17 3PY 01-701 6644

J. WALTER THOMPSON CO. LTD.  
40 Berkeley Square  
London W1X 6AD 01-629 9496

(24) TMC RECORDING STUDIOS  
116 Mitcham Road  
London SW17 01-672 4108/01-672 8468

(24) TRILION VIDEO LIMITED  
36-44 Brewer Street  
London W1R 3EW 01-439 4177

(24) UTOPIA RECORDING STUDIOS  
Spencer Court, 7 Chalcot Road  
London NW1 8LH 01-586 3434

(24) VIDEOSONICS  
13 Hawley Crescent  
London NW1 8NP 01-482 2855

(4) WARREN RECORDINGS  
59 Hendale Avenue  
London NW4 01-203 0306

(24-32-48) WESSEX STUDIOS  
106 Highbury New Park  
London N5 01-359 0051

WESTLAND STUDIOS  
5-6 Lombard Street East  
Dublin 2, Eire 774229/778701/779762

(24-48) WEST SIDE STUDIOS  
Olaf Centre, 10 Olaf Street  
London W11 4BE 01-221 9494

(24) WEST 3 RECORDING STUDIOS  
Impress House, Mansell Road  
London W3 7QH 01-740 6060

(24) WINDMILL LANE RECORDING STUDIOS  
4 Windmill Lane  
Dublin 2, Eire 0001 713444

(24) WOOL HALL STUDIOS LTD.  
Castle Corner, Beckington, Nr. Bath  
Somerset BA3 6TA 0373 830731

(24) WORKHOUSE  
488 Old Kent Road  
London SE1 5AG 01-237 1737/8

(24) YELLOW TWO RECORDING STUDIOS  
11-13 Bamford Street, Stockport  
Cheshire SK1 3NZ 061-429 8480

# EFFECTS AUTOMATION

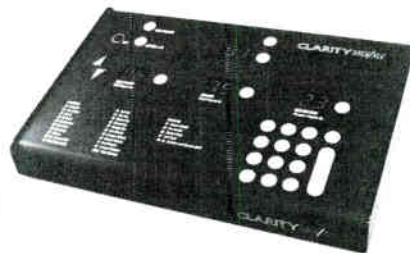
## THE NEXT CREATIVE WAVE.

The CLARITY MIDI/XLV is the professional interface for effects automation.

Whether you are an independent producer or large automated facility, that signature sound or time saving edge couldn't be more affordable.

The MIDI/XLV uses MIDI, the primary cross/company control protocol, to bring automation to the 224XL, 480L and other high-end signal processors.

*Fairlight, Synclavier and MIDI sequencer owners note: Use the MIDI/XLV as your link to the analog world with 8 channels of MIDI to control voltage conversion.*



### CLARITY: MIDI FOR THE PROFESSIONAL

Available in North America only through CLARITY • Nelson Lane, Garrison, NY 10524 • 914 424 4071 • Telex 4930810

Circle #122 on Reader Service Card

## One Stop Service Quality Products Timely Deliveries



Let the quality of your graphics reflect the excellence they can expect to find in your music.

Stoughton Printing can provide all your record and video related printing and packaging. Direct board record jackets, 7 and 12 inch sleeves, labels. The finest in UV Coatings. All done in house. CD booklets and inlay cards, posters, box wraps and any other graphic material you may need to promote your products.

If it's worth doing, it's worth doing right. Come to the source .... We're there when you need us.

## stoughton printing co.

130 N. Sunset Avenue, City of Industry, CA 91744  
From Los Angeles: (213) 686-2753  
(818) 961-3678

Quality Printing For The Record Industry Since 1965

© 1986 Stoughton Printing Co.

Circle #078 on Reader Service Card

# STRANGERS IN STRANGE LANDS

## The Joys and Perils of Overseas Recording

by Blair Jackson

It sounds like a dream assignment over the phone. After years of engineering in top Manhattan studios, you're contacted by an Italian band familiar with your work asking you to come to Milan to help them record their new album. It's a hard deal to resist—the money is more than generous, plus it offers an excuse to see the world, or at least Italy. No more overpriced Madison Avenue Italian shoes and flabby Upper East Side fettucine for you!

It sounds too good to be true—and unfortunately it is. In your excitement to tackle the assignment, you neglect to properly check out the Milan studio in advance and it isn't until you arrive at the first session that you learn that Studio Milano is perfectly equipped—for 1967, not '86. Fortunately you'd trained on that kind of ancient 8-track years ago, but even so, the monitors are a mystery, the outboard gear nil. It turns out the band doesn't speak English and has little studio experience. Still, you slog through it all like a pro and, remarkably, the record company is delighted with your work.

A month later you go home, just a bit broken and dispirited. A few pounds heavier but the proud owner of some great shoes, you vow that next time you work overseas you'll do things differently—if you go at all. Back in Manhattan, the Lexington Avenue subway has never looked so good.

• • •  
This is the stuff of (bad) fiction, of course (everyone knows that restaur-

rants on the Upper East Side don't survive if their fettucine is flabby), but the fact remains that recording in unfamiliar environments, particularly in foreign countries, sometimes can take on nightmarish qualities for American engineers and producers—not because there is anything inherently bad about working overseas, but simply because it is always a little unnerving to veer far from the places and equipment that are part of your world. Working in an alien recording environment is sort of like being forced to commandeer a car with a clutch you've never driven—usually you're in for a bumpy ride.

At the outset, so there is no misunderstanding, we should say that most technologically advanced nations possess recording studios—sometimes government-run, other times privately owned—that are equipped to make records that sonically rival anything coming out of the hit factories in New York and Los Angeles. There are those who would even argue that the best studios in London and Tokyo surpass the most advanced America has to offer, but this article isn't about superiority and inferiority. It is about preparation, acclimatization and lessons learned the hard way by Americans working outside the United States.

It is a relatively unusual occurrence for engineers to work outside the cities where they are based, let alone

overseas—rare indeed is the recording budget that allows the expenditure for such travel. But it does happen from time to time and the engineers we spoke with emphasized that the key to success in the occasionally strange situation was to keep a cool head and the ability to improvise. Alas, sometimes they also had to lower their exacting standards.

The engineers agreed that the most difficult situations arose out of physical problems with the studios. "One of the studios I used in Australia," remembers producer Harry Maslin (the owner of Los Angeles studio Image Recording), who worked "down under" with Air Supply and others, "was built right next to a railway station. We couldn't record strings or anything that required much quiet because every five minutes a train would go by. Another studio there was built under a book depository and people were always dropping huge loads of books on the ceiling of the studio. Another one was built right next to an exercise studio that played loud music all the time. It was really pretty bad all over. Some of it was a lack of perception about the kind of isolation a recording studio needs, and some of it was just miscalculation."

According to John Stronach, a top Los Angeles independent engineer who has worked with the likes of Alvin Lee, Jimmy Cliff (including the singer's best album, *Give Thanks*) and others, "the studios I saw in Jamaica were

—CONTINUED ON PAGE 148



# MOVERS & SHAKERS

---

## BRUCE LUNDVALL

---

His  
Kingdom  
For  
A Song



by Neal Weinstock

**H**e was high in the ranks of one of the world's largest record companies, and formerly on top of the biggest of the big. But Bruce Lundvall quit the presidency of Elektra/Asylum/Nonesuch to run a moribund jazz label and start a fusion label. Put in such stark form, this does not sound like a logical thing to do. Even identifying the labels—Blue Note, one of the greatest names in jazz, and Manhattan, which in a few short months of existence has put several hits on the charts—it's hard to understand the move. Unless, that is, you understand the man.

Lundvall has been a jazz fan since

---

*"I'm not just a  
lawyer or  
businessman—  
I'm a listener  
and a fan."*

---

he was in high school in Englewood, New Jersey, sneaking into Manhattan whenever he could to hang out at the legendary 52nd Street clubs. "Listening to Art Tatum and Bud Powell and Charlie Parker as a kid trained my ears," he says. "They were magical. They decided the direction of my life."

Lundvall remembers, "When I was 14, I went into Colony Records and bought my first 78s, and they were Blue Notes, by Monk and Milt Jackson."

When he was in college, Lundvall spent more time trying to play the sax than studying, but today he sadly admits his talents were more in being a listener than a player. He got a degree in business, and when he came out of the military in 1960 joined CBS Rec-

**DEAN BURT***Engineer*  
*dB PROD.*7248 Shoshore Ave., Van Nuys, CA 91406  
(818) 881-7241

Credits: Whitney Houston, George Benson, Jeffrey Osborne, Peabo Bryson, Teddy Pendergrass, Crystal Gayle, Stacy Lattisaw, Bryan Scott, Living Color.

**Services Offered:** Pre-production and production consultation, producing, engineering and programming.**TONEY CAMPBELL***Producer***RFO INTERNATIONAL**4651 Lochshin, Houston, TX 77084  
(713) 550-5470

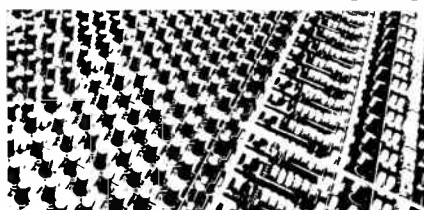
Credits: Al Campbell, Don White, Little John, RFO Posse, Toney Campbell, Reggae Fever Band, The Obidike Rappers, Obidike Kamau (Dub Poet).

**Services Offered:** Arranging, mixing, producing, promoting to pressing. Label and jacket design also available upon request**CARL CANEDY***Producer & Engineer***ROCK CANDY PRODUCTIONS**156 Fifth Ave. Rm. #623, New York, NY 10003  
(212) 477-5787; Contact: Bob Schwaid

Credits: Spreading the Disease, Anthrax, Feel the Fire, Overkill, Heavier than Thou, The Rods, Rolling Thunder, Atila, Possessed, Beyond the Gates, Hollywood, CFBC, The Beast is Back, Blue Cheer, Gone with the Wind, Rhett Forrester, Thrasher, Thrasher; Out of the Darkness, Jack Starr, Violence &amp; Force, Exciter, E.X.E., Slayer.

**Services Offered:** World class production; sensitive to artists goals. Arranging, publishing, computer assisted pre-production, MIDI sequencing/drum programming. If needed we will write with or for the artist, as well as help them find the right songs. Referrals. Looking for the strong new artists. Resume on request.**KEVIN H. CARLSON***Engineer & Producer***CARLSON PRODUCTIONS, INC.**1014 Shadowood Pkwy., Atlanta, GA 30339  
(404) 952-8459

# INDEPENDENTS



Credits: Available upon request.

**Services Offered:** At Carlson Productions, Inc. we can handle your entire project or just part of it. We have experience in albums, re-mix, live recording, advertising, and radio. We also provide pre-production consultations, engineering, budgeting, programming, mastering, manufacturing, and many other services designed to meet your needs. Call us to discuss your next project**PETER M. CARLSON***Engineer & Producer***HAVE EARS WILL TRAVEL**P.O. Box 1454, Aptos, CA 95003  
(408) 688-9295

Credits: Bob Brozman, Lacy J. Dalton, Manfred Mann's Earth Band, Chris Thompson, and Patrick Simmons.

**Services Offered:** Audio engineering for any purpose, production techniques, audio consulting.**RON CARLSON***Engineer & Producer*

427 Carroll #1, Boone, IA 50036

(515) 432-6425

Credits: Engineered and produced for Allen/Carlson, Messengers of Love, Kent Holmeister. Assisted for Benson, The Soul Searchers, Hank Laake Band.

**Services Offered:** Have had four years experience with NEOTEK/MCI setup at local studio. Versatility and an open ear are offered with the understanding that music is a

creative form of your self-expression. Can offer an intelligent third opinion. Getting it right to tape better than fixing it in the mix. Also have had limited experience with doing live sound reinforcement.

**RODGER EDWARD CARPENTER/RON GRESHAM***Engineer & Producer***INNOVATIVELY STYLED PRODUCTIONS**c/o Chicago Trax, Inc.  
3347 N. Halstead, Chicago, IL 60657  
(312) 525-6565, 525-8491

Credits: Among our credits for records, labels, live mixing and tours are: Superbowl Shuffle, Midnite Star, Bang Orchestra, Union Station, Jesse Saunders, Victor Romeo, Marshall Jefferson, Gavin Christopher, ZZ Top, Kiss, Ted Nugent, Aerosmith, Hall &amp; Oates, No Sovereign, Warner Bros., Gelfen, CBS, MCA, Polygram, Bright Star records. Also numerous independent labels, feature and independent films, commercials and industrials.

**Services Offered:** The development of new Sonic directions and the art of innovative production. Studio engineering, programming on an extensive variety of synths, drum machines, computers, samplers and many different types of specialized effects; also, sequencers and other MIDI based systems. We can take your project from concept to completion very cost effectively.**STEVE CARR***Engineer & Producer***HIT AND RUN STUDIOS**18704 Muncaster Rd., Rockville, MD 20855  
(301) 948-6715Credits: Bruce Springstone "Live at Bedrock," *Meet the Flintstones* (Billboard Pick Single, Nov. '82), Tommy Keene *Places That Are Gone*, 1984 *Village Voice* Number One E.P. of the Year. Oho "Change in the Wind" *Musician* magazine Best Unsigned Band in America—first place winner, Tommy Keene (Griffin Records) "Listen to Me" (single B side).**Services Offered:** Helping musicians reach their goals.**JOE CHICCARELLI***Engineer & Producer*

1835 Sunset Plaza Dr., Hollywood, CA 90069

(213) 654-2064

Credits: Pat Benatar, Robert Tepper, Frank Zappa, Poco, Lone Justice, Oingo Boingo, Stan Ridgeway, Romeo Void, Bangles, Bob Geldof, Alison Moyet, George Thorogood, Red Rider, Glen Frey.

**PAUL CHITEN***Producer*

c/o Naked Prey Music

1226 Harper Ave., Suite 4, Los Angeles, CA 90046  
(213) 656-3775Credits: Worked with Michael Jackson, Tina Turner, Commodores, Five Star, Natalie Cole, Pointer Sisters, Jose Feliciano, The Breakfast Club, Suzette Charles. Music for films: *Witness*, *Gung Ho*, *Pennsylvania 6-5000*. Music for television: *The Hollywood Beat*, *Solid Gold*. Records for RCA, Arista, CBS, Warner Brothers, Motown, MCA, Polygram, Capitol. Wrote Five Star's hit record: "Can't Wait Another Minute."**Services Offered:** Producing, writing, arranging, and mondo monster keyboards.**PAUL CHRISTENSEN***Engineer & Producer***OMEGA AUDIO**8036 Aviation Pl., Dallas, TX 75235  
(214) 350-9066

Credits: Johnny Cash, Ben Vereen, Anne Murray, Willie Nelson, Quarterflash, Commodores, Oak Ridge Boys, Ray Charles, Merle Haggard, Helen Reddy, Pat Benatar, Sammy Hagar, Hall &amp; Oates, Art Garfunkel, Al Jarreau, Boomtown Rats, and over 200 major artists in past 13 years.

**Services Offered:** Engineering and producing services with emphasis on audio for video and film. Specialty is consultation for live video shoots from concept to completion. Extensive experience in digital audio/video interlock, stereo television, video disc and video cassette release both Beta and VHS hi-fi.**ALEX CIMA***Engineer & Producer*1501 E. Chapman Ave. Ste. 100, Fullerton, CA 92631  
(714) 680-4959

Credits: Alex Cima and On-Line's "Solid State" video and LP; previous releases on Deutsche Grammophon/Polydor International-Germany, GNP-Crescendo, and Chromosome labels. All TV networks, Select TV, films, trailers, audio-visual, radio/TV commercials, and special projects for major entertainment companies. Detailed resume on request.

**Services Offered:** Audio recording/production, analog


**FUTURE DISC SYSTEMS**

---

**COMPLETE ANALOGUE & DIGITAL MASTERING SERVICES**

---

**FOR COMPACT DISC, RECORD & CASSETTE MANUFACTURING**

---

3475 CAHUENGA BLVD WEST, HOLLYWOOD, CALIFORNIA 90068  
(213) 876-8733



Quantum 8-track board. When it came time to lay down tracks for his solo album, Pack turned to Channel Records in Burbank, CA, which he purchased with producer Michael Verdick.

"Every musician knows the condition where the demos always end up sounding better than the real thing, so I decided to do all mine on 24-track," says Pack. "Luckily, every song on the record which started out as a demo turned out to be a master."

Despite his solo success, Pack hasn't forgotten his days in Ambrosia, the group he formed with bassist Joe Puerta when the two musicians were growing up in the South Bay region of Los Angeles. Puerta now plays with Bruce Hornsby, who was briefly in Ambrosia himself at the time of the group's final LP, *Road Island*. Pack points to a photograph on the wall of a group that could be The Lettermen, complete with crewcuts, matching varsity sweaters and vintage acoustic guitars.

"Our mothers had to drive us to that photo session because we didn't have licenses," reminisces Pack. "I've played with Joe since I was 15 years old. For us to rise out of the South Bay was a fantastic accomplishment. It was difficult to split up because we were so close. By the last LP, though, we were



David Pack

PHOTO: JIM SHEA

talking more about attorneys and money than music."

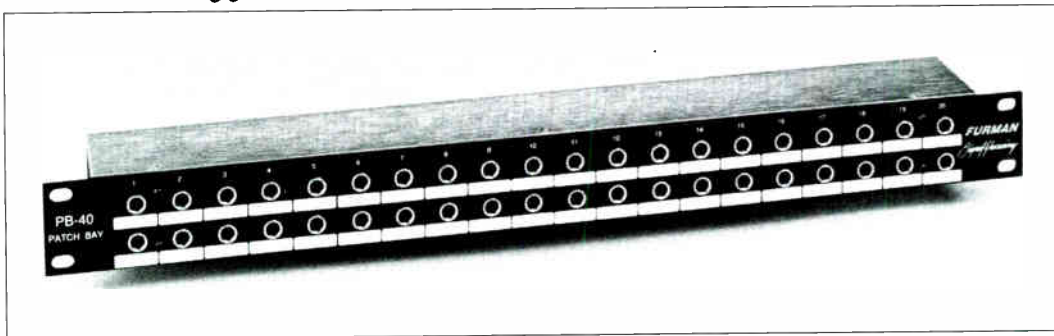
Coming together in the early '70s, Ambrosia was influenced by the musical melting pot that was the Torrance/San Pedro area, as well as the ever-changing pop trends of the time. "We wanted to be the Southern California Beatles," laughs Pack. "We started on the premise that we could write in any style... R&B, rock, progressive, blues, classical... as long as the songs were quality. Unfortunately, that very ideal would later strangle us."

Ambrosia's increasing eclecticism made it hard for critics and fans to get a handle on them. Their very first album, produced by Alan Parsons, included such now-chic elements as an African tribe recorded live ("The Brunt") as well as the use of Balinese instruments. The LP also boasted a hit single, "Holding On To Yesterday," and a tune which included lyrics from a Kurt Vonnegut, Jr., poem ("Nice Nice Very Nice"). From the very start, Ambrosia was caught between their hits and a more experimental side.

"You never knew what to expect from us," says Pack. "We were rock's literate band, California's Moody Blues or a poor man's Pink Floyd. We were about vocals and harmonies, with songwriting that was all over the map."

Ambrosia's first two albums, both

## The Cost Effective Patch Bay



## Ten Reasons Why

- 1 40 Point bay, not 32. More than any other bay in its class.
- 2 Normalled. Eliminates a "rat's nest" of patch cords for most setups. Each pair can be un-normalled easily as needed.
- 3 Custom Combinations. Modular construction permits mixing phone and RCA connections in any combination on the rear panel. Ring-Tip-Sleeve versions are available. Modules are also available separately, allowing you to customize the unit at any time should your requirements change.
- 4 Custom wiring. Multis, double normal (both upper and lower jacks on the front panel break normalled connection), and third circuit switching are all possible through provisions on each module's circuit card. Instructions provided with each unit.
- 5 Extra heavy steel chassis, insuring long, trouble-free performance.
- 6 Full metal sleeve inserts in each jack for tight grab of connectors. No more cords falling out of the rear panel.
- 7 All circuit grounds are isolated from the chassis and adjacent pairs to prevent ground loops from developing through the bay.
- 8 Great Value, low cost per patch.
- 9 One year Limited Warranty, extendable to five years.
- 10 FREE BONUS OFFER. Return this ad with your warranty registration card and receive 5 free patch cords.

**FURMAN**

*Signal Processing*

30 Rich St. Greenbrae, CA 94904  
(415) 927-1225

Circle #084 on Reader Service Card

**Pi** audio  
inc.

Select products at  
competitive prices with  
full after-sale support.  
We aim to please.

OTARI	ART
TASCAM	VALLEY
FOSTEX	ORBAN
SOUNDCRAFT	DBX
AMEK-TAC	SMPL
RAMSA	APHEX
ALLEN-HEATH	CROWN
LEXICON	JBL/UREI
ROLAND	KURZWEIL
EVIDENCE	EMU
ALESIS	LINN

"Music Technology for the 80's"

2121 BROOKPARK ROAD  
CLEVELAND, OHIO 44134  
(216) 741-2733

Circle #085 on Reader Service Card

## Los Angeles Recording Workshop

### 10 Week Recording Engineering Certificate Program

Low-cost student  
housing available

5287 Sunset Boulevard,  
Hollywood, CA 90027  
(213) 465-4254

Circle #086 on Reader Service Card

produced by Parsons, were nominated for engineering Grammys. "We became audiophiles," Pack agrees. "We wanted the best-sounding records. We wanted to make albums that had a beginning and an end, that made a statement, like a book or a movie."

That's how they ended up getting Alan Parsons to produce Ambrosia. After admiring his work with Pink Floyd and Wings, the novice group decided to ask Parsons to be their producer.

"We called Abbey Road, and he only answered the phone because his assistant just happened to be in the john at the time," recalls Pack. "Since Alan was coming to Los Angeles for the Grammys, he agreed to come by our house and listen to what we had. He didn't know who we were. All he knew was we had enough spunk to call him in London and ask him to work with us."

Despite a succession of hit singles, such as "You're The Only Woman," "How Much I Feel" and the triple Grammy nominee "The Biggest Part of Me," Ambrosia never quite achieved the goal of worldwide success.

"We were finally getting across, but, ironically, it was with easy listening songs," says Pack ruefully. "So, even while grateful for our success, it wasn't the image we wanted. We worked long and hard to establish ourselves as an album-oriented band, and there we were, breaking through Top 40. We wanted popularity on our own terms...and that didn't mean just having pop hits."

Ambrosia's image was so tied up in its music that the group never really projected much larger-than-life charisma. "We just didn't have that glitz consciousness," Pack admits. "I knew what we needed. I searched for the right gimmicks. At one time, I designed shoes for myself that would have a famous composer's profile on the tips."

"But it always comes back to one thing: honesty. We were too honest as people and musicians to pull that off. The same holds true for me today. I'm too real to create an alter ego. Songwriters like Paul Simon and Michael McDonald are strong enough in the way they see the world that they don't need to wrap themselves in an alternate identity."

Pack can certainly stand on the strength of his own quite diverse musical talents, thank you. One of his good friends is composer Leonard Bernstein, a big fan of Ambrosia's music who asked Pack to audition for the L.A. presentation of his *Mass*.

"I was so scared, I memorized every guitar lick in the piece," recalls Pack. "Just out of fear I wouldn't be able to sight-read well enough. I spent months learning it by rote."

And he got the part, playing guitar, banjo, classical guitar and percussion, as well as leading the onstage band, which included ex-Mother of Invention Ian Underwood and wife, Ruth. The friendship with Bernstein continues to this day. In fact, Pack helped produce the never-released debut album for the composer's daughter, Jamie, who co-wrote "Do Ya," from Pack's own solo effort.

What's interesting about David Pack's work is the fact that he's been completely deaf in his left ear for ten years. It's a handicap he's only recently revealed to the public. He lost his hearing as the result of a viral infection he suffered while recording Ambrosia's first LP.

"I can hear relative stereo," he says. "I've learned to use the one ear to my advantage. If the sound pressure becomes too loud, I can just turn my deaf ear to the source and listen with my good ear as the sound bounces off the wall. It acts as a mute. I mixed the title track to *Life Beyond L.A.* with one ear by placing the speakers close together and having the engineer help me with the stereo imaging."

"I'm still keenly aware of sound. For some reason, I'm able to pinpoint frequencies even better now. The only thing that's really bothered me is figuring out how to hear pitch. When you perform live, everything has like a Doppler effect. The pitch fades in and out and changes when you move your head left or right."

Pack is now actively involved in the House Ear Institute, trying to inspire hearing-impaired youngsters that a career in music—or anything they want, for that matter—is still possible.

"If I can be an inspiration to any of these kids, that's what I want," he says. "If I can show them you can actually make it in music even while deaf in one ear, that would give me a great thrill."

Despite missing the closeness of a band situation, Pack has formed an alternative network of collaborators that has taken the place of a group. "Michael McDonald and I have become stronger friends since getting out of our respective band situations," says Pack. "We've become what our groups used to be for us: pals. We both miss that camaraderie, but you have to grow and learn, expose yourself to new situations. It's like pushing yourself into something that scares you. It took me 12 years in a band to achieve what I wanted. Hopefully, I'm laying the groundwork for the future with my current work."

"I want to be associated with quality songwriting and production. I won't settle for anything short of that. I want my songs to stand the test of time."



While admitting "it's possible there'll be another Ambrosia album," Pack is committed to his solo career. As for the massive popularity of peers like McDonald or Paul Simon, David Pack claims that kind of recognition is not important to him.

"I don't think in terms of my ego," he says. "You have to follow what your instincts tell you. And mine tell me I love to sing. And that there are some people out there who seem to like my voice."

## The Hendrix Legacy:

### 'Scuse Me While I Slice the Pie

by Bruce C. Pilato

"Hendrix created a school and no one has graduated from it yet," says Alan Douglas. "He set the standard, and if you pick up a guitar and you're interested in rock music you've got to refer to Jimi Hendrix."

"Aside from the fact that his music excites young kids," Douglas continues, "I think it's basically because he's still, in musical terms, an outlaw. The

"I'm content to express myself as a vocalist and a songwriter, a musician and a producer. Whatever happens from there—whether it be mass acceptance or a professional's professional—I'll accept my destiny. Still, whatever that is, I'm going for it with the best of my ability. While trying to live up to my own expectations about myself. And that's hard enough. You can't tell people what you are... you write your songs, perform them, and leave it to the public to tell you the rest."

mainstream just can't absorb him the way they have Presley or The Beatles and many of the classic artists. He's still the musical outlaw, and so, uniquely, he remains the reference point."

During 1969 and 1970 Douglas oversaw the production of nearly all of Hendrix's recordings, including live performances, finished studio masters, and assorted superstar jam sessions. In all, Douglas worked on more than 400 hours of Hendrix recordings before the guitarist's death in September, 1970.

Douglas has dedicated the last 13 years to keeping the Hendrix legacy alive. In cooperation with the Hendrix estate, he has assembled ten posthumous albums—some of which have been quite controversial.

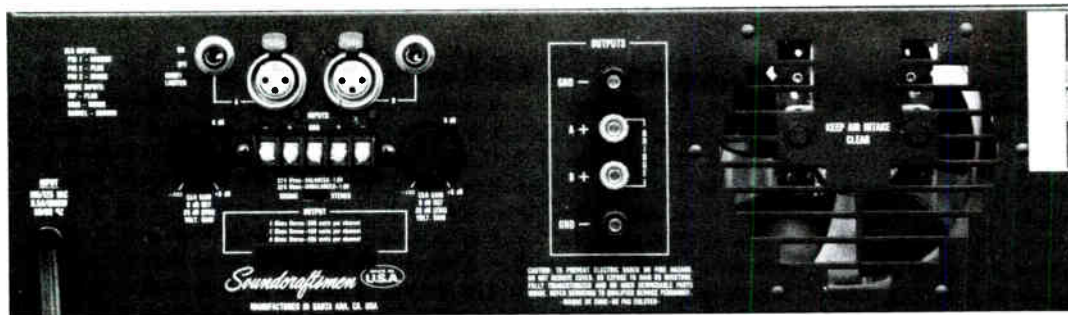
With Hendrix's audio legacy virtually exhausted now, Douglas has formed a video label to release a series of Hendrix videos as well as other music products. Douglas Video is distributed by Sony Home Video, with soundtrack records released by Capitol Records.

The first release in the series is *Johnny B. Goode*, a collection of live concert footage and abstract visual images all set to music by Hendrix. "Are You Experienced?" and "Voodoo Chile" are conceptual clips with digitally remastered studio recordings, while the others are taken from concert footage of Hendrix performances at the Atlanta Pop Festival (July '70), Berkeley Community Theatre (May '70), the Monterey Pop Festival (June 1967) and the Isle of Wight (September '70).

Future releases will include the complete Experience performance from Monterey Pop (with additional footage of Hendrix performing "Sgt. Pepper's Lonely Hearts Club Band" taken from another show) and *Experience*, a 30-minute documentary shot in 1968. Both these films will probably be shown in theaters before being released in home-video form.

All the Hendrix film projects supervised by Douglas feature digitally remastered hi-fi audio tracks, in most cases mixed down from the original

# Soundcraftsmen ...the Professional's Choice! uncompromised MOSFET power



The New 450x2 has  
**MORE POWER...**  
**MORE FEATURES...**  
**MORE PERFORMANCE PER DOLLAR...** than any of the competition. See it, plus our other new amplifiers at NAMM... Booth Number 351. We want to talk to you about our **1987 Dealer Program.**

- 450 watts/ch. RMS @ 2  $\Omega$
- 900 watts RMS mono @ 4  $\Omega$
- 350 watts/ch. RMS @ 4  $\Omega$
- 230 watts/ch. RMS @ 8  $\Omega$
- THD less than 0.05%

Call or write Robert Brand for details, (714) 556-6191, 2200 So. Ritchey, Santa Ana, CA 92705. In Canada, Tri-Tel Associates LTD., 105 Sparks, Willowdale, Ontario M2H 2S5, Phone (416) 499-5044.

Circle #087 on Reader Service Card



PHOTO: MARK BOWERS • 1986

**Keeping the Hendrix flame alive: Alan Douglas.**

multi-track recordings. The 8-track masters were transferred to a 32-track digital machine and then "digitally mixed to two tracks on the same piece of tape," Douglas explains, "so consequently there's no generation loss. We EQ'd differently for everything—for the film, the video and the album soundtrack. We had three separate mixes."

Douglas says that in the '80s, Hendrix's music has found a new audience—"a very young audience who had never seen Hendrix before. These

kids were born after he died or were very young when he died and had never known about his stage presence and so on. We felt we could create a visual library as we had with an audio library. So *Monterey* and *Johnny B. Goode* are the first things in a series of things that, hopefully, will make some sense."

A respected jazz producer who worked with giants like Duke Ellington, Charlie Mingus and Eric Dolphy, Douglas was brought in to work on

Hendrix's recordings three years after the guitarist's death. The first album, *Crash Landing*, came out in 1974. The concept behind it was revolutionary: Douglas stripped everything from the multi-track masters except Jimi's guitar and vocals. He then brought in ace studio musicians, many of whom had never even met Hendrix, and laid down new musical beds for each song. The result was a little eerie, but it gave the public a "finished" and well-produced album that Douglas still feels was true to Hendrix's vision.

Of course, many purists blasted Douglas and the album, but it was a huge success. It sold more than 800,000 copies in the U.S. alone and revitalized the entire Hendrix catalog.

Two subsequent, similarly constructed albums under a three-LP deal, *Midnight Lightning* and *Nine to the Universe*, were not nearly as strong, though, and led to widespread accusations that Douglas was exploiting Hendrix by scraping the bottom of the barrel.

"It didn't bother me that much because I had been hearing that for years," says Douglas nonchalantly. "The criticism comes from people who heard Jimi in a certain way and think of him only in that way. But, you know, I made a mistake. I should have gone directly to the live material. I was holding on to the live material, thinking at that point that the studio albums were probably the best things to market. While everyone was blasting *Midnight Lightning*, the live material was just sitting there."

In 1980, partly at Douglas' urging, Warner Bros. deleted most of the posthumous albums after *Cry of Love*. To satisfy the continued demand for Hendrix music, Douglas next produced a double- and a single-album anthology set entitled *The Essential Jimi Hendrix, Volume I and II*. These were followed by the excellent live double album, *Jimi Hendrix Concerts*, and last year's *Kiss the Sky*, an audiophile-quality release featuring digitally remastered tracks on premium vinyl and high-quality cassettes.

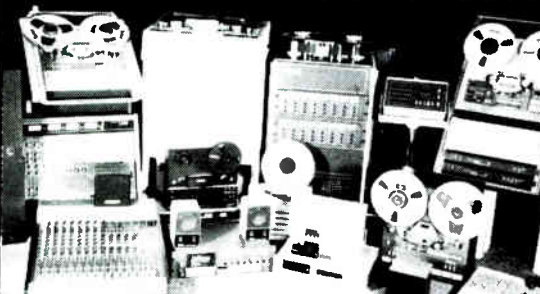
The newest audio release came this past March with the complete soundtrack of Hendrix's Monterey Pop performance. Now, according to Douglas, only one audio release remains: the best of six shows by the original Experience taped at Bill Graham's Winterland in San Francisco in October of 1968.

"It's great stuff," says Douglas. "We have the original 8-track tapes, and they're all in very good shape. We'll do a digital transfer and a CD-only release, just to separate it from the rest of the catalog."

Other remaining audio recordings,

# THOROUGHbred MUSIC

## HAS FREE DELIVERY.






**RECORDERS**  
**MONITORS**  
**AMPS**  
**MICROPHONES**  
**SIGNAL PROCESSING**  
**TASCAM**  
**FOSTEX**  
**KURZWEIL**  
**E-MU**  
**ENSONIQ**  
**AKAI**  
**UREI**

20,000 Square Feet Of  
State-Of-The-Art Pro Audio  
Shipped Daily

# THOROUGHbred MUSIC

2204 E. Hillsborough Ave.  
Tampa, FL 33610  
(813) 237-5597

\* Mail orders only  
shipped in continental U.S.  
via U.P.S.

Circle #088 on Reader Service Card



including a 1970 jam session with John McLaughlin, are not up to Douglas' standards and will remain unreleased. Douglas' concentration now shifts to film and video.

The Hendrix estate and Douglas have been able to acquire most of the existing footage, although a few choice properties have proven to be elusive—including the complete Woodstock performance and an excellent concert by the original Experience filmed at the Royal Albert Hall in February of 1969.

Douglas says he and the estate have also talked extensively with film companies and independent producers about doing a dramatic film biography of Hendrix, although that project is slow in coming to fruition. "Thus far, no one has come up with a script or a story line that makes sense other than a straight biography," he says. "It's got to be more than that, or we'll just do a straight documentary."

Douglas says he often wishes Hendrix were still alive, if for nothing else than just to see how the guitar giant would have reacted to advances in music technology. As great as he was back in the late '60s, Douglas feels had Hendrix lived he would still be a technological front-runner.

"I think he would have wanted to use everything he could possibly have used. Electricity was his game; he knew how to use it better than anyone else. When you hear him blend feedback and harmonic tones, you know he had control. He used it—it didn't use him. He was the ultimate guitarist."

—CONTINUED FROM PAGE 131, HORNSBY  
ing no major label would have any interest in this tape, I sent it to Windham Hill. Will Ackerman offered me a deal for it, and I thought, yeah, that was great. I was gonna do that and then, ironically, the tape was leaked out to a couple of major labels and they offered deals on it. I didn't try at all. I was elated about the Windham Hill situation, and then the RCA thing came in out of the blue. I'd been trying all these years to calculate it and then when I finally just said 'screw all that' is when it worked. It shows you how much I knew," he laughs.

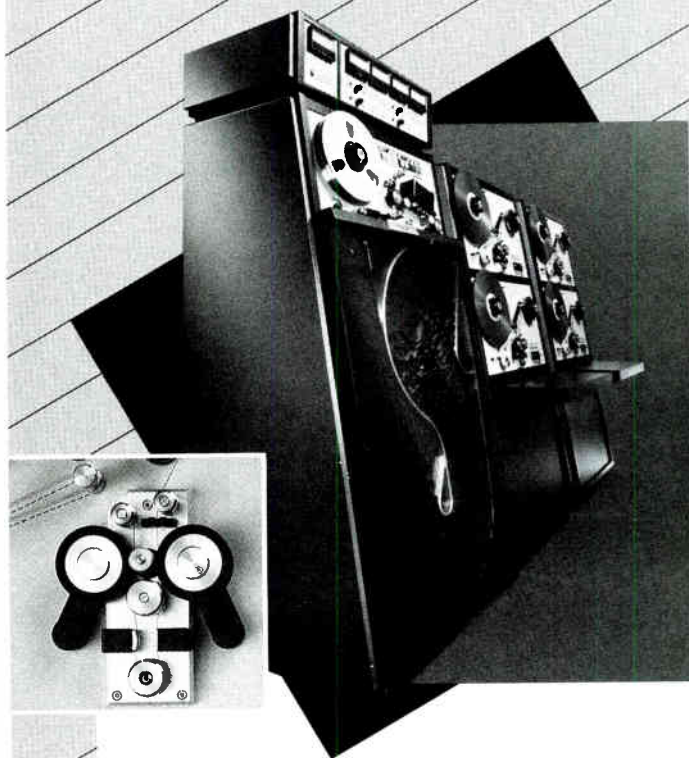
If the Mid-American focus of *The Way It Is* attracts comparisons with the work of John Cougar or Bruce Springsteen, Hornsby doesn't mind. "It's in that mold, for sure," he says. "Hell, I'm proud to be in with those guys; I think they're great. I think the way probably has been opened up by those guys for sure." But the way has also been widened by Hornsby's friendship with America's biggest radio hero, Huey Lewis. Hornsby's songwriting was

again the magnet. Lewis nearly recorded one of his tunes, "Let the Girls Rock," for *Picture This*, and according to Hornsby, "He became kind of a champion of the cause and a fan of the music and we traded things back and forth this year. He produced part of my record ["The Long Race"] and he cut a song of mine ["Jacob's Ladder"] for his record."

That reciprocal relationship paid off for Hornsby with the invitation to join Lewis as an opening act on the latter's European tour. When the touring ends, Hornsby, who's been playing steadily since last May, will get to work on his second record for RCA. He has a few little changes in mind already. "When you do your first record," he says,

"you're working in kind of a vacuum as far as feedback. You throw it out there and see what happens. And the feedback that we've gotten basically is, 'piano, piano, more piano.' So it'll probably be a little more groove-oriented, a little funkier, with more stretching out on piano and more slices of Southern life." He hasn't decided on a producer yet, although he admires the work of Neil Dorfsman and was impressed by Eddie King, who did some engineering and mixing on *The Way It Is*. But he's happy to be in the situation of getting to make those sorts of decisions. "I'm just glad to be in the position to be thinking about a second record," he grins, "in that sense, we've already won!" ■

## REFINED MOTION... THE 1500 SERIES



**The 1500 Series...** the world's smoothest running, most dependable high speed tape duplicating system, ever! Definitely a step beyond state-of-the-art.

**The 1500 Series...** within its compact, production oriented design are found features such as 32:1 & 64:1 duplication ratios, HFE (high frequency record enhancement), record level expander and a loop-bin that will hold up to 2,000 feet of 1.5 mil tape!

# Versadyne

504-C Vandell Way, Campbell, CA 95008  
(800) 233-9370 (408) 379-0900 Telex: 172-230



Circle #089 on Reader Service Card

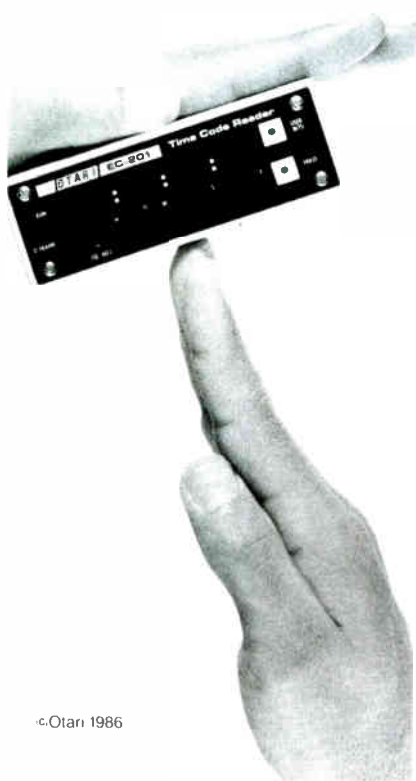
Otari's compact EC-201 SMPTE/EBU time-code reader is a natural for field or studio operation, and it costs only \$495. It offers 1/20 to 60X playspeed reading, 40 hour continuous use on battery power, and re-shaping circuitry on the loop output.

This advanced reader features a full hexadecimal user bits display (with a hold-button for edit logging), a -10 to +10 dBV input range, balanced XLR inputs/outputs, and includes an AC adapter, belt clip and batteries. It measures 1.5" x 4.2" x 5" and weighs 18 oz.

Contact Otari at (415) 592-8311 for your nearest dealer. From Otari: Technology You Can Trust. Otari Corporation, 2 Davis Drive, Belmont, CA 94002.

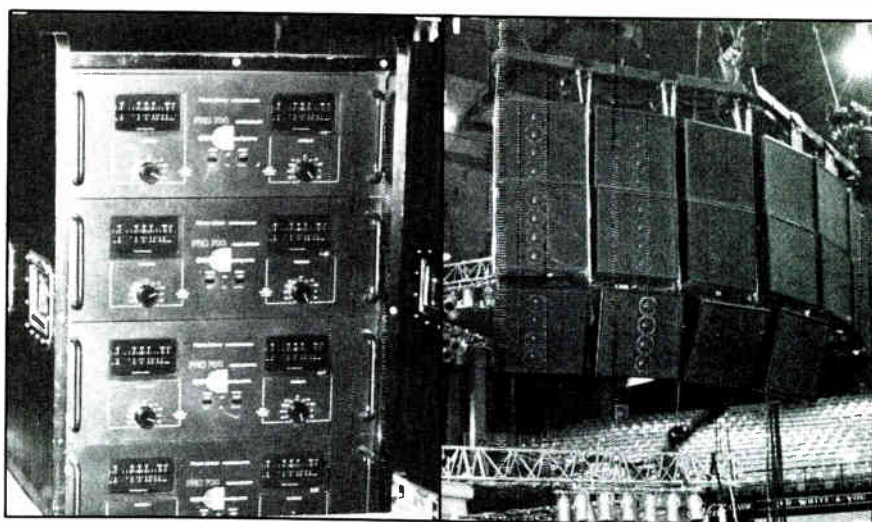
**OTARI**

**TIME OUT!**



©Otari 1986

Circle #090 on Reader Service Card



*Phase Linear Pro-700 amplifiers push 64,000 watts of power through the tour system.*

*The circular array of speakers utilizes Audio Analysts' S Series 4 cabinets.*

—FROM PAGE 45, BILLY JOEL

through the complete digital processing system," he explains. "The hard part comes in implementing the mathematics and the necessary filters, plus in figuring out the problems inherent with speed, dropouts, and error correction. When complete, however, I'll have a crossover that works completely in the digital domain, and we'll be able to do things like match different loudspeaker components and apply correct time alignment right at the crossover."

Other planned changes in the system before tour's end include the installation of new tweeters, new re-structured cabinets, and multi-cabling.

Audio Analysts has established a reputation for designing components that are custom-tailored to the needs of a particular group or artist when the need arises. Aided by computerized design systems and their years of experience, field testing to "get the bugs out" of their designs has in many cases been virtually eliminated, or been drastically reduced. For The Bridge Tour, the monitor system was designed in theory using computer programs written by Leccese, and tested before their construction with a TEF analyzer. Once built, they were positioned out of sight beneath the stage's floor, where they deliver sound up to the performers through fiber-glass grates.

Long-time drummer with Billy Joel, Liberty DeVitto sums up the appearance of the tour's new stage by saying: "Some people look at the stage when they come in, panic, and think that the show is only going to consist of drums and piano." For the uninitiated, that's exactly what the mind conjures up, because at first glance, it

seems as if the roadies have forgotten most of the band's gear. DeVitto's drum kit, a few keyboards, mic stands, and Joel's baby grand piano are the only things clearly visible on stage.

The brain child of Steve Cohen and Brian Ruggles, who have respectively served as Joel's show designer and chief sound engineer since his bar-room days, the stage is highly angular to the point where it almost resembles the beginning folds of a giant origami figure.

Cohen freely admits that he and Ruggles set out to create an image "that when you first walk into the arena, you'd never figure out how the hell any music could come out of that setup." They succeeded in achieving that goal by placing everything that's normally seen on a stage underneath. Cohen then added to the simplicity of the stage's appearance by applying spartan principles to the lighting as well. Utilizing only 219 lamps, 30 of which are multi-celled units with ten different colors to bolster color saturation, Cohen operates the lights manually from a board situated out on the floor next to Ruggles' 40-channel house console, which mixes the signals being pushed by Audio Analysts' 64,000 "real" watts of Phase Linear Pro-700 power.

"The stage as it is now is the perfect landscape for Billy to run around on," Cohen said. "Unlike in the past, now he can't trip over something and kill himself. It is also ideal for the arenas we play in, because it makes every seat in the house a good one. There are no obstructions in the audience's field of vision, unless they're posed by the room itself. The lighting simply mirrors the lines of the stage. It's as bright and effective as thousands of lights, and makes the band as indi-



viduals stand out as well as Billy."

Since there is such a smooth, uncluttered texture to the surface of the stage, it's only natural to find that the world below is a maze of cables, amps, hanging monitors, MIDI gadgetry, effects, and of all things, an air conditioner capable of supplying enough cool air to freeze your average bus station.

To offer relief from the sweat he works up while performing, Joel originally suggested to production manager Bobby Thrasher that having air conditioning on-stage might not be a bad idea. Thrasher took the job quite seriously, located an industrial couch-sized air conditioning unit, hid it carefully under the stage, and then routed duct work that exited next to Joel's baby grand, and downstage, where it cools the rest of the band.

Another important area under the stage is referred to by the band and crew as "MIDI Central." A trove of the latest in everything MIDI, it represents the first time a Billy Joel tour has taken such technology under its wing. Sounds ranging from the ocean on "This is the Time" to the horns on "Tell Her About It" are all controlled by keyboardist/MIDI Central creator Dave Lebolt with the flick of a foot switch which ignites a matrix switcher. The switcher, in turn, activates any of the samplers, effects, and 20-odd synthesizers below.

"I put together a system that would allow for maximum flexibility, so that regardless of what kind of music we were going to do, we could do it from any of the four keyboard positions (which includes the baby grand) on-stage, with anything hooked to anything, and that's pretty much what we got," Lebolt said. "I did all of the patch routing using a MIDI/matrix box that allows you to initiate source and destination program changes, and to have a register of the instruments playing so that you can have multiple splits on the keyboards. You can also limit the velocity of the instruments in such a way to effect the dynamics of the keyboard in relation to the sound."

Prior to the beginning of the tour, Lebolt spent three weeks working up to 14 hours a day programming MIDI Central's effects. "This is one of the first shows that utilizes a master keyboard with everything offstage," he says. "Which is kind of a nervous situation because you have to worry about whether or not everything is going to work or not when you step on the foot switch. This may be Billy's most high-tech tour to date, but the show isn't about technology, it's about Billy's songs. This equipment just gives him more in the palette of sound to choose from."

## studio consultants, inc.

321 West 44th Street, New York, NY 10036 (212) 586-7376

### The source for:

- **Bryston:**

Superb, reliable power amplifiers from 50W/channel stereo to 800W bridged mono, with balanced inputs, modular channel electronics, and dual independent power supplies. Professional preamps also.

- **API:**

Classic audio module designs, including the 560A graphic and the all-discrete 550A three-knob program equalizers. Powered racks, moving fader automation, and new modules on the way.

Also: **White** equalizers and crossovers, **Westlake** and **Fostex** monitor speakers, **Valley People** signal processing, **Audio Digital** delays and effects, **Ursa Major** digital reverb and signal processing, **Audio Kinetics** Q-LOCK synchronizer systems—and other fine products.

Short-term needs? We rent the best: **Bryston** power amps and racks of **API** equalizers.

**Equipment, support, and design services for professional audio facilities and broadcasters.**

Circle #091 on Reader Service Card

## flexibility!

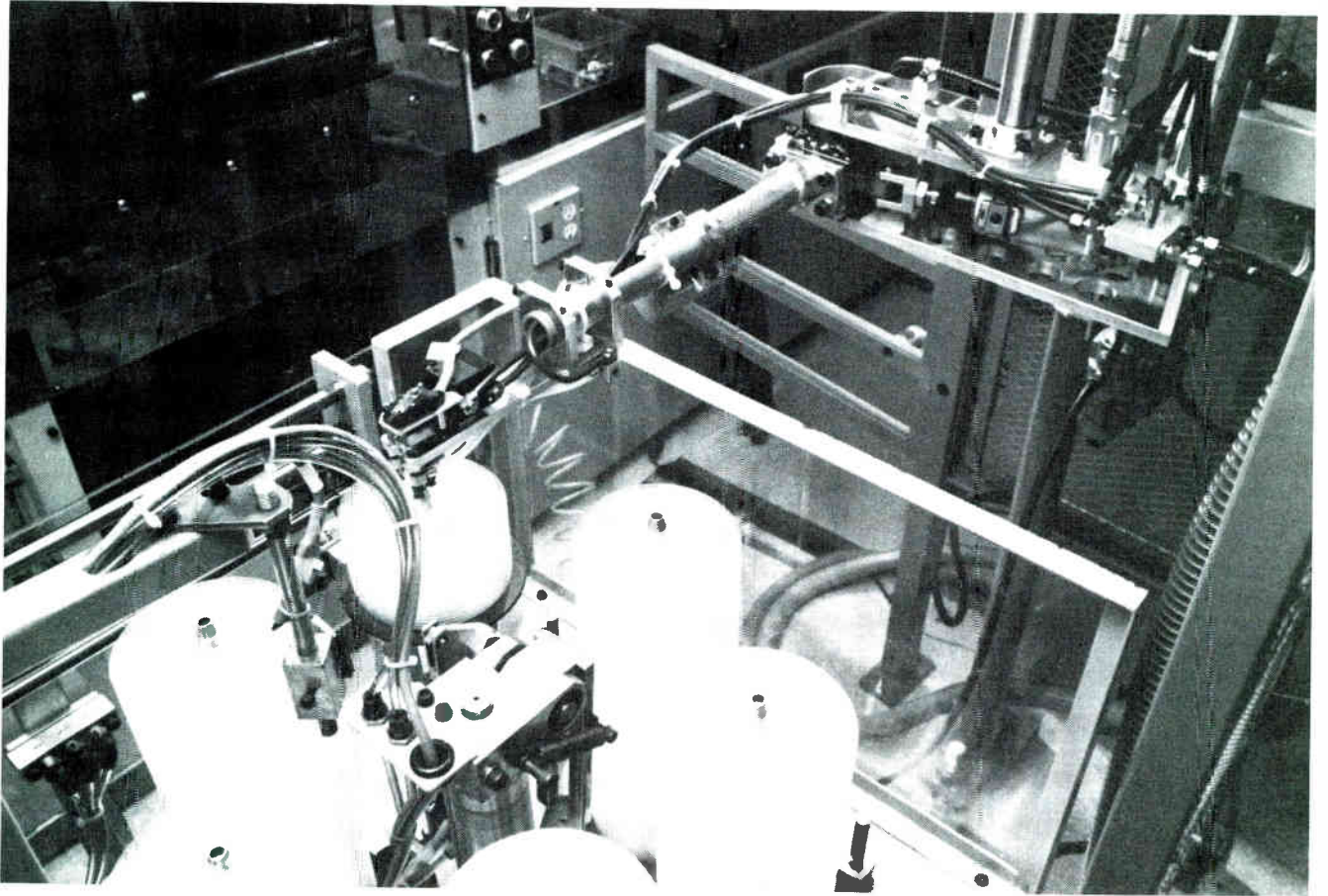
**Littlite®**  
Gooseneck Lamps & Accessories

mixing consoles, amps,  
turntables, effects racks,  
multi-tracks, synthesizers,  
music stands, drum machines,  
keyboards, orchestras,  
d.j. consoles



**Littlite/CAE, Inc.**  
P.O. Box 430  
Hamburg, MI 48139  
313/231-9373

Circle #083 on Reader Service Card



## LASERVIDEO

**TODAY HUNTSVILLE,  
TOMORROW THE WORLD**

by Philip De Lancie

In harmony with the joint-venturing spirit that seems to be popular in compact disc related industries, LaserVideo Inc. has reached agreement with the Marubeni Corporation of Japan on a cooperative approach to guiding would-be CD manufacturers through the financial and technical processes

of bringing a plant on line. As outlined in company announcements, Marubeni will concentrate on "equipment and material procurement services, as well as financial assistance." LaserVideo, a subsidiary of Chicago's Quixote Corporation, will provide "design and process know-how, technical data, and start-up and training assistance." Help in product market-

ing will be offered to the new manufacturers by Marubeni and LaserVideo together. To encourage the development of an international network of CD plants that could cooperate in training, technical and marketing fields, the two companies hope to be compensated for their services in part with equity interests in the facilities they help to create.

*Above: After injection molding, a robotic arm stacks clear CDs, which will later be coated with reflective and protective layers at the LaserVideo plant.*



LaserVideo's agreement with Marubeni coincides with another important development for the company: the official opening of its second CD plant. The new facility, located in Huntsville, Alabama, is 16 times the size of LaserVideo's original plant in Anaheim, California, which has been shipping product since January of 1986. The Huntsville plant is designed for an ultimate capacity of 60 million discs per year. Reached at the new facility on the eve of formal opening ceremonies, LaserVideo chairman James H. DeVries took time out from preparations to talk about the Marubeni agreement and the CD manufacturing market in general:

**Mix:** What services will LaserVideo be offering to clients under the agreement with Marubeni?

**James H. DeVries:** We started working on optical discs back in 1979. Our Anaheim plant makes video discs, special masters and stampers for the optical memory disc industry, and compact discs. We also have the plant in Huntsville which began production in October. And we have made our own mastering systems. Through this whole course of development, we think we've built up a lot of knowledge and expertise in all the different areas that go into making discs.

Right now, there is really no one who will help somebody get into production. You go and you buy isolated pieces of equipment, and each individual equipment manufacturer will show you how it works, but somebody needs to tie it together into a whole process and set the process specifications to make a whole system that can make large volumes of CDs with high yields at low cost. That's the kind of service that we are going to offer people.

**Mix:** So you see yourselves as the coordinators of all the various aspects that need to come together to make a plant.

**DeVries:** Right. And we also would be specifying what kind of equipment to get. We would tell our clients what we thought were the best pieces of equipment, how many to get of each, and things of that sort.

**Mix:** Will you be providing the actual designs for the layout and construction of the plants?

**DeVries:** We have a design, a prototypical plant layout. We will specify all the requirements. But we are not engineers. We don't do the detailed engineering work that a contractor would work from, but we would specify what needed to be done. For instance, we

"Right now, there is really no one who will help somebody get into CD production... that's the kind of service that we are going to offer."

might say where a column goes, but an engineer has to decide how big that column needs to be.

**Mix:** Would you also be supervising during construction to ensure that building goes according to specifications?


**DeVries:** Yes.

**Mix:** At some stages in the CD manufacturing process, more than one technique is available to complete a given

step. The CD's reflective layer, for example, can be applied by vapor deposition, wet silvering or in-line sputtering. What factors will influence your recommendations to clients on this choice?

**DeVries:** We use both deposition and sputtering. What you would use in a particular situation depends on the volumes you're talking about, where it is in the world and what services are available, and how easy it is to get


—CONTINUED ON PAGE 144



## The Masters of Sound Sculpture

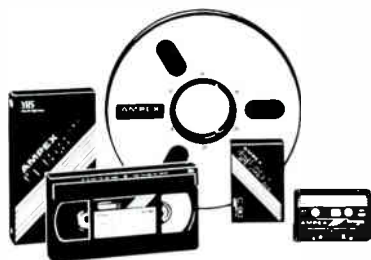
When it comes to quality  
record manufacturing and  
cassette duplication, QCA  
has no equal.

2832 Spring Grove Ave.,  
Cincinnati, Ohio 45225  
513/681-8400



# AMPEX

Professional  
Audio and Video  
Tapes



AVAILABLE FROM THE NUMBER ONE IN  
**AMPEX**  
PROFESSIONAL RECORDING PRODUCTS:

## ADVANCE RECORDING PRODUCTS

Please call or write for our FREE catalog.

7190 CLAIREMONT MESA BOULEVARD  
SAN DIEGO, CALIFORNIA 92111  
(619) 277-2540

CALL TOLL FREE: IN CALIFORNIA:  
(800) 854-1061 (800) 858-1061

WHOLESALE DISTR



Circle #093 on Reader Service Card

# MOVING?

FOR UNINTERRUPTED SERVICE  
MAIL TO:

**MIX PUBLICATIONS**  
2608 NINTH STREET  
BERKELEY, CA 94710

(PLEASE ATTACH OLD ADDRESS LABEL HERE)

(PLEASE PRINT NEW ADDRESS BELOW)

NAME

COMPANY

ADDRESS

CITY

STATE

ZIP

Circle #094 on Reader Service Card

—FROM PAGE 144, LASERVIDEO

whatever you have serviced. You have to analyze the whole situation, looking at the size and the skills of the people involved.

**Mix:** In the molding of the discs, both injection and injection-compression techniques are in use. Which system might you be recommending to your clients?

**DeVries:** The injection-compression discs are made by Polygram. I think if you look at a Polygram disc and you look at one made by somebody else, you can see some differences. Polygram has to cold punch the hole. I think the plain injection molding works the best. Polygram has a lot of know-how with their process, and it might work very well for them, but if you're going to start out cold, I'd say go with straight injection molding.

**Mix:** Are you planning to have much in the way of sound enhancement capability in the mastering facilities at the plants you will be designing, or do you conceive of the mastering step as strictly a flat transfer?

**DeVries:** We just transfer what we get. We don't do any enhancement or editing. The tape has music on it in digital form when we get it. We check the tape to make sure there are no defects on it and to see that all the information we've received is accurate. If it's not accurate, we usually just try to send it back. In other words, we don't like to fix them.

As far as EQ and level changes, we don't think we're in the business of creating music. When you start doing enhancement, you're putting some subjective judgement into it. We just like to have it ready to run.

**Mix:** Do you anticipate that the Teldec DMM CD Mastering System will have any impact on the mastering side of the services you offer?

**DeVries:** If it were equal quality and cheaper, that might be a good thing, but I don't think we know yet if it can achieve the same quality. With the photo-optical systems we use, we get very low error rates and many of our discs have no interpolation. So you really can't get much better in terms of quality.

**Mix:** Are the mastering systems that you make and use available for sale to other companies?

**DeVries:** We don't really have it as a product. If, in connection with one of our deals to help somebody open a plant, it looked like that would be a good way to go, we would do it. But we don't really want to be in the busi-

ness of making and selling them.

**Mix:** Who do you see as the potential clients to whom LaserVideo and Marubeni will be offering their services?

**DeVries:** I see our services as helping people in places outside of the big industrialized countries. Places like Korea, Taiwan, Hong Kong, China, Indonesia, India, Singapore, all of Latin America and Africa. Places that want to develop a plant, but really don't have the technology in the country. They just can't reinvent the wheel by themselves. It makes more sense for them to hire someone like us to come in and help them get it going.

**Mix:** What sort of capital expenditure are clients likely to be looking at in order to get a plant off the ground?

**DeVries:** The compact disc business is difficult, and you really have to be prepared to do it well. You should be prepared to spend as much money as needed to build a plant as big as your local market would justify. You're talking at least \$20 million on up. Thirty million to \$35 million is really a more optimum range for something with an annual capacity of ten to 15 million discs. Anything smaller than that is not very economical. It's not big enough to give you the kind of technical support staff you need. It's not worth building a plant to put out borderline CDs.

**Mix:** Do you think that the growing number of people getting into CD manufacturing will create the kind of competition that could lower CD prices?

**DeVries:** There are more people getting into the field, but remember that by 1990 we are going to need 300 million CDs in the U.S. If you add up what everybody says they are going to make, you probably don't hit 300 million. The other thing is that many of those who say they are going to get into the business never do. If you go back a couple of years and look at the announcements that were made, you'll see that a lot of them have just disappeared.

It's going to get better than it has been, but there is not going to be an oversupply. Remember, on top of the music business you have CD-ROM coming along. And on top of that you have CD-I, which will be a consumer product.

I think that the big plants will be Sony, Philips-Du Pont and ours. All of them could be up to 50 or 60 million each. Then Capitol and Warners are only going to produce about 50 to 60% of their own needs, so they're going to be customers for the other



"I don't think that R-DAT will have any impact on the CD market..."

shi are all coming along, but they're not exactly burning up the tracks at getting into production, and you can't be sure how big they will be. We still have to see all that capacity really being built.

**Mix:** What is your assessment of the effect of the R-DAT on the CD picture, and how is that reflected in your company's planning?

**DeVries:** I don't think it will have any impact on the CD market, though it will have an impact on the present analog cassette market. If you put yourself in the position of a salesman in a store trying to tell somebody whether to buy a CD or an R-DAT player, it's a little bit tough to sell digital audio tape. It has all the problems of tape: it wears, tears, jams, you start to lose signal from wear after a while, and you can't immediately access the next song or some other song if you want it. The player is really like a VCR in terms of complexity, so it's hard for it to be a very low cost item. The players are going to be more expensive [than CD], and the prerecorded cassettes are probably going to be more expensive.

The CD lasts forever. It lends itself to things like the Sony 10 disc cartridge for the car, where you've got six hours of music at your fingertips. It has all those conveniences, plus the cost factor. So digital audio tape, I think, is not as good and will cost more. When you buy a CD player in the store for \$88, that, to me, is a real value.

In "After-Mix" for last October, I described TMD, the high speed video cassette duplication process under development by Du Pont. A TMD system is apparently now ready for commercial use, and Du Pont has announced its forthcoming installation at BHCP in Northbrook, Illinois. BHCP is a tape duplication operation owned by Bell & Howell, Columbia Pictures and Paramount Studios. Bell & Howell collaborated with Du Pont on some of the mirror mastering technology for TMD. The system, which BHCP intends to have up and running early this year,

will copy a two-hour movie in just 52 seconds.

EMI Music Worldwide has announced the commissioning of Capitol/EMI's first CD plant in the U.S. Located at a Capitol Records facility in Jacksonville, Illinois, the new operation will have an annual capacity of seven million discs. A separate 97,000 square foot distribution center is also located at the site. In bringing CD capability to Jacksonville, EMI increases its number of CD plants worldwide to three. The original, opened in 1982 by Japan's Toshiba-EMI, is currently increasing annual capacity to 15 million. EMI Music's European plant in the UK opened last spring with a five million disc capacity, and early expansion is planned.

BASF Professional Products Division has revised its audio cassette duplication line, claiming "major improvements" in both ferric and chrome formulations. The upgraded LHD ferric stock features a newly developed particle that is finer and more consistent in size, allowing a high frequency MOL (Maximum Output Level) increase of 1.5 to 2 dB. Meanwhile, "Chrome Extra" has been introduced as a replacement for BASF's previous chromium dioxide stock. The company reports an improvement of 2 dB in dynamic range for the new product.

In an effort to realize the full playback potential of today's state-of-the-art A/V home entertainment systems, HVM Video Duplication of Long Island, NY, has turned to Sony for digital audio processing and broadcast video equipment. HVM has combined a bank of Sony Broadcast BVH-2180 1-inch VTRs, a Sony PCM 1630 digital audio processor and an AVP-500 synchronizer to ensure high quality audio in its home video duplication business. At full capacity, HVM produces 12,000 two-hour movies per day, and the company plans an "aggressive" expansion in the near future.

American Comedy Network of Bridgeport, CT, has purchased a customized Electro Sound 5000 for high speed (32-1) duplication of reel-to-reel tapes. The new system, said to be the only one of its kind on the East Coast, will allow ACN to provide its 151 affiliate stations with more timely material. The company plans to purchase three additional slaves for the system before the end of 1987.

## TUBE•TRAPS

**CONTROL BASS ACOUSTICS**



**THE ONLY ACOUSTICAL TREATMENT SYSTEM**

- Broadband, Effective 400 Hz, Thru 40 Hz
- Corrects Low End Phase Distortion
- Damps Standing Wave Room Resonances
- Reduces Room Resonance "Q" Response By 4
- EQ's Low End RT-60 Decay Constants
- Packs 15 Sabines Absorption Into Each 3' Tube
- Midrange, Adjustable Diffusion
- Light Weight, Sturdy and Very Portable
- Versatile, Pressure Zone Bass Trap or GOBO

**1-800-ASC-TUBE**

**ASC** ACOUSTIC SCIENCES CORPORATION  
P.O. BOX 11156 EUGENE, OREGON 97440

Circle #095 on Reader Service Card



*Custom pressing, tape duplication and packaging.*

**1,000**

**7"-45"**

including mastering, metal parts and processing, white sleeves, labels, pressing.

**\$439.00**

**12" Albums with jackets**

including mastering, metal parts and processing, poly dust sleeves, labels, pressing and printing of full colour ultra high gloss board jackets from customer supplied process film.

**\$1,390.00**

(F.O.B. DETROIT)

- 2 - 3 WEEK SERVICE
- VIRGIN VINYL
- HIGH GLOSS BOARD JACKETS
- CrO<sub>2</sub> CASSETTES
- CUSTOM 7" SLEEVES
- INHOUSE ART & TYPESETTING

Call Toll Free Continental U.S.A.  
**1-800-263-7798**

*Canada's Largest Custom Producers*

**WORLD RECORDS**

BASELINE ROAD WEST, BOWMANVILLE, ONTARIO L1C 3Z3

Circle #096 on Reader Service Card

## BITS AND PIECES

by Elizabeth Rollins

### Facilities:

Miami plays host to another world-class facility with next month's opening of *Limelite Video*. The 100,000 square foot building houses five soundstages, set design and scenic art departments, digital audio production/sweetening, a mobile truck division, and a full-blown computer graphics studio.

According to operations manager Michael Garrett, emphasis will be placed on special effects—and certainly the hardware list backs up the claim: Quantel Harry/Encore and Paint Box, Mirage, Sony D-1 format DVR-1000 digital video tape recorders, Abekas A-62 digital disk-based recorders, and a SteadiFilm/Rank Cintel telecine configuration. Garrett is especially enthusiastic about *Limelite's* interactive motion control camera, which is completely computer controlled. (The plan is to fit the IMC with a film camera soon, also.)

The editing suites can accommodate one-inch, 3/4-inch, and Betacam. In the audio editing suites, the 32-track digital Mitsubishi X-850 and the Otari analog 24-track are available with a 36-track digital Neve console.

### The Post Group, Los Angeles Announces Computer Graphics Division

Tony Redhead has exited Quantel to become art director at the Post Group's new computer graphics division. Of course, SFX are nothing new to this Hollywood facility, but VP Linda Rheinstein says the entire art department has been consolidated in a separate cottage to enhance the creative atmosphere.

According to Rheinstein, the big news is their new Graphic Paint Box—a high resolution video imaging

device that can modify still frames in the same way that a Quantel Paint Box can—but it can then translate that still frame into printed material.

Other recent acquisitions include: a second Paint Box with 403 software, an Aurora 220, a stat camera, an Encore to go with the Quantel Harry, and an interactive motion control camera. The list of other effects gear is seemingly endless, but some essentials include: a Wavefront computer graphics room, Mirage and Bosch FGS-4000 suites.

But beyond the heavy hardware attributes, both Rheinstein and Redhead are quick to emphasize art above mere technique. "We have a conventional art department with people who started as artists—you know, with pencils and paper," says Rheinstein. "That's important to us. We're trying to create a creative atmosphere with people who know the equipment well enough not to be distracted by it," she explains.

Certainly if anyone knows the Paint Box and the Harry, it's Tony Redhead, who just left the company that manufactures these high-end graphic art *wunderkinder*. Harry freaks, take note. Redhead's organizing a Harry user group, open to all artists who are using these devices. He says, "We welcome everybody because we feel that if we can all learn as much as possible about Harry, then we can keep the standards high—both on the user and the manufacturing side."

### St. Louis Gets New Corporate Video Facility

Corporate Video Services (CVS) is the name of a computer and laserdisc oriented production facility that recently opened in St. Louis. CVS is the only company that currently offers two systems mainly useful to corporate customers: the McDonnell Douglas Laserfilm system, and the Digital Techniques Touchcom interactive computer system.

Laserfilm is an interactive videodisc system which stores source materials from video tape, film and other media onto a 12-inch disc made of X-ray film. As with traditional laserdiscs, any address can be randomly accessed instantly.

CVS claims each Laserfilm disc can hold up to 32,000 pictures or frames of photographic film; but it only takes about 17 minutes to master one, at a price of about \$20 (copies, \$10 each).

The Touchcom system is based on the interactive touchscreen, such as the one you probably use to do your banking at an automated teller machine. It's designed to handle volatile, sophisticated databases with multiple remote terminal access locations.

CVS supplies programming services for both Touchcom and Laserfilm systems. Founder Ken Bronson says his company will also serve as "dealer for more traditional audio/visual equipment, including JVC, Hitachi, Sharp, and Bell and Howell. However, our primary emphasis is on the newer interactive developments."

### Image Transform of North Hollywood Introduces New Noise Reduction For Film-to-Tape

Image Transform, a compact video company, is up and running with their new proprietary noise reduction system designed specifically for the film-to-tape process. It offers 10-bit digital signal processing, instead of the standard lower resolution 8-bit processing. The Image Transform design team says the unit reduces the amount of film granularity visible in the output picture—in addition to eliminating the electronic noise generated in the transfer process. It works on 16mm and 35mm positive and negative film; also, because of its RGB mode option, the noise reduction system can also be used when source material is being transferred to Betacam or other component formats.

### Ampex Manufacturing Betacam Products

Ampex has begun manufacturing a full line of Betacam format equipment in Colorado Springs and Hong Kong. Two of those products will be available in this quarter of '87: the CVC-5 high resolution, three-chip camera for ENG/EFM use, and the CVC-40 studio recorder/editor. There are eight other basic products in 40 versions/configurations with more than 100 lenses and accessories.

The CCD camera eliminates lag and burn problems because the chips substitute for traditional tubes, which are sensitive to concentrated light. Chips also make the camera substantially lighter in weight. Three tube cameras will be available as part of the Betacam line of products to configure with the camcorder. ■



# How long has your dealer been a dealer?

Soundcraft


December 4th, 1986

To all at Pyramid Audio:

Congratulations on a great year. In 1986, as with every year as a Soundcraft dealer, Pyramid has been superlative in service to the greater Chicago area. Your fifteen years of stable support and experience is well recognized.

As you continue your dedication to customer support into 1987, it is fitting to bring in a new year with a new product. We are pleased to have Pyramid Audio representing the new Soundcraft TS12 console.

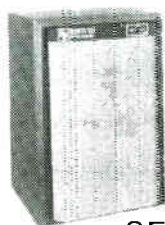
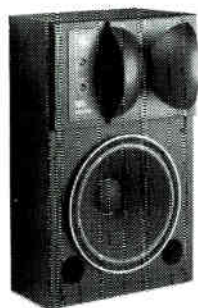
Good luck with your next fifteen years.

  
David A. Kimm  
Sales Manager

**We're not the  
exclusive Soundcraft  
dealer in the midwest...  
just one of the  
oldest...  
most respected...  
experienced...  
dependable...  
qualified...  
informative...  
supportive...  
and all around  
nice guys!**



 **Pyramid Audio Inc.**  
450 W. Taft Drive • South Holland, Illinois 60473 • (312) 339-8014

**EV****SENTRY  
100A****4425 JBL****Turbosound****TOA****Great Sound...****...Great Monitors!****170 Product lines  
for the PRO!**AMPLIFIERS • CASSETTES • HEADPHONES • INTERCOMS • SPEAKERS  
• TAPE • TAPE RECORDERS • TEST EQUIPMENT • TURNTABLES  
• LIGHTING • MICS • MIXERS • PARTS SIGNAL PROCESSING**TOLL FREE IN ALL 50 STATES****1 (800) 356-5844**

IN WISCONSIN — 1 (800) 362-5445

**FULL COMPASS SYSTEMS**

6729 SEYBOLD RD., MADISON, WI 53719-1393

**—FROM PAGE 124, STRANGERS**

primitive at best as far as the technology available. One of them was located back behind a record store and the window between the booth and the studio was literally a windshield from a Volkswagen van. You can adjust to almost anything, though. You have to."

In Hong Kong, Stronach was surprised to find that so many of the major studios are situated in high-rise buildings, no doubt because space is at such a premium in that crowded metropolis. "The studios were pretty well equipped for the most part," he says, "with bare bones Studer and MCI gear, but at one studio that was supposedly one of the best, I really didn't think they had their acoustics together. We had to rent an awful lot of stuff, too. But it was really great fun. I've always enjoyed working outside the U.S."

Stronach advises, "When you book a studio overseas, as a protection, if you can possibly manage it, you should see the place where you're going to be working before you confirm anything. You don't want to be unprepared or unpleasantly surprised when you get there. If I can't actually go to the studio in advance, I at least want to know everything that's in it. If you see Solid State Logic and Studer in their brochure, for example, you can pretty much assume that it's a world-class room. That's the first thing I look for. I go to my SSL book, find out where the SSL-Studer rooms are, and try to use those studios."

Of course SSL rooms aren't exactly a dime a dozen worldwide, and for lower budget projects, engineers frequently find themselves in studios that seem antiquated by top U.S. standards. When Jeff Jones, an engineer who's a co-partner at New York's Intergalactic Music, arrived at one studio in Barcelona, Spain, he found "a classic, old-style European studio; real high ceilings and heavy duty gobos on wheels. It reminded me of pictures you'd see of The Beatles recording, where they'd be in this gigantic room but they'd be close together with gobos in between them. It was a monstrous room, but real nice to work in."

"They had a vintage Neve with VCA groupings, which was great, but the monitoring system was weird. The way it was set up, they had one speaker in one corner of the room and the other in another corner, literally 20 feet away. The solo was in mono out of one speaker. Also, the crossover was a passive crossover, so what that means is the louder it gets, the frequency response changes. The more you turn it up, the more high end you get. So I decided on a moderate listening level, and then I'd solo on one speaker to

make sure everything was OK."

Americans working abroad invariably find that equipment rental possibilities aren't quite what they are in large cities Stateside. "The couple of studios I worked in overseas didn't have much in the way of outboard equipment and it was hard to find," Jones says. "The owners complained about the availability of parts, too. Since I went over there, I've worked with people who came over from France and they're just as amazed at how easy it is to find equipment, and even more, how cheap it is. They could buy three SPX90s here for what they pay for one in France."

Jim Scott, an L.A.-based independent who has worked on Sting's solo albums at AIR Montserrat and Eddy Grant's Barbados studio (and who's currently engineering Robbie Robertson's long-awaited solo debut), found that "Sometimes I'd be working [in Barbados] and I'd think to myself, 'Oh, if I only had this kind of gear!' When you're in Hollywood, you call up Studio Instrument Rentals day or night and in a little while you've got it. Or, in the big studios, you walk down the hall to the equipment room and pick up what you need. Down [in the Caribbean], if you don't have what you need, it'll be a couple of days before you can get it. At AIR Montserrat it was a little different because it's supported by AIR London and that affiliation makes them a stronger studio."

"If you isolate yourself, rental is going to be a real problem," agrees Harry Maslin, who found himself with limited equipment resources working on a project in Sweden. "Even if the equipment available to you is good and well maintained, which is not usually the case—at least in my experience—you're going to be stuck sometimes if you can't rent what you want." Or you figure out a way to work around it. When Jeff Jones found that one European studio didn't have a 2-inch splicing block, "I ended up using a block of wood and thumbtacks."

Of course, working away from home can take a psychic toll on an engineer, too. "There are different kinds of isolation," comments Jim Scott. "In Montserrat there's no town. There isn't much tourism. You can't really go to find nightlife or a movie house. The studio [AIR] tries to compensate for that by making everything as enjoyable as possible. And they do a great job. From my standpoint, as an engineer, the normal work day is 12 or 14 hours, so it's pretty much just a case of where to sleep after the session. But I would imagine you could get pretty lonely down there and pretty tired of seeing the same faces all the time."

Circle #098 on Reader Service Card



And even in sophisticated metropolitan areas, engineers on the road still have to deal with being away from family and friends, sometimes for weeks at a time. This means there are fewer distractions at work, but a frequent side effect is a sort of studio tunnel vision that can become numbing after a while.

Jeff Jones also encountered a fairly severe language barrier when he was working with local audio people in France and Spain. "I'd try to explain that I needed this, this, and this and they'd say, 'Hmmm. I don't know.' Part of that was language and part was that they didn't know some of the technical things I was trying to do. I'd do gated reverb tracks and they'd look completely baffled—'Why are you doing this?'"

"But basically it was really nice being over there, and I'm looking forward to going back," he continues. "They gave me mucho respect. I'm 6'7" and they called me 'the big American producer.' Their notion was, 'We'll get everything set up and then we'll come to the hotel and pick you up.' I appreciated that, but I like to be down there myself to make sure things are right. I'd hate to have them go to all that work and then I come in and say, 'No, no—put the 451 on the snare.'"

---

**"When you book a studio overseas, as a protection, if you can possibly manage it, you should see the place where you're going to be working before you confirm anything."**

---

Complaints about equipment and maintenance aside, the engineers we spoke with seemed to basically feel positively about their foreign experiences and the feeling of camaraderie they developed around the globe. In Tinseltown or Timbuktu, engineers constantly strive for excellence.

And the technology gap? That seems to be shrinking, too. It wasn't long ago that John Stronach was set to go to the People's Republic of China with a partner to help the Chinese figure out some 24-track recorders the government had bought. "They were a little confused," he says with a chuckle. "They were putting one song on each track." (Stronach's trip never happened and presumably everything is up and running in Peking now.) And the increased availability of inexpensive and efficient outboard gear is helping bring many studios around the world firmly into the '80s.

"It still comes down to getting a good performance and using your ears," Harry Maslin says of working abroad. "I think you can record a great album in any studio if the engineer and producer know what they're doing. You can overcome any technical shortcomings." Just ask the engineers who've been earning their gray hairs trying to do just that. ■

*The intelligent choice*

**RECORDING • BROADCAST • VIDEO  
KEYBOARDS • MUSICAL INSTRUMENTS**

LaSalle stocks over 250 professional audio and musical instrument product lines, offering you the widest choice of manufacturers at **discount prices!**

<b>ADC</b>	<b>Auratone</b>	<b>Eddor</b>	<b>Kurzweil</b>	<b>Scotch</b>	<b>TAC</b>
<b>AKG</b>	<b>Beyer</b>	<b>Electro-Voice</b>	<b>Lexicon</b>	<b>Scotchcart</b>	<b>Tannoy</b>
<b>Allen &amp; Heath</b>	<b>Biamp</b>	<b>E-mu Systems</b>	<b>Lexicon 224XL</b>	<b>Sennheiser</b>	<b>Tascam</b>
<b>Amek</b>	<b>Bose</b>	<b>Ensoniq</b>	<b>Nady</b>	<b>Shure</b>	<b>Technics</b>
<b>Aphex</b>	<b>BGW</b>	<b>Eventide</b>	<b>Neptune</b>	<b>SMPL</b>	<b>Telex</b>
<b>Aphex Broadcast</b>	<b>BBE</b>	<b>Fairlight</b>	<b>Orban</b>	<b>Sony Digital</b>	<b>TOA</b>
<b>ATI</b>	<b>Capitol</b>	<b>Fostex</b>	<b>Otari</b>	<b>Sony/MCI</b>	<b>UREI</b>
<b>Audioarts</b>	<b>Cipher Digital</b>	<b>Goldline</b>	<b>Peavey</b>	<b>Soundcraft</b>	<b>Ursa Major</b>
<b>Audio Design</b>	<b>Countryman</b>	<b>HME</b>	<b>PPG</b>	<b>Soundcraft</b>	<b>U.S. Audio</b>
<b>Audio Developments</b>	<b>Crest</b>	<b>Hill Audio</b>	<b>QSC</b>	<b>Magnetics</b>	<b>Valley People</b>
<b>Audio Technica</b>	<b>Crown</b>	<b>Ibanez</b>	<b>Ramko</b>	<b>Studer Revox</b>	<b>Wheatstone</b>
<b>Audio Kinetics</b>	<b>dbx</b>	<b>JBL</b>	<b>Ramsa</b>	<b>Symetrix</b>	
<b>Q-Lock</b>	<b>DOD</b>	<b>JVC</b>	<b>Rane</b>	<b>Symetrix</b>	<b>and</b>
<b>Mastermix</b>	<b>EAW</b>	<b>Klark-Teknik</b>	<b>RTS</b>	<b>Broadcast</b>	<b>many more!</b>

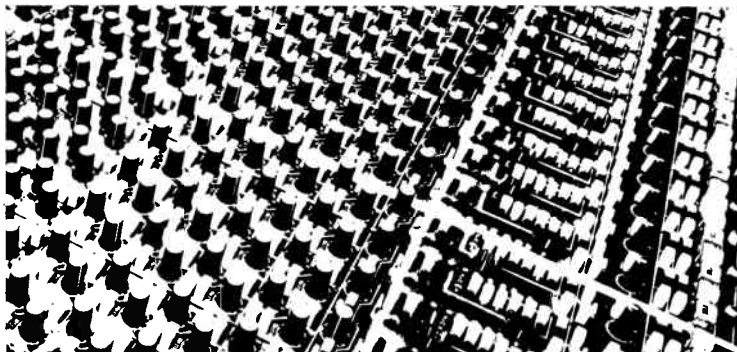
**YOUR DIGITAL SOURCE IN NEW ENGLAND**

1116 Boylston Street  
Boston, MA 02115  
(617) 536-2030

22 LaSalle Road  
W. Hartford, CT 06107  
(203) 236-5401

Outside MA 1 (800) 533-3388

# INDEPENDENT



# ENGINEERS & PRODUCERS

## RANDY ADAMS

*Engineer & Producer*

3725 Cibola, Ft. Worth, TX 76133

(817) 294-2581, 921-3881

Credits: Jeanne Rogers (Maranatha Records), Tom Autry (StarSong Records), Gingerbrook Faire (Word Films), John Hall, James Robison Television Special, Dave Roever Ministries, Alexandria Sanctuary Choir and Chorale, and many others.

Services Offered: Production, arranging, and engineering services. Large orchestral recordings, choirs, audio for video, live recordings.

## RICHARD ADLER

*Engineer & Producer*

RICHARD ADLER RECORDING SERVICES

P.O. Box 21272, Nashville, TN 37221

(615) 646-4900

Credits: John Prine, Jerry Jeff Walker, Ricky Scaggs, John Hartford, Dolly Parton, Neil Young, New Grass Revival, Shel Silverstein, Natalie Cole, "Doc" Watson, Country Gazette, Johnny Cash, The Carter Family, Townes Van Zandt, The DRMLS.

Services Offered: Studio, remote, digital, analog recording & mixing; production and/or co-production available for albums & CDs. Private 8-track (demo) studio available for pre-production sessions. Extensive inventory of mics, tube EQ, IVC & Sony digital 2-track systems on hand!

## A. GREGG ALEXANDER

*Engineer*

WEDGCO SOUND

328 Karrow Avenue, Whitefish, MT 59937

(406) 862-5161

Credits: Over the past ten years I have toured with such acts as: Commander Cody, Asleep at the Wheel, Alvin Lee, Edgar Winter, Pat Travers, Tommy TuTone, Greg Kihn, Whiskey River, and Lion. I am also a graduate of the Recording Workshop.

Services Offered: I am available upon notice for club and concert sound engineering, and will also send resume and equipment list on request.

## STUART J. ALLYN

*Engineer & Producer*

ADR PRODUCTIONS, INC.

325 West End Ave., New York, NY 10023

(212) 486-0856

Credits: Mel Lewis Orchestra (20 years at the Vanguard), Hall & Oates, Aerosmith, Billy Joel, James Galway, Plácido Domingo, Lionel Hampton, The DukesMen, Taylor Wines, Time magazine, Lee Jeans, COKE, AT&T Communications, Radio 1990 (USA TV), National Geographic specials, Budenbrooks (PBS), Tony Awards shows (ABC), Olympics (ABC), Camelot (HBO), Major League Baseball (NBC), etc. Services Offered: We can oversee your entire project from start to finish or work on one aspect. Our 12 years of experience has covered: albums, videos, concerts, TV, film, theater, radio and advertising. We have associations with large and small studios, musicians, etc. and can supply the following services for any production at the right price: pre-production consultation (budgeting, studio bookings, schedul-

Following is a list of independent producers and engineers who responded to our recent survey. The information was supplied by those listed, and thus *Mix* is not responsible for its accuracy. We urge other independent producers and engineers to get in touch with us in order to be included on our next update.

ing, instrument pre-programming, etc.); recording and engineering services (analog and digital); production services (composition, arranging, scoring, contracting, etc.); location recording (audio, video, film); equipment and microphone rental (including our extensive collection of vintage tube and ribbon microphones); location sound reinforcement; mixing; mastering; post-production (video, film); jacket design and layout; plating, manufacturing and more.

## GREGORY ALPER

*Engineer & Producer*

ALTAVISTA MUSIC/ALPERTRACK STUDIOS

ALTA VISTA MUSIC PRODUCTION

77 Warren St., New York, NY 10007

(212) 349-8095

Credits: Produced, composed, arranged, performed records: Greg Alper Band, *Adelphi* (Billboard Pic); Johnny Copeland, *Rounder*; J. Beck, *Global*; Atlantix, *Wave*; Lovelace, *Lovelace*; Chesno Straiter, *New Leaf*; Healing Gems, *Gem*; Jingles and A/V: Aarnco, WPIX, AT&T, Chams, New Jersey, MTV, several independent films.

Services Offered: Sizzling sax solos (a la Jr. Walker, Mike Brecker), composing, producing, arranging in all styles: dance, rock, pop, jazz; commercial and film scoring, drum and keyboard programming. Studios: state-of-the-art 16-track, Soundcraft 24 channel board, Emulator II, digital mixdown, digital reverb, digital delay, digital drums, cuac-racha.

## JIM ANDERSON

*Engineer & Producer*

86 Dexter Ave., Watertown (Boston), MA 02172

(617) 926-6914

Credits: Livingston Taylor, Girls' Night Out, Life on Earth, Uncertain Terms, Curious Figures, The Roys, Men and Volts, Young Rationals, Pleasure Pointe, David Cook, Larry Gould, Prima Music, The Stable, Michael Baker, Capital Gain, Mir-

ror Mirror, Maggie Galloway, Steve Berman.

Services Offered: In addition to engineering services and record production, I can assist with pre-production, including rehearsals, instrumental and vocal arranging, talent coordinating and session planning.

## PAUL ANTONELL

*Engineer & Producer*

25 Rhinecliff Road, Rhinebeck, NY 12572

(914) 876-4382

Credits: Gospel At Colonus, Paris, LA, Atlanta, Philadelphia; The Warrior Ant at Alice Tully Hall, NYC; Little Village, Five Blind Boys, Soul Stirrs, Terrance Boylan, Roger Powell, Big Noise, Chris Winham; Plácido Domingo, AV Presentations: RCS Audio Visual, Comart Aniforms, IBM, Cambel's, Stuart Pharm, Kraft, etc.

Services Offered: Pre-production, consultation, audio/visual presentations, soundtracks for industrial theater, complete 16-track production studio with MIDI, keyboards, drum machines and sequencers. Call for more information.



# VOCAL DYNAMICS

PRIVATE VOCAL INSTRUCTION  
AND PRODUCTION STUDIOS

THOMAS E. APPELL  
Santa Ana, CA

## THOMAS E. APPELL

*Director*

VOCAL DYNAMICS

1420 E. Edinger Ste. 212, Santa Ana, CA 92705

(714) 835-3344

Credits: Allied Artists Record Co.

Services Offered: At Vocal Dynamics we specialize in private vocal instruction and top-flight vocal production. We train vocalists at all levels to sing expertly and work with them on their songs, line by line, giving specific direction, detailing how to improve every aspect of the vocal line. We then teach the singer how to execute the produced version of the song, and can assist with or completely produce the vocalizing on the recording date. We have studios located in West Covina, Santa Ana, Rancho Cucamonga, and San Clemente, California.



**FRANK L. ARN****Producer****BANTAM SOUND SERVICES**

4724 Kester, Sherman Oaks, CA 91403  
(818) 907-5181, 997-0128

Credits: Staging and production on tours with: Rare Earth, Bob Seger, Parliament/Funkadelic (Mothership tour), Tommy Bolin, Keith Carradine (I'm Easy tour), George Benson (Breezin' & In Flight tours) and more. RIAA Gold Records "In Flight" with George Benson, platinum "Night Moves" with Bob Seger, and more. Prior education includes A.A. in Electrical Engineering. Certificate in Recording Engineering from University of Sound Arts.

**Services Offered:** Available for live showcases, consultations, independent recording engineering, live sound engineering for major tours, custom built racks, and home studio installations. Also a full service production company for new bands, including buying or renting complete pro P.A. systems, stage production, discounts on instruments, bookings, and demo recording dates in various major L.A. and San Francisco studios. For these services, sending band promos and tapes are a must. 1986 has been a great year. Recent projects include recording dates with Kenny James, Neil Henderson, Tuesday Night, Paul Warren, Mike Egizi, Paul Sabu, Only Child, and the Smithsonian Institute for U.S. Government. Also concert dates and showcases with: Calif. Music Presentations, Paul Warren with Explorer, Tuesday Night, Little Bruce & the Billionaires, Rick Roberts Talent, Calvin James, Bill Lorden, Paul Sabu and Only Child, Neil Henderson, and more. Watch for more in '87. Thank you Mix Magazine and Jesus Christ.

**RICK ASTER****Engineer & Producer****BREAKFAST COMMUNICATIONS**

P.O. Box 42139, Philadelphia, PA 19101  
(215) 639-4977

Credits: *Fast Food*, "Christmas Spirit," *Days Like This, As If* by Paul Nordquist; *High Dosage of Rock and Roll* by Fiver; *Paradise Road* by Hey; *Robots*; *Martial Law Has Been Declared All Over* by Rick Aster; *The Left*; *Thesaurus*; *Bah* and the *Humbugs*; *Dismembered Puppies*; *The Tough*.

**Services Offered:** We produce master tapes, demos, and jingles on any budget, specializing in British-sounding rock and pop. We have an extensive team of creative people on call who can handle absolutely any production or pre-production task, especially songwriting and re-writing, arranging, sequencing, playing and singing, vocal coaching, spiritual guidance, conflict resolution, and "problem" mixes. We also offer remote recording, PR, consulting, graphic design, and T-shirts.

**DAVID AVIDOR****Engineer & Producer****HOME PRODUCTIONS**

96 Sterling Place, #2B, Brooklyn, NY 11217  
(718) 636-1245

**Services Offered:** Studio engineering for music and film; 2-track and 8-track remote recording; in-house 8-track/MIDI demo/pre-production facility; personal studio design, consultation, and installation; music arrangement and full-charge production.

**CLIFF AYERS****Producer****CLIFF AYERS PRODUCTIONS**

830 Glastonbury Rd., Ste. 614, Nashville, TN 37217  
(615) 327-4538, 361-7902

Credits: Started producing records for his own label Emerald Records in New York in 1951. Through the years he has had productions released on Decca, Columbia, MGM, Discover, MCA and many other labels. Presently owns American Sound Records and produces some 20 artists.

**Services Offered:** Recording and video productions under American Sound Records and Emerald Records owned by Ayers. Music Town Distributors & Promotions Co. distributes independent labels and The Music City Entertainer Newspaper in its 13th year of publication. It promotes artists and has its own records charts called "HotPops." Cliff Ayers Productions also leases masters for its Emerald Record label.

**JB****Engineer**

P.O. Box 120803, Nashville, TN 37212  
(615) 385-9827

Credits: Dion, Elim Hall, Michael W. Smith, Chris Eaton, Amy Grant, The Imperials, Gary Chapman, Rich Mullins, Dallas Holm, Kenny Marks, Debbie Boone.

**Services Offered:** Aggressive recording and mixing.

**SUZAN BADER****Engineer & Producer****D.S.M. PRODUCTIONS**

161 West 54th St., New York, NY 10019  
(212) 245-0066

Credits: Current: American Steel, *Shake Your Body Line*,

Lulu Records; Fonda Rae, *Last Train to Clarksville*, Urban Rock Records, 12-inch and 7-inch UR-922.

**Services Offered:** Pre-production, record production, film scoring, original composition, arranging, mixing (club and radio), commercial, documentary, industrials, post-production, tape copies: 15ips to 15ips, 1/4-inch, 1/2-inch, cassette duplication, Fairlight CMI 2x, and list of outboard available for rent upon request, including 24-track studios. Call for special requests.

**DEAN BAILEY****Engineer & Producer**

3422 Beech St., Rowlett, TX 75088  
(214) 475-9796

Credits: Ray Owens, Bergman & Roberts, Rich Gilliland-demos; 6 1/2 years of TM Country; *Golden Moments*, an Olympic Retrospective; simu-lite training programs; in-flight music services; commercial production for numerous advertisers.

**Services Offered:** Audio engineering including all facets from studio installation, maintenance, tracking, mixing, and producing. Specializing in mellow rock, country, jazz, radio specials, commercial production, and audio visual programs.

**ARTHUR BAKER****Producer****SHAKEDOWN SOUND**

222 W. 37th St., New York, NY 10018  
(212) 947-9170

Credits: Produced and mixed for various artists such as Daryl Hall, Cyndi Lauper, Carly Simon, Bruce Springsteen, Paul McCartney, The Pet Shop Boys, Jeffrey Osborne, etc.

**Services Offered:** Re-mixes, production.

**MICHAEL BARBIERO****Engineer & Producer****c/o Advanced Alternative Media**

277 Church St., New York, NY 10013  
(212) 334-9556

Credits: Aretha Franklin, Anphaville, Cutting Crew, Tesla, Whitney Houston, Irene Cara, Psychedelic Furs, Rolling Stones, Phantom Rocker & Slick, Icehouse, Pat Benatar, Tears for Fears, John Lennon, Julian Lennon, Belovis Some, Journey.

**Services Offered:** Re-mix specialist, producer, engineer.

**ANDREW BARRETT (SCHWARTZ)****Producer****LIONELLA PRODUCTIONS**

7 W. 14th St., Suite 8G So., New York, NY 10011  
(212) 620-3122

Credits: Melis'a Morgan, Candi Staton, Carol Douglas, Carboy.

**Services Offered:** Creative, Top 40 oriented production services with an ear for highlighting strengths of artist. Arranging, songwriting, and keyboard playing are available. Full pre-production and production staffs on call.

**JIM BARTZ****Engineer & Producer**

Royal Recorders, Americana Resort, Hwy. 50  
Lake Geneva, WI 53147  
(414) 248-9100

Credits: Tools of Romance, The Ultraviolet, (eng/prod) Tom Holland. Asst: Bon Jovi, Cheap Trick, Survivor, Chuck Mangione, John Hunter, Daryl Stuermer.

**GEOFF BENSON****Engineer & Producer****FRONTSTREET MUSIC**

P.O. Box 15611, St. Louis, MO 63163  
(314) 773-9297

Credits: Ozark Airlines, Southwestern Bell Freedom Phone, KangaROOS shoes, Fashion Gal stores, Sandoz Chemical, Venture stores, "On This Rock" A Look Inside the Vatican.

**Services Offered:** Synclavier composer/producer. Original compositions in music and sound effects. Specializing in post-scores for commercials and film. Record production. Synclavier digital music system, with 32 polyphonic sample voices, SMPTE, MIDI, 16 FM voices, 12 Meg RAM, Linn 9000, Yamaha DX7 and TX-816, Prophet 600.

**GLENN E. BERKOVITZ****Engineer****SPINNING REEL SOUND SERVICES**

11929 Windward Ave., Los Angeles, CA 90066  
(213) 313-2776

Credits: Television/film credits include *Godzilla '85*, *To Live & Die in L.A.* (MGM/MTV), *Max Maven* (Universal), and too many commercial and music video projects. Music credits include ongoing independent album projects, and numerous jingles and demos.

**Services Offered:** Specializing in audio—production and post-production—for film and television. I bring to my work a thorough knowledge of all systems in use today. From incorporating digital and time code technologies in my production recording equipment and techniques, to helping create full MIDI/SMPTE recording and scoring studios, I seek to implement and incorporate all of what is currently going on into my work to produce a more cohesive and satisfying result. Large or small, it has to be good, and, hopefully, fun.

**BILL BERRY****Engineer & Producer****MUSICON**

1820 Moreno St., Oceanside, CA 92054  
(619) 721-2029

Credits: Worked with John Ford Coley, Jimmy Stewart, Celedonio Romero, countless others on projects ranging from pop, classical, R&B, and soundtracks, to gospel, sound FX, and over 1000 international radio broadcasts.

**Services Offered:** Arranging, producing, engineering, and programming. Personal studio featuring Yamaha, Kurzweil, Ensoniq, Oberheim, E-mu SP-12, much more.

**MIKE BILLINGSLEY****Engineer & Producer****STRAIGHT ARROW RECORDINGS**

3 1/2 Kent St., Montpelier, VT 05602  
(802) 223-2551

Credits: Wood's Tea Co., Chattaqua Symphony Orchestra, Vermont Opera Theatre, Plainfield Village Gamelan, Grupo Aymara, Real Steel, Seleshe Demassae, Africa djole, Pat Metheny, Michael Hedges/Daniel Hecht, Gloucester Sea Life Festival, Vermont Choral Festival, Treacha O'Driscoll, Michel Cuisson/Ike Ueno, Vermont Brass Quintet, Michael Arnowitt, Night Gelerlach Klezmer band, Vermont Philharmonic Orchestra, Flor de Cana.

**Services Offered:** Location performance recordings—live to digital, live to 1/2-track or 4-track; location sound effects and ambience; audio for video/on-location sync digital; multi-track mixdown; album production from performance recordings. Small post-production and demo studio (BACK-TRACKS). Particularly interested in acoustic voice and instrument ensembles including ethnic, classical and folk, and solo voice/instrument performance in good halls; and experimental works, including electronic.

**CRAIG R. BISHOP****Engineer & Producer****INDEPENDENT RECORDING SERVICES**

27 W. 75th St., #4B, New York, NY 10023  
(212) 581-6470 (service), (212) 580-0974 (office)

Credits: The System, Tommy James, Spyro Gyra, John Hall Band, Change, Ornella Vanoni (featuring George Benson, Herbie Hancock, Brecker Brothers), Airrace, Kool & The Gang, Lenny Kaye Connection, Go Aghami (Nippon Columbia), television. Producers: Reggie Lucas, Deodato, Jimmy Jenner, Terry Lewis & Jimmy Jam, Alan Lanier, Liggett & Barbosa, Carlos Alomar.

**Services Offered:** Extremely experienced and diversified freelance engineering from a strong production background (former senior engineer with a highly successful and innovative NYC music production house). Grammy nominee with international credits. Closely affiliated with George Benson's state-of-the-art Broadway productions. Other services range from Synclavier programming to coordinating complete world class production packages. Sensitive to artistic needs and respectful of budgetary realities.

**MICHAEL BITTERMAN****Engineer & Producer****MIDNIGHT MODULATION**

2211 Pine Lane, Saugerties, NY 12477  
(914) 246-4761

Credits: Produced and engineered *Woodstock—Moods & Moments* (Prism Records); *Five After Eight* (OC Records); *Company Wife*, Denise Finley; engineered Jean Redpath (Rounder); Priscilla Herdman (Flying Fish); John Hall, Dan Brubeck, The Band; John Sebastian; Orleans.

**Services Offered:** I own and operate Midnight Modulation, a fully loaded 16-track studio w/full MIDI setup. Located in Woodstock, NY, I have access to many of the fine musicians here. I have produced artists ranging from folk music to pop to cabaret to rock. I can give you a state-of-the-art sound for a fraction of the price. I am extremely eclectic and will serve every project on its own high merits—from production through engineering, and finally, mastering.

**JOHN P. BLACKWELL****Engineer & Producer****BEDLAM RECORDS**

388 Marietta St. N.W., Atlanta, GA 30313  
(404) 525-9193

—LISTING CONTINUED ON NEXT PAGE

—LISTING CONTINUED FROM PAGE 151

Credits: Tomb Stones, Anti Heros, Up Beats.  
Services Offered: Cigarette lighting, record production, video production, psychoacoustic imagery specialist; from classical to hard core.

**DAVID BLADE**

*Engineer & Producer*  
**SOUND SOLUTION RECORDING**  
1211 Fourth St., Santa Monica, CA 90401  
(213) 393-5332

Credits: Animal Dance, Attila, Babylon Warnors, Raymond Berney, Clark Sisters, Jimmy Cliff, George Clinton, Doll Congress, Doris Day, Richard Greene, Bruce Johnston, Susan Lynch, Barry Manilow, Terry Melcher, MGM—Seven Brides for Seven Brothers, Dudley Moore, Fred Myrow, Penny Royal, Jim Phogloglow, Mary Ann Price.

Services Offered: 24-track studio, complete production, project management, concert sound mixing, albums, demos, TV and film scoring, etc. My commitment is to provide the highest service possible to my clients, making every step as effortless as possible.

**BO BLAZE**

*Engineer & Producer*  
**BLAZE PRODUCTIONS**  
46 W. Passaic St., Maywood, NJ 07607  
(201) 845-9175

Credits: Various local and national acts! Please call for more information.

Services Offered: An East Coast connection! Top quality masters, demos, singles done by top industry professionals. Will fit the right producer, engineer, arranger, writer, musician, etc. to your budget. We work with all major studios in NY and NJ. Our engineers and producers have worked with the best of all styles: Bill Cosby, Stevie Nicks, James Brown, Grover Washington Jr., Pete Townsend, Alan Vega, Joan Jett, Wendy O'Williams, etc. as well as hundreds of independent and local acts

**PHIL BONANNO**

*Engineer & Producer*  
**Royal Recorders, Americana Resort, Hwy 50**  
**Lake Geneva, WI 53147**  
(414) 248-9100

Credits: Survivor, Pretty Boy, Amusement Park Band, Cuff Johnson, John Hunter, Styx, Bachman Turner Overdrive, Ruby Star, Gary Lyons, The Outlaws, Tommy Shaw, Daryl Stuermer, Bon Jovi.

**ROBERT BOTH**

*Engineer & Producer*  
**TWAIN PRODUCTIONS**  
18 Hiawatha Pass, West Milford, NJ 07480  
(201) 697-7540

Credits: James Brown, The JB's, Lyn Collins, Robert Kraft & the Ivory Coast, Hank Ballard, Mutha Records, I.R. Records, The Watch, Tom Storms, Tito Rodriguez Jr., and others. Three gold records for work with James Brown.

Services Offered: Engineering and/or production services in own 24-track studio or studio of your choice—will travel! Musical directions: rock, pop and jazz; solo performers or groups.

**JIM H. BOYER**

*Engineer & Producer*  
**JAMES BOYER COMPANY**  
P.O. Box 303, South Salem, NY 10590  
(914) 763-5086

Credits: Producer: Three-Speed, Rupert Holmes, Peter Cetera, CBS/multi-artists, Sophie Sara Dakis. Engineer: Billy Joel, Steve Winwood, Paul McCartney, Patti Austin, George Benson, Chicago, Kenny Loggins, Linda Ronstadt, Paul Simon, and Manhattan Transfer. Feature films: *Places In The Heart*, *Arthur*, *Silkwood*, *Yentl*, *Easy Money*. Have also recorded and engineered music for multiple television and video shows.

**GARY VAN BOYLAN**

*Engineer & Producer*  
**GARRISON SOUND**  
256 Woodbury Rd., Hicksville, NY 11801  
(516) 822-5562

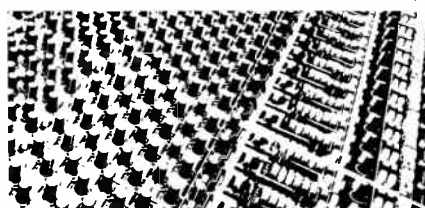
Services Offered: 2- to 24-track recording and mixing. Complete audio and video production; studio or remote videotape editing; teleprompter rental and operation

**JOHN BOYLAN**

*Producer*  
**GREAT EASTERN MUSIC**  
6420 Wilshire Blvd., 19th Fl., Los Angeles, CA 90048  
(213) 851-2944

Credits: Boston, Little River Band, Charlie Daniels Band, Quarterflash, Linda Ronstadt, KBC Band, Carly Simon,

# INDEPENDENTS



various soundtracks: *Urban Cowboy*, *Footloose*.

Services Offered: Production, publishing (contact: Teri Weigel).

**ERIC T. BRANDT**

*Engineer & Producer*  
**ALPINE RECORDS INC.**  
P.O. Box 6007, Malibu, CA 90264  
(213) 456-0096

Credits: Music video of "Flyin' High"—MTV Basement Tapes winner; *Beyond the Edge*—Warren Miller ski feature; sports/documentary film soundtracks; comedy/novelty rock album—*Ski Patrol*; "Galaxy High" TV series.

Services Offered: Serious demo production/engineering, TV music production, consultation in the following: synth programming, sampling (Emulator, SP-12), MIDI/ SMPTE configurations and applications, audio/video sync and sweetening, sequencing with the Macintosh. Also: video/film production and direction. Call me if you have questions!

**BRYAN BREWER**

*Producer*  
**EARTH VIEW INC.**  
6514 18th Ave. N.E., Seattle, WA 98115  
(206) 527-3168

Credits: Interactive AudioMation CD demonstration system.

Services Offered: We specialize in creating interactive audio for computer/CD applications in all CD formats: CD audio, CD-ROM, and CD-I. Services include audio user interface design, storyboarding, scripting, recording, post-production, and pre-mastering for CD replication. Application areas include education, entertainment, reference, music, and professional recording. Software development is also available.

**JAMIE BRIDGES**

*Engineer & Producer*  
1474 Hauck Dr., San Jose, CA 95118  
(408) 723-3125

Credits: I've engineered and produced in the San Francisco Bay Area and L.A. for eight years recording every style and sound imaginable—some famous, some not.

Services Offered: I can engineer and produce your project without getting in the way of your music, or work with your producer. I can also help you find a studio or studios that best suit your music and budget.

**HARRY BROTMAN**

*Engineer & Producer*  
**BROTMAN MUSICAL SERVICES**  
19010 Avers Ave., Flossmoor, IL 60422  
(312) 799-7711

Credits: Recent national airplay: Robin Angel (CBS) final mixes; Sandy Torano (Atlantic) lead vocals/mixes; Calvin Bridges, "Renew My Spirit" (IAM/Lexicon) final mix. Albums—Sole Recordist: Eddy Clearwater, *Flimdoozie* (Rooster/Flying Fish); Johnny B. Moore, *Hard Times* (Blues/R&B); Byther Smith, *Gritty Soul* (Gnts/Mina); Music Tracks—Chi-Lites England tour.

Services Offered: Engineering, co-production, production, analog and FM digital synthesis; 11th year working Chicagoland and beyond. Requestable at many fine 24-track facilities, including ARS Studio, Seagrape, Startrax, P.S. Recording, Prism, Sonic Art, and Jor-Dan. Full-service packages are also available in Houston and Jamaica. European near-field monitors/amplifier system goes everywhere. Also, European condenser and ribbon microphones plus various outboards (16 channels of the good stuff!). Custom pre-/post-production assistance on all projects is included

**BRETT BROWN**

*Engineer & Producer*  
**RENEW SOUND PRODUCTION**  
2516 El Camino Real, Redwood City, CA 94061  
(415) 366-4212

Credits: Cornelius Bumpus (Doobie Bros.), Mingo Lewis

(The Tubes), Sterling Crew (Santana), Mark Adams (John Entwistle), Henry Small (Prism/John Entwistle), Rock Hendricks (session sax player for Motown).

Services Offered: Professional 16-track recording, engineering and production services

**GLENN BROWN**

*Engineer & Producer*  
**AUDIOGRAPH PRODUCTIONS INC.**  
2810 Bennett, Okemos, MI 48864  
(517) 332-3272

Credits: Commercial/Industrial: Dow, Amway, Upjohn, General Motors, Oldsmobile. Albums: Fastracks, Jellyroll, Cave Gods, Dave Barrett, Invisible Ink, Tribal Dance Method, over 30 album credits.

Services Offered: In-house 24-track studio w/Studer A80MKIII, NEOTEK 32 input series II, Emulator II w/extreme library Perfectionistic approach.

**SCOTT BROWN**

*Engineer & Producer*  
**QUEST MUSIC**  
3078 Florida Blvd., Lake Park, FL 33410  
(305) 626-7808

Credits: Client list not available for publication. A demonstration cassette is available for \$50 refundable towards contract terms.

Services Offered: Will produce high quality demo tapes, or "masters" of bands or individuals. A musician pool and private studio are available for the exclusive use of clients. Will provide engineering services at any location in south Florida. Quest Music focuses on contemporary rock music and reserves the right to reject potential clients

**STACY BROWNRIGG**

*Engineer*  
1129 Settlers Way, Lewisville, TX 75067  
(214) 393-2606, 436-0905

Credits: Brown Mark, Kim Sharp, Rod Autoon, Boyfriend, Richard Theisen, Benita, The Mason Dixon Band, Jerry Jeff Walker, numerous motion picture soundtracks, and local artists. Resume upon request.

Services Offered: Multi-track recording and mixing. Equipment available: Nagra 4 2, Mac Plus, Apple IIe, DX7, TX-816, Memory Moog plus, Linn 9000, Linn LM 2 with MIDI, various delays, reverbs, effects and mics. Eight years experience. Audio and video production available.

**CHRIS BUBACZ**

*Engineer*  
87-86 116th St., Apt. D-5, Richmond Hill, NY 11418  
(718) 411-5271, (914) 362-1620

Services Offered: Engineering, co-production.

**EDWIN BUKONT**

*Engineer*  
**EB AUDIO**  
7513-201 Republic Ct., Alexandria, VA 22306  
(703) 765-8397 (Washington, DC area)

Credits: New Music Festival IV & V—National Public Radio; Proof of Utah; Midwest Summer Show Choir Camps; Voice of America—held operations; studio construction in Barbados, Costa Rica, Houston, TX. Member AES.

Services Offered: Consulting engineer for design, maintenance or operation of audio recording and sound reinforcement systems. Repair and alignment of audio equipment including consoles, processing devices, recorders, distribution systems. Trained in repair of Nagra IV series. MCI JH-110, Studer A810, Otari MX5050. Available as local technician for touring companies and contract maintenance of audio facilities.

**LELAND BURNS**

*Engineer & Producer*  
**LELAND BURNS AUDIO SERVICES**  
4940 Madella, Ft. Worth, TX 76117  
(817) 834-8281, 429-0764

Credits: Sunset-Bernet Sound Studios, Stone Mountain Band, NTSU One O'clock Lab Band, Mary Kay Cosmetics, Healing Faith, MJM Productions "The Unexplained," Jerry Max Lane, Al Hirt, Danmark Recording, Dizzy Gillespie, Larry T-Byrd, Gordan, Incredible Productions Inc., Chili's "Baby Back Ribs," Brian and Fouts Music.

Services Offered: Recording/mixing engineer for studio recordings, live concerts, TV broadcast; editing and special event programming; producer for numerous radio features and short dramas and recording sessions; film/video producing and audio for film/video; photography/cinematography skills for sporting events and concerts; writing credits for Pro Sound News; current manager of Studio Services Inc./Studio Supply Co. of Texas.



**FROM THE INVENTORS OF AFFORDABLE,  
RELIABLE, MULTI-TRACK**



**TASCAM ATR-80/24**

**TASCAM**

**ATR-80/24**

The long awaited 2" 24-track ATR-80/24 from TASCAM has now arrived. This NEW multi-track stands to be a very strong competitor to the other 2" multi-track tape machines on the market today. This new machine offers 14" reel capabilities, one of the fastest wind speeds on any multi-track and full function remote control which addresses the needs of the audio for video market.

AUDIOLINE has been appointed by TASCAM to represent this exciting NEW product in the Midwest. If you are in need of a demo on this machine we will have a demo ATR-80/24 for evaluation. Call NOW, this machine promises to be a very good seller.

**Now available from your most complete midwest Pro-Audio Dealer AUDIOLINE!**

**Milwaukee**

**Chicago**

**AudioLine**  
**AUDIOLINE, INC. MILWAUKEE**

**(414) 785-9166**

2323C Bluemound rd.--- Waukesha, Wisconsin 53186

**DDA**

**AMR 24**

**AUDIOLINE HAS BEEN APPOINTED THE MIDWEST DEALER!**

*Why your next console  
should be as difficult  
to hear as it is easy to  
operate.*

There's new awareness of noise, crosstalk and distortion. The immediate future of recording makes nonsense of many analog specifications. As clarity and transparency of sound becomes the goal, consoles must offer greater sonic integrity as well as more advanced operating features.

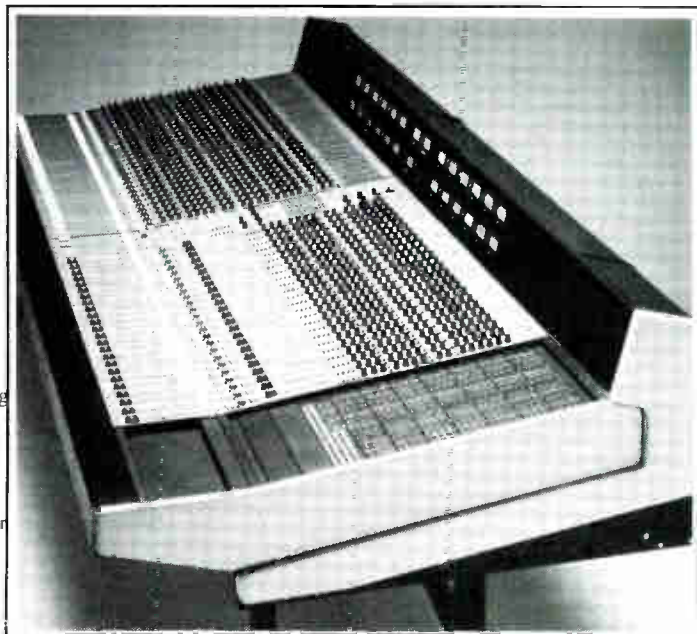
Major console design has certainly moved forward in terms of facilities, yet overall performance rarely strives to improve on what the analog magnetic medium can achieve. Indeed, the signal path often suffers from ever increasing circuit complexity.

The DDA AMR 24 is significantly different. While offering all the facilities expected from a major console, painstaking attention has been applied to optimize every stage in the audio chain.

Most significantly, the AMR 24 offers a design philosophy that has not been abandoned in the context of mass production.

Every circuit and operational detail has been realized to offer major console performance that will not be outdated by fashion.

On closer inspection it is apparent that the features accommodate not only contemporary recording techniques, but also offer scope to develop new ways to mix synchronized tracks.



**DDA AMR 24**

**Call AUDIOLINE Today For More Information!**

**DEAN BURT***Engineer*  
**dB PROD**7248 Shoshore Ave., Van Nuys, CA 91406  
(818) 881-7241

Credits: Whitney Houston, George Benson, Jeffrey Osborne, Peabo Bryson, Teddy Pendergrass, Crystal Gayle, Stacy Lattisaw, Bryan Scott, Living Color.

**Services Offered:** Pre-production and production consultation, producing, engineering and programming.**TONEY CAMPBELL***Producer***RFO INTERNATIONAL**4651 Lochshin, Houston, TX 77084  
(713) 550-5470

Credits: Al Campbell, Don White, Little John, RFO Posse, Toney Campbell, Reggae Fever Band, The Obidike Rappers, Obidike Karnau (Dub Poet).

**Services Offered:** Arranging, mixing, producing, promoting to pressing. Label and jacket design also available upon request.**CARL CANEDY***Producer & Engineer***ROCK CANDY PRODUCTIONS**

156 Fifth Ave. Rm. #623, New York, NY 10003

(212) 477-5787; Contact: Bob Schwaider

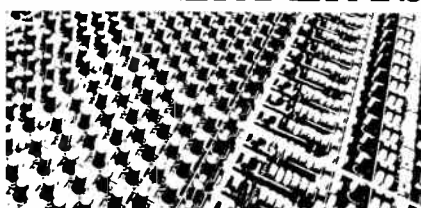
Credits: Spreading the Disease, Anthrax; Feel the Fire, Overkill, Heavier than Thou, The Rods; Rolling Thunder, Atilla, Possessed, Beyond the Gates; Hollywood, CFBC; The Beast is Back, Blue Cheer; Gone with the Wind, Rhett Forrester, Thrasher, Thrasher; Out of the Darkness, Jack Starr; Violence &amp; Force, Exciter; E.X.E., Slayer.

**Services Offered:** World class production; sensitive to artists goals. Arranging, publishing, computer assisted pre-production, MIDI sequencing/drum programming. If needed we will write with or for the artist, as well as help them find the right songs. Referrals. Looking for the strong new artists. Resume on request.**KEVIN H. CARLSON***Engineer & Producer***CARLSON PRODUCTIONS, INC.**

1014 Shadowood Pkwy., Atlanta, GA 30339

(404) 952-8459

# INDEPENDENTS



Credits: Available upon request.

**Services Offered:** At Carlson Productions, Inc. we can handle your entire project or just part of it. We have experience in albums, re-mix, live recording, advertising, and radio. We also provide pre-production consultations, engineering, budgeting, programming, mastering, manufacturing, and many other services designed to meet your needs. Call us to discuss your next project.**PETER M. CARLSON***Engineer & Producer***HAVE EARS WILL TRAVEL**

P.O. Box 1454, Aptos, CA 95003

(408) 688-9295

Credits: Bob Brozman, Lacy J. Dalton, Manfred Mann's Earth Band, Chris Thompson, and Patrick Simmons.

**Services Offered:** Audio engineering for any purpose, production techniques, audio consulting.**RON CARLSON***Engineer & Producer*

427 Carroll #1, Boone, IA 50036

(515) 432-6425

Credits: Engineered and produced for Allen/Carlson, Messengers of Love, Kent Holmeister. Assisted for Benson, The Soul Searchers, Hank Laake Band.

**Services Offered:** Have had four years experience with NEOTEK/MCI setup at local studio. Versatility and an open ear are offered with the understanding that music is a

creative form of your self-expression. Can offer an intelligent third opinion. Getting it right to tape better than fixing it in the mix. Also have had limited experience with doing live sound reinforcement.

**RODGER EDWARD CARPENTER/RON GRESHAM***Engineer & Producer***INNOVATIVELY STYLED PRODUCTIONS**

c/o Chicago Trax, Inc.

3347 N. Halstead, Chicago, IL 60657

(312) 525-6565, 525-8491

Credits: Among our credits for records, labels, live mixing and tours are: Superbowl Shuffle, Midnite Star, Bang Orchestra, Union Station, Jesse Saunders, Victor Romeo, Marshall Jefferson, Gavin Christopher, ZZ Top, Kiss, Ted Nugent, Aerosmith, Hall &amp; Oates, No Sovereign, Warner Bros., Geffen, CBS, MCA, Polygram, Bright Star records. Also numerous independent labels, feature and independent films, commercials and industrials.

**Services Offered:** The development of new Sonic directions and the art of innovative production. Studio engineering, programming on an extensive variety of synths, drum machines, computers, samplers and many different types of specialized effects; also, sequencers and other MIDI based systems. We can take your project from concept to completion very cost effectively.**STEVE CARR***Engineer & Producer***HIT AND RUN STUDIOS**

18704 Muncaster Rd., Rockville, MD 20855

(301) 948-6715

Credits: Bruce Springstone "Live at Bedrock," *Meet the Flintstones* (Billboard Pick Single, Nov. '82), Tommy Keene *Places That Are Gone*, 1984 *Village Voice* Number One E.P. of the Year. Oho "Change in the Wind" *Musican* magazine Best Unsigned Band in America—first place winner, Tommy Keene (Gnlfm Records) "Listen to Me" (single B side).**Services Offered:** Helping musicians reach their goals.**JOE CHICCARELLI***Engineer & Producer*

1835 Sunset Plaza Dr., Hollywood, CA 90069

(213) 654-2064

Credits: Pat Benatar, Robert Tepper, Frank Zappa, Poco, Lone Justice, Oingo Boingo, Stan Ridgeway, Romeo Void, Bangles, Bob Geldof, Alison Moyet, George Thorogood, Red Rider, Glen Frey.

**PAUL CHITEN***Producer*

c/o Naked Prey Music

1226 Harper Ave., Suite 4, Los Angeles, CA 90046

(213) 656-3775

Credits: Worked with Michael Jackson, Tina Turner, Commodores, Five Star, Natalie Cole, Pointer Sisters, Jose Feliciano, The Breakfast Club, Suzette Charles. Music for films: *Witness*, *Gung Ho*, *Transylvania 6-5000*. Music for television: *The Hollywood Beat*, *Solid Gold*. Records for RCA, Arista, CBS, Warner Brothers, Motown, MCA, Polygram, Capitol. Wrote Five Star's hit record: "Can't Wait Another Minute."**Services Offered:** Producing, writing, arranging, and mondo monster keyboards.**PAUL CHRISTENSEN***Engineer & Producer***OMEGA AUDIO**

8036 Aviation Pl., Dallas, TX 75235

(214) 350-9066

Credits: Johnny Cash, Ben Vereen, Anne Murray, Willie Nelson, Quarterflash, Commodores, Oak Ridge Boys, Ray Charles, Merle Haggard, Helen Reddy, Pat Benatar, Sammy Hagar, Hall &amp; Oates, Ari Garkunkel, Al Jarreau, Boomtown Rats, and over 200 major artists in past 13 years.

**Services Offered:** Engineering and producing services with emphasis on audio for video and film. Specialty is consultation for live video shoots from concept to completion. Extensive experience in digital audio/video interlock, stereo television, video disc and video cassette release both Beta and VHS hi-fi.**ALEX CIMA***Engineer & Producer*

1501 E. Chapman Ave. Ste. 100, Fullerton, CA 92631

(714) 680-4959

Credits: Alex Cima and On-Line's "Solid State" video and LP; previous releases on Deutsche Grammophon/Polydor International-Germany, GNP-Crescendo, and Chromosome labels. All TV networks, Select TV, films, trailers, audio-visual, radio/TV commercials, and special projects for major entertainment companies. Detailed resume on request.

**Services Offered:** Audio recording/production, analog


**FUTURE DISC  
SYSTEMS**

---

**COMPLETE ANALOGUE & DIGITAL MASTERING SERVICES**

---

**FOR COMPACT DISC, RECORD & CASSETTE MANUFACTURING**

---

3475 CAHUENGA BLVD WEST HOLLYWOOD, CALIFORNIA 90068  
(213) 876-8733



and digital music synthesis, project troubleshooting, music video consulting.

**KIRK W. CIRILLO**

**Engineer & Producer**

**NEW MUSIC STUDIOS**

2A Manston Woods Dr., Agawam, MA 01001  
(413) 789-2264

Credits: Rockville Records, The Cartells, Bill Zucker (B2B Band), Platinum Forge, Hot Shot, "Star Search," "MTV," Sheri Christian, Group Therapy (Picture This), Tom Cote, Tom Whalen, Delicate Instrument, Roger Parenteau, Dave Colucci, Rich Devin, Billy Hollerman, Music Media Productions, Flyer, P.S. Pat & Steve.

**Services Offered:** State-of-the-art engineering with honest advice and direction.

**MICHAEL COLLINS**

**Engineer & Producer**

**THE COMMERCIAL REFINERY, INC.**

2105 Maryland Ave., Baltimore, MD 21218  
(301) 685-8500

Credits: Mission's *When Thunder Comes* LP; Mission's *The Last Detail* LP; *8 Essential Attitudes* compilation LP; Relative Theory's *Hard Times* LP; Majestic's *Mystical Teaser* EP. Major market radio commercials for Ford, Dodge, Toyota, Nissan, Colt 45, O'Keeffe, National Premium, Klondike ice cream, Merry-Go-Round, Equitable Bank, and Commercial Credit.

**Services Offered:** Chief engineer at The Commercial Refinery, and staff producer for Frantic Records. Freelance engineering and producing, live sound reinforcement, and sound consultation. Radio and off-camera TV commercial production, slide/video/film audio production, LP/EP/single production.

**TOMMY COOPER**

**Engineer**

**THOMAS L. COOPER, JR.**

550 Cranberry Place, Roswell, GA 30076  
(404) 998-9621

Credits: Melissa Manchester, Paul Davis, Commodores, Nigel Olsson, Dony McGuire & Reba Rambo, Peabo Bryson.  
**Services Offered:** Engineering, production, arrangement. Strong background in many styles of music.

**JUAN COVAS "PERICLES"**

**Engineer & Producer**

**ALFA RECORDING STUDIOS**

Cacique 2058 Ocean Park  
Santurce, Puerto Rico 00911  
(809) 727-1732, 790-9872

Credits: Eng. & Prod.: Beyond, Elliott Matter, Cotui, Electric Cloud. Others: Bobby Caldwell, Chuck Armstrong, Betty Wright, Miami Disco Band, Danny Rivera, Chirino, Lucicita Benitez, Ismael Miranda. Jingles for radio and TV, ID's, Glenn Monroig, more records co. TH, CBS, Mamoku, Lobo, Codiscos, Fania, Salsoul.

**Services Offered:** Multi-track recording/mixing, live sound mixing and reinforcement, Q.Lock in audio and video sync, digital mixes. Hardworking engineer with creative ideas and good ears to make you sound the way you like. "We have got the sound you want."

**TIM COX**

**Engineer & Producer**

**TC PRODUCTIONS**

50-12 Donna Ct., Staten Island, NY 10314  
(718) 983-1913

Credits: Ashford and Simpson's "Solid" and "Real Love" LPs; Patti LaBelle's "A Winner In You"; Victor Willis (formerly of The Village People); Bruce Roberts and Andy Goldmark; Jennifer Holiday; ABC's daytime drama *Loving*; *Lifestyles of the Rich and Famous*; Barry Finnerty; McGarrigle Sisters; Gina Gina (of Kid Creole and the Coconuts).

**Services Offered:** Engineering and producing all styles of music. Contracting of musicians and studios to fit any budget. IBM based sequencing and patch librarian utilizing Octave Plateau's Sequencer Plus. Getting more than your money's worth is our business!

**R.T. "TABBY" CRABB**

**Producer**

**TCR PRODUCTIONS**

Rte. 2, Box 4, P.O. Box 589, Charlotte Hall, MD 20622  
(301) 884-3709

Credits: Six Top 100 Country Cash Box in 1986 for Mercedes, TC Roberts, and The Brickers. Produces Top 40 folk rocker, Sam Neely. Has helped five acts break the charts since 1984. Formerly with The Urban Cowboy Band. Producer of The Tidewater Report on the public radio satellite. Owner db Records.

**Services Offered:** Independent production and consultation. Low budgets a specialty. Cost effective. Records 24-track in Nashville and New York. 8- and 16-track in-house

with up-to-date rack. Assistance with single distribution and promotion. Produces with emphasis on "feel and character." Likes to get to know the artist and tailor facilities and personnel around the artist's talent and personality.

**AL CRAIG**

**Engineer**

**REMOTE AUDIO PRODUCTION SERVICE**

4410 Park Ave., Nashville, TN 37209  
(615) 297-0513

Credits: CBS, ABC, PBS, ESPN, CBN, VH-1, TNN, USA.  
**Services Offered:** Remote audio production: live album engineer, TV concerts, TV specials, sports productions, mixdown engineer, P.A. mixer, commercials, industrials. Synclavier programmer (E-mu II, Linn 9000, DX7 also). Arranger, saxes. Specializing in unusual and difficult audio set-ups. I have been involved with remote television and recording for the past ten years. Whether live, live to VTR, or multi-tracked, from one mic to 50, one camera or 20, R.A.P.S. has done it before and can do it again, for you.

**WARREN (RUSTY) CRAWFORD**

**Producer**

**CRAWFORD PRODUCTIONS**

P.O. Box 1192, New Smyrna Beach, FL 32070  
(904) 427-6626

Credits: Fairlight CMI programming with John Philip on Atlantic Records and AWOL Album; original music for Bike Week '86 video. Staff member Harold Blanchard is the composer of an album, *New Earth Sonata* featuring Hubert Laws, Chick Corea and Quincy Jones still in the top ten on CBS Masterwork after a year.

**Services Offered:** Music for television and motion pictures. With the recent installation of the Fairlight CMI, Crawford Productions of New Smyrna Beach, Florida is now specializing in the field of custom and audio sound effects and music productions for television and motion pictures. The Fairlight CMI is mobile and Crawford Productions is available for contract on a project or per diem basis.

**T.R. CULBERTSON**

**Producer**

**POSITIVE AUDIO**

A division of Positive Video, San Carlos, CA  
1250 San Carlos Ave., San Carlos, CA 94070

(415) 595-4041

Credits: Commercials: First National Bank of Monterey, Winner Chevrolet, Hyatt Regency of Monterey, St. Joseph's Hospital. Video Sound Scores: Apple Computers, Syntex Corp. Ad Exchange.

**Services Offered:** Original composition and arranging lyric composition, video and film special effects and scoring, vocal training, owner of two 24-track recording (studios) facilities. B.A. degree Voice; M.A. degree Composition and arranging. Groups: The Young Presidents—Paris; The Med Fls. Solo Artist—Pat DuVal.

**J.R. CUMMINS**

**Producer**

**SOUNDSTAGE I PRODUCTIONS**

13270 6 1/2 Mile Rd., Battle Creek, MI 49017  
(616) 979-1532

Credits: Jingles and/or original music/soundtracks for such clients as: Whirlpool, North American Van Lines, Dolly Madison, Bil-Mar Foods, Upjohn, State of Michigan, Archway, Scores of Regional Music Works, Lansing General Hospital, Felpausch, Madel Hill, Liela, Gilmores, Savannah Light & Power, U.S. Government, many more.

**Services Offered:** Original music scores for corporate advertising clients. Including audio for video, motivational, training, industrial, and commercial music. We pride ourselves on consistently producing superior product, through our experienced staff, and up-to-date technology.

**JOHN CUNIBERTI**

**Engineer & Producer**

**LAUGHING BOY PROD.**

245 Hyde St., San Francisco, CA 94102  
(415) 474-0377

Credits: 1986 LPs and singles for Dead Kennedys, Whispering Lion, Until December, Big Bang Beat, Ronnie Montrose, Victims Family, Rhythm Pigs, Caribbean Allstars, Jah Big, Razor Maid, Don Pender, Joe Satnani, Blue Movie, Lambs Bread, The Stickers.

**Services Offered:** Recording engineer (eight years' experience) 12-inch dance remix producer, state-of-the-art record production of all aspects start to finish, Laughing Boy Productions is always looking for new and interesting music for production deals and record contracts, write for more info, or send tapes to address listed.



**When the tape runs out, call United Tape Company**

**Manufacturers of BASF Custom-Length Chrome Cassettes—Customized Video Cassette Loading**

**Authorized Distributor of**

**AMPEX Blank Recording Tape**

**SCOTCH/3M Blank Recording Tape**

**TDK Blank Recording Tape**

**BASF Calibration Cassettes**

**CAPITOL Audiopak Carts**

**TEAC/TASCAM Accessories**

**DISCWASHER Accessories**



☐ United Office Supplies, Inc.

☐ United Tape Company

☐ United Audio-Video Supply

☐ United Tape Corporation

10746 Magnolia Blvd.

North Hollywood, CA 91601 ☐ (818) 980-6700

**Call for our free 40-page catalog**

**AMPEX**  
Ampex Corporation • One of The Signal Companies

**BASF 3M**

**TOM CUNNINGHAM**

**Producer**  
**CUMMINGHAM WEST STUDIO**  
 Kommandanten Strasse 90  
 1000 Berlin 45, West Germany  
 030-833-1524

Credits: Queen Yahna, CITY (DDR), Romy Haag, Robert Bauer, Rik De Lisle, RIAS 2 and Eurosound jingles, film scores.

**Services Offered:** Complete musical production services in the studio and pre-production. American with years of experience as record producer in Europe. Background: writer, artist, instrumentalist, arranger (three solo LPs). Specialties: empathy for singers, musicians, groups ("I've been there"); international musical outlook; originality; technical know-how; absolute correctness in business details. Fluent in German. Final and/or pre-production possible in own facility, Cunningham West Studio. Can also supply original songs and lyrics.

**DAVID DACHINGER**

**Engineer & Producer**  
**RECORDING AND SOUND SERVICE**  
 222 Willow Ave., Hoboken, NJ 07030  
 (201) 659-3473

Credits: Isley-Jasper-Isley, Third World, Mtume, Arnold Schwarzenegger, Jane Fonda, Arthur Baker, Was (Not Was), Full Force, Tyrone Brunson, Burger King, Miller Beer, Pioneer Stereo.

**Services Offered:** Production, engineering, original compositions, synth and drum machine programming.

**JON "MR. BIG" D'AMELIO**

**Engineer & Producer**  
 P.O. Box 120884, Nashville, TN 37212  
 (615) 883-8086 or 883-9600

Credits: Alabama, Marshall Tucker Band, Jerry Dale McFadden, Susan Marshall, Government Cheese, Bigamy Brothers, The Dusters, Scott Tull Music, Tom Dowd, Opryland USA, Alex Zanetti, Cynthia Clawson, Earl Thomas Conley, Charlie Daniels, Merle Kilgore, Mack Vickery, Bobby Harden, Jean Sheppard Band, Bruce Henderson, Webb Pierce, Craig Southern, Union Station, Reptile Records.

**Services Offered:** Record production and engineering, live recording and mixing, studio design, song plugging, artist management, photography, album packaging, video concepts. Multi-track/digital studios used: Chelsea, 1030 Studios, Sound Emporium, Studio 1111, Sound Connection, LSI, Treasure Island, Sound Shop, Jack O'Diamonds (studio manager).

**ROBIN DANAR**

**Engineer & Producer**  
**SQUID PRODUCTIONS**  
 1689 1st Ave., #1, NY, NY 10128  
 (212) 289-5868

Credits: Suzanne Vega, Garland Jeffries, Randy Newman, Linda Ronstadt, Ry Cooder, Buster Poindexter, Kids in the Kitchen, Uptown Horns, Urban Blight, Pedantiks, Joy Askeew, Crossfirechoir, Michael 7, Doc Roc, Longhouse, Velveteen, Sylvain Sylvain, Joey Balin, Richard Lloyd and Lonesome Val.

**Services Offered:** Squid Productions provides both recording, engineering and production services and live engineering and production services. Studio specialties have been high quality-low budget demos and independent records, with several subsequent major label releases. Live specialties have been coordination of shows and live mix in all the major New York venues (Ritz, Limelight, Palladium, World, CBGB, Bottom Line, etc.) as well as major and support tours. Live mixes for television shoots have also been coordinated for Showtime and MTV, as well as local cable networks.

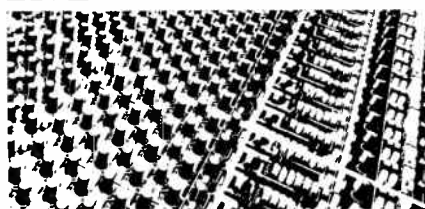
**MAL DAVIS**

**Engineer & Producer**  
**HEARING EAR**  
 730 S. Harvey, Oak Park, IL 60304  
 (312) 386-7355, 653-1919

Credits: *The Master & Musician*, Phil Keaggy; *Mourning To Dancing*, James Ward; Jessy Dixon; Ken Medema; Northern Illinois University Jazz Band; *Chicago Jazz*, Roger Pemberton; Hope Publishing; *Brass Impact #2*, Warren Kime; Wheaton College Men's Glee; Resurrection Band; Chris Christensen, Russ Daughtry.

**Services Offered:** Eighteen years of professional recording experience. Complete music production and multi-track engineering services. Excellent pool of professional musicians and arrangers available. Homebased at Jordan Studios, Wheaton, IL. Augspurger/Edwards design incorporating 20 ft. studio ceiling along with Neve-Studer-AMS control room. Accommodations, complete kitchen facilities, musicians lounge, and health club available to help make your project a creative and comfortable process. I believe in the strength of good working relationships and the pursuit of excellence in all areas.

# INDEPENDENTS

**SAMMY DEL BROCCO, BOB SPRAGUE**

**Producer**  
**PRO CREATIONS**  
 P.O. Box 998, Bowie, Maryland, 20715  
 (301) 262-0705

Credits: MCI, IBM, The United Way of America, Gray and Company Public Communications, the American Red Cross, United States Information Agency.

**Services Offered:** Original music for film and video, written, arranged, produced and recorded in our own studio facilities, using a combination of computer/MIDI-controlled synthesizers and live instruments; the writing, direction, editing and producing of video; and the creation and production of live musical shows, both for entertainment and industrial purposes.

**RICH DENHART**

**Engineer & Producer**  
 Royal Recorders, Americana Resort, Hwy. 50  
 Lake Geneva, WI 53147  
 (414) 248-9100

Credits: Adrian Belew, Champaign, Elvis Brothers, Pauli Carmen, Combo Audio, The Bears.

**EUMIR DEODATO**

**Producer**  
**KENYA MUSIC, INC.**  
 60 East End Ave., New York, NY 10028  
 (212) 472-2933, 334-8444

Credits: Kool and the Gang, Deodato's 2001, Roberta Flack, Gwen Guthrie, Breakfast Club, One Way, Chuck Mangione, Kleer, Juicy, etc.  
**Services Offered:** Private studio facilities, nine platinum record certificates, two Grammy Awards, countless prizes. State of the art MIDI setup with different sequencers including Linn 9000, Macintosh, etc. Samplers, digital keyboards, lots of samples and effects.

**BARRY DIAMENT**

**Engineer**  
 2728 Henry Hudson Pkwy, Riverdale, NY 10463  
 (212) 543-2079

Credits: Recordings: The Mary Antonelli Band, Frieda Ehrens—Recital. CD mastering for: Genesis, Phil Collins, Mike and the Mechanics, Yes, Frankie Goes To Hollywood, Robert Palmer, Kevin Eubanks, Stevie Nicks, Linda Ronstadt, Pete Townshend, AC/DC, Robert Plant, Ahmad Jamal, Crosby, Stills and Nash, Julian Lennon, Howard Jones, Second Hearing Records.

**Services Offered:** True Stereo Recording with a purist orientation, specializing in jazz and "classical" ensembles; mastering for compact disc.

**MARC J. DICCIANI**

**Producer**  
**MJD PRODUCTIONS, INC.**  
 5500 Central Ave, Sea Isle City, NJ 08243  
 (609) 263-1777

Credits: Record production: Ben Vereen (Manhattan); Mary Welch (Atlantic); Bobby Rydell (Appaloosa). Video/music production/direction: national promotional and educational spots for thoroughbred racing industry; "Total Body Workout" (exercise video).

**Services Offered:** Full audio/video production; phone records; jingles; demos; promotions; commercial and industrial music and video.

**OLIVER DiCICCO**

**Engineer & Producer**  
**MOBIUS MUSIC RECORDING**  
 1583 Sanchez, San Francisco, CA 94131  
 (415) 285-7888

Credits: 1985 Grammy nomination. Best Engineered Album: Michael Hedges *Aerial Boundaries*; Zasu Pitts, Windham Hill Records; Darol Anger, Mike Marshall, Kaleidoscope Records, KQED, KRON, Apple Computer, Ron Thompson, Andy Narrell, 700 Club, Eno, Henry Kaiser, Fred Firth, Z-Axis, Alex DiGrassi, Steve Miller, Barbara Higbie.

**Services Offered:** With over ten years experience working out of our own 24-track studio, we offer a full range of services, including location recording, musician contracting (we have access to the best studio musicians in the area), production, arranging and engineering. We strive to bring out the best in your music.

**FERENC DOBRONYI**

**Engineer & Producer**  
 125 Clayton St., San Rafael, CA 94901  
 (415) 453-3103

Credits: The Wankers, The Twisters, The Leapers  
**Services Offered:** Full service productions that are guaranteed not to lose the "band sound"; cutting edge-college radio—cheap.

**HANK DONIG**

**Engineer & Producer**  
**WIZARD MUSIC GROUP**  
 8033 Sunset Blvd., Suite 358  
 West Hollywood, CA 90046  
 (818) 905-1703

Credits: Kenny Rogers, Lionel Richie, Devo, Air Supply, Crusaders, Egyptian Lover, George Winston, Russ Parr, Kingston Trio, Kin Vassey, Linda Carter, P.P.L., Star Search, G.L.O.W. (Musical Director for the national TV Show).  
**Services Offered:** Total production package includes 48-track studio, song writing or publisher "A" drawer songs, arrangements, double-scale musicians and BG vocals; all engineering and total package includes shopping a record deal or pressing records for an independent distribution network. We produce master quality radio-ready tapes.

**JIM DOTSON**

**Engineer**  
**SOUTH COAST RECORDING**  
 1818 1/2 N. Main Street, Santa Ana, CA 92706  
 (714) 541-2397

Credits: Black Label Records, Gothic Records International, Hi Point Productions, Dionysus Records, Tommy Woods (The Woods Empire), Lisa Love (The L.A. Dream Team), Sincerely Yours, The Untold Fables, The Final Tourguides, Offspring, Swan, Onyx, Love & Terror, Kita, Side-show, Picture This, Still Life, Those Guys, Set Free, Higher Ground, Stormbringer and more!

**Services Offered:** In-house 8-track recording studio (please refer to the Southern California Studio Listing in the September issue of *Mix* magazine). Experienced with all styles of music for complete record production, high quality comprehensive demos, and radio jingles.

**THOMAS R. DUSENBERRY**

**Producer**  
**DUSENBERRY ADV. & PROMO.**  
 87 Lafayette St., Marblehead, MA 01945  
 (617) 631-3022

Credits: Award-winning video production writer, producer and director. Specialize in consumer product sales and marketing.

**Services Offered:** Video production, multi-media shows, script writing, brochures, consultant, trade incentives, consumer promotions.

**HUGO DWYER**

**Engineer & Producer**  
**70 Carmine St., New York, NY 10014**  
 (212) 929-4197

Credits: Pointer Sisters, Belle Stars, New Edition, Gloria Loring, Boys Don't Cry, Evelyn King, Al DiMeola, Jenny Burton, House of Mommies, Jocelyn Brown, Jingles for Chrysler, Volkswagen, Nabisco, more.

**Services Offered:** Recording and mixing for all types of music, especially dance oriented; rock, jingles and industrial as well.

**STEVE DYER**

**Producer**  
**ROCKY MOUNTAIN HEARTLAND PRODUCTIONS**  
 P.O. Box 6904, Denver, CO 80206  
 (303) 690-6904

**Services Offered:** Rocky Mountain Heartland Productions is a full service production company and advertising agency. Executive producer and studio producer is Steve Dyer. Studio production: Access to some of the finest studios in the Rocky Mountain empire, Midwest, Nashville, and L.A. Music. Arranged and originally scored for studio orchestra, big band, synthesizer, or other combinations. LP albums and cassettes: master tracks are produced, mastered and pressed. Complete jacket art and photography creatively produced in fresh and stimulating ways. Advertising: scripts, lyrics, and compositions for radio, TV and print media. Film and slide presentation: production for business promotion projects and presentations for seminars, sales meetings, etc. Financing: artist sponsorship, promotion, and project financing is possible upon approval of qualified



artists and groups. Creative positions available. Currently looking for personnel in areas related to above. Submit demos, samples and resumes for file.

#### EBN

**Engineer & Producer**  
**MSP MUSIC, INC.**  
476 Broadway, New York, NY 10013  
(212) 226-1030

**Credits:** Credits as producer, programmer, engineer or musician include: Air Race, Richard Burgess, Keith Diamond, Ebn Ozn, Bob James, Jimi Hendrix, John Luongo, Ani Mardin, Gary Moore, Gary Myrich, Phil Ramone, Riff Raff, Scritti Politti, Ravi Shanker, Star Point, Harold Wheeler, James Ingram, Michael Bolton, ABC-TV (*All My Children*), MTV, etc.

**Services Offered:** Fairlight CMI Series III state-of-the-art 16-bit computer musical instrument. 24-track music production and recording, Fairlight programming, film scoring. Complete state-of-the-art production facility is available on premises, including Fairlight CMI Series III, Studer A80 24-track and 2-track tape recorders, and a complete line of top quality signal processing equipment, musical instruments, and special effects. EBN also has one of the most extensive Fairlight sound libraries available in the world.

#### ED EDELBROCK

**Engineer**  
**EDELBROCK RECORDING**  
1620 N. Wilmot #244, Tucson, AZ 85712  
(602) 296-8105

**Credits:** Ron Price, Neil Andrews, Ronald Kosi, Odin and the Host, Nemesis, Montreal, Nouveau Riche, Flightcrew.  
**Services Offered:** Multi-track recording 2-track, 8-track, 16-track, and 24-track. Editing, tape duplication, album and tape services.

#### DAVE EDWARDES

**Engineer & Producer**  
**DAVID EDWARDES PRODUCTIONS**  
7221 Judson Ave., Westminster, CA 92683  
(714) 892-0877, 892-6448

**Credits:** Credits and references available upon request.  
**Services Offered:** Multi-track recording and co-production with artist or producer. Pre-production planning and demos, live sound, and arrangement consultation. Experienced in engineering many different musical styles in an efficient and easy-going atmosphere. Dedicated to capturing and enhancing artist's sound. Also experienced in visual fields of the music industry, photography, video camera operation, and design. Artists are encouraged to write or call.

#### NORMAN K. ELDER

**Engineer & Producer**  
**MEMPHIS LEE MUSIC**  
P.O. Box 632, Poway, CA 92064  
(619) 748-2050

**Credits:** Norman Elder is a 25-year veteran of the recording industry, possessing a thorough knowledge of production, engineering, disk mastering, and related services. Prior to becoming an independent, his industry employment included Cadet Records (L.A.), Harmony Recordings (L.A.), Motown (Detroit), Elektra (L.A.), and others.  
**Services Offered:** Complete production of professional quality demonstration records and tapes. Our clients, singers, songwriters, and performers utilize our service to introduce new songs, auditions, both audio and video, try out new routines, secure record contracts, company training aids, etc. Our studio is a state-of-the-art, 2-inch 16-track facility in a pleasant country setting, insuring the client complete privacy and a relaxing atmosphere. Charges for our services are based on a production fee, studio time and materials. We are neither a record company nor marketing firm. Our only service is quality production. Due to the inherent high cost of audio/video productions, we are unable to undertake any "speculation" projects.

#### DEAN ELLIOTT

**Engineer & Producer**  
**"REEL HITS" RECORDING STUDIOS**  
**A DIVISION OF DON ELLIOTT PRODUCTIONS**  
15 Bridge Rd., Weston, CT 06883, or  
67 Park Ave., New York, NY 10016  
(203) 226-4200; (212) 679-5670

**Credits:** Worked for/with Esther Galil, Quincy Jones, Gerry Mulligan, Dave Brubeck, Grady Tate, The Heath Bros., Paul Newman, Phyllis Hyman, Don Elliott, Zack Smith, L. Leon Pendarvis, James Ingram and other various artists.  
**Services Offered:** Jingle producing, writing, arranging and recording; personal management; producing and engineering, live sound reinforcement and recording; fully-equipped 24-track audio/video facility. MCI JH-24, MCI JH-10-2-track, MCI JH-10-4-track, MCI JH-10-8-track, Allen Heath Syncon A 28x24; every mic from Neumann to AKG, Beyers, Shure; many keyboards, drum machines and more.

#### REGINALD ESKRIDGE

**Engineer & Producer**  
**GCS PRODUCTIONS**  
1508 Harlem Dr. Ste. 202, Memphis, TN 38114  
(901) 274-2726

**Credits:** We have had the pleasure to serve Carlio, Rufus Thomas, Ms. Millie Jackson, Eddie Mayberry, Homer Banks, George Jackson, Xavien, J. Blackfoot, Carla Thomas, The Townsend Sisters, Valentino, Sound Town Records, Blue Town Records Ltd., Malaco Records, MCA Records, The Temprees, Glona Suggs, WXS Radio, Jorel, Vanese Thomas, Stars of Nightingale, Cheryl Fox.

**Services Offered:** Complete record production and radio jingles. We take your ideas through to radio. We provide you a competitive edge and high performance mixing within budget. Immense song catalog for you to explore. Extensive industry contacts—U.S. and abroad. Your project can be recorded at our in-house studio or at your location. In-house engineers w/current top ten records. Most of our staff musicians have gold record credits. Call us when only the best will do. We'll do it right. We can meet your deadline. Serious inquiries only.

#### ALEXANDER ESPOSITO

**Engineer & Producer**  
**DOUGH PRODUCTIONS & MANAGEMENT**  
1111 Warren Avenue, Cherry Hill, NJ 08002  
(609) 795-3471

**Credits:** Produced the pictures at Kajem studios in Gladwyne, PA. Others include: Radio Vienna, John Doe, Casting Shadows, MU. Received Bachelor of Arts degree in musical composition and theory from Rutgers University, mallet percussionist for 20 years; keyboard/pianist for 12 years.  
**Service Offered:** Versed in MIDI studio set up (on premises), usage of digital sequencing and sampling equipment, tape sync setup; will provide services as well in aspects of pre-production and video/audio post production; can act in capacity as executive producer but prefers to approach productions from the technical end; active as mallet percussionist, pianist/keyboard player; available for session work. Amassed a considerable amount of material as writer in many areas of music.

#### DUANE EVANS

**Engineer & Producer**  
**MIKALANNA MUSIC**  
P.O. Box 66, Moore, SC 29369  
(800) 992-3930; in SC dial (803) 574-6104

**Credits:** Engineered and produced *American Dreams* LP for Benny Mardones and the Hurricanes on BT Records; production and engineering consultant for three songs on *Soldiers of Fortune* LP for the Outlaws on Pasha/CBS label; engineered *It's Your Choice* LP for John Garies LP to be released on Turn Records.  
**Services Offered:** Engineering, production, direction and publishing. We have unlimited use of a 24-track recording facility (fully equipped). References available on request.

#### JOHN FALZONE

**Engineer & Producer**  
**ON FIRE PRODUCTIONS**  
1305 Wake Forest Rd., Raleigh, NC 27604  
(919) 828-3410

**Credits:** Sidewinder-Fade To Black (Executive), Nantucket-Nantucket V (Executive), Carlena Williams (Broadcast), 3PM-Better Late Than Never (Ostinato), Z Sharpe-Sweet Sixteen (Warner Bros.), Maxx Warner (Executive), Rod Dash-Comboland (Making Waves).

#### MICHAEL FAY

**Engineer & Producer**  
**MICHAEL FAY PRODUCTIONS**  
5631 Aztec Dr., La Mesa, CA 92041  
(619) 697-6557

**Credits:** 1986 Credits include: American Heart Association's national radio spots, Travelodge, Un-Soap, Adventures in the Solar System, Sea World's City Streets and pirate ski shows, Imperial Savings, Star System, Amlac, Hawaiian Island Creations, Adam's peanut butter, America's Cup, Designer Depot, broadcast promotion for WWNY, KCOY, WAGT, WHO, KWCH, KFBK.  
**Services Offered:** Engineering, production, writing, equipment rental and consultation in the San Diego area. Thirty+ years music experience, 16 in engineering and seven years as an independent.

#### GLENN FEIT

**Engineer & Producer**  
**GLENN FEIT**  
6315 Primrose Ave., Hollywood, CA 90068  
(213) 467-4827

**Credits:** New Edition, Bobby Womack, Motley Crue, Gary Numan, Black Flag, The O'Jays, Klymaxx, The Red Hot Chili Peppers, The Sugar Babes, numerous independent records.  
**Services Offered:** Production, engineering, computer-assisted pre-production, arranging, consultation. Remixes a specialty.

## HEADS UP

The superb workmanship of AMP Services in the refurbishing of heads and head assemblies is matched only by the rapidity of a same day turnaround, weekdays, evenings and weekends.

- All work guaranteed.
- Quality at the best pricing.

### DON'T LOSE YOUR HEAD

*Over neglect or poor restoration*

IN FL (305) 659-4805  
1-800-828-0601

Mastercard & Visa



Audio Magnetic Professional Services  
224 Datura Street, Suite 614  
West Palm Beach, FL 33401

Circle #102 on Reader Service Card

## THE PRESSING PLANT

2727 Irving Blvd. • Dallas, Texas 75207

## SPECIAL OFFER

500 - FULL COLOR  
CUSTOM ALBUMS

— AND —  
300 - CASSETTES with  
FULL COLOR  
INSERTS

**\$1795.00**

**FREE Test Pressing**

*Mention this Ad and Receive  
Similar Savings on  
Your Project.*

**CALL FOR ADDITIONAL  
INFORMATION  
(214) 630-6401**

Circle #103 on Reader Service Card

**OGDEN FELL**

**Engineer & Producer**  
**OMF PRODUCTIONS, INC.**  
 c/o Sage, Gray, Todd & Sims, 100th Floor  
 Two World Trade Center, New York, NY 10048  
 (401) 247-0218

Credits: Kip Carmen, Danny Horton, Jimmy Smith, Cornell Dupree, Tinker Barfield, Stanley Banks, Crusher Bennett, Spider Rice, Charles Collins, Chris Parker, John Cooksey, Morris Goldberg, Ray Peterson, WNBC Home-town Album, Martin Neary and The Winchester Cathedral Choir, Richard Gersh Associates, Creative Channel II Designs, Audio Fidelity Enterprises, Reveille Records, United Recording Group.  
 Services Offered: Executive and line record production—media consultation

**BRENDA FERRY**

**Engineer & Producer**  
 18 Haviland St., #9, Boston, MA 02115  
 (617) 536-0193

Credits: Videos: prod./eng. "Out of Touch" (top 10 local V-66), "Starmakers," "Digital Co." Films: "Transformer" NRG (CBS distr.), "Safelynet," "Father Death." Audio: Buddy System, I-Tones, Maurice Starr, Earl Steward (comp.), Christian Jacob, Milton Marsh (comp.), Sidney Smith, Superiors, Mercy Ray, Herman Johnson, Oo-Ah-Ah, Music Minus 1, Berklee College, Victor LeComer.  
 Services Offered: Automated mixing on Solid State Logic 4000E Series combined with multitudes of outboard gear. Studio Production. Multi-track recording with vintage and modern microphones. Specialty—vocals. Location recording. Video production specializing in overall effectiveness of the video-audio package. Ability to recognize talent, organize and be cost effective; hire composers, arrangers, musicians, video crews, mold effective mixes; get quality product mastered, packaged and distributed. Studios employed by Mission Control, Newbury Sound, Normandy Sound, Air Sound, Home Inc. (video prod., editing), and Tape Complex (tape duplication). Adaptable to any studio. Willing to travel. Free demo of Brenda's work upon request.

**KENN FINK**

**Engineer & Producer**  
**DEEP SPACE RECORDS**  
 400 Mill Rd., Hewlett Woods, NY 11557  
 (516) 791-6755

Credits: My credits include Arif Mardin, Ebn-Ozn, Keith Diamond, Scritti Politti, James Ingram, Phil Ramone, MTV, Harold Wheeler, Michael Bolton, Air Race, ABC TV (*All My Children*), Starpoint, John Luongo, Fear of Ordinary Life, Richard Burgess, WLIR Radio, and Stephan Gerbier, to name a few.

Services Offered: Extensive MIDI programming and 8-track pre-production. 24-track recording and Fairlight Series III with experienced programming. Many synthesizers and access to 48-track situations. Assistance with composition, arranging and performance. Players available. Familiarity with all kinds of music including rock, electronic, pop, techno-anything and heavy metal.

**TOM FOLEY**

**Engineer**  
**TOM FOLEY WOODWORKING**  
 5121 N. Berkeley, Milwaukee, WI 53217  
 (414) 964-3521, 332-3419

Credits: Sound Reinforcement Engineer: Six years. Mixed Second Look from 1982 to present. Have mixed: Second Look, Kingfish, Sneaks, Lyons & Clark Band. 15 years woodworking, design-construction.

Services Offered: Audio Engineering—Sound system operation—2-track recording. Woodworking—audio furniture, speaker enclosures, design-construction. Send blueprints for quotes.

**SCOTT FORMAN**

**UNDERGROUND PRODUCTIONS**  
 466 Commonwealth Ave, Box #703  
 Boston, MA 02215  
 (617) 536-5317, (516) 759-1492

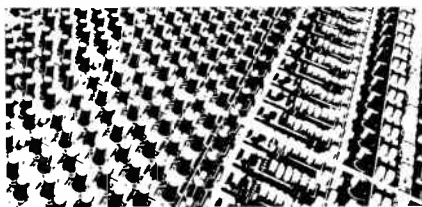
Credits: I have worked as engineer and second engineer with the following: Tol-Tec, Barry Marshall, Rubber Rodeo, The Fools, members of Billy Squier, Aerosmith, Peter Wolf. I am on staff at Syncro Sound Studios in Boston.  
 Services Offered: 8-track engineering and pre-production, 24-track engineering and production.

**E. SCOTT FRAZIER**

**Engineer & Producer**  
**DAN-SING RECORDING STUDIO**  
 120 Ridgcrest Drive, Danville, VA 24540  
 (804) 836-4673

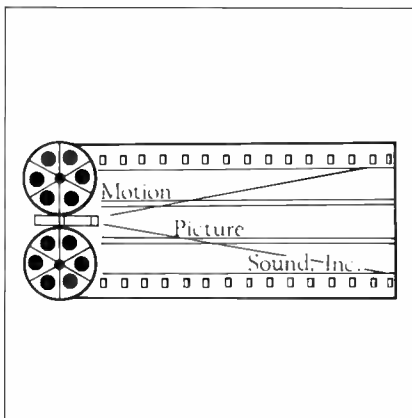
Credits: Actively involved in both creative and technical capacity with over ten major recording projects in past two years. Produced and engineered openings, closings, and stingers for programming on RCN Satellite Network. Num-

# INDEPENDENTS



erous full-production demos, jingles, and promos. Associate producer/engineer: all contemporary Christian recordings released by Niromi Record Company.

Services Offered: Because we are so self-contained, offering the finest services including in-house production, engineering, arranging, and studio musicians, contemporary Christian artists from New Jersey to Nashville, Seattle to Dallas, have travelled here to take advantage of top-quality recording in a relaxed and friendly atmosphere. Utilizing the latest in digital instrumentation and keyboard technology, we are able to give the customer an uncompromised sound at an incomparably low cost. Of all the services offered, none is as important as working personally and patiently with each artist to achieve their own unique musical statement.



**JERRELL L. FREDERICK**  
 Detroit, MI

**JERRELL L. FREDERICK**

**Engineer & Producer**  
**MOTION PICTURE SOUND, INC.**  
 3026 East Grand Blvd., Detroit, MI 48202  
 (313) 873-4655

Credits: My thirty years as a re-recording film mixer and recording engineer have won many local, national, and international awards for the mixing of thousands of motion picture sound tracks for industrial, documentary, training and theatrical films.

Services Offered: Re-recording/mixing sound tracks for motion pictures. This is the largest 35mm facility in the Midwest. We can handle up to 8 tracks of 16mm, 8 tracks of 3-track 35mm, and 16 tracks of 35mm single track. 16/35mm transfers, sound effects, and music, as well as custom effects and all new digital music. Dialog recording and replacement, foreign language dubbing. Production recording and mixing. 16/35mm screening facilities. Soon to be added: the Midwest's first Foley Stage, and 30 frame transfer, and mixing.

**JONATHAN FREED/RON SCALISE**

**Engineer & Producer**  
**THE 19 RECORDING STUDIO, INC.**  
 19 Water Street, S. Glastonbury, CT 06073  
 (203) 633-8634

Credits: Melba Moore, Al Anderson, NRBQ, David Darling, Dayton, John Coster, Preston Reed, The Downbeats, 8 to the Bar, Max Creek, Ranni P. Harris III, Michael Gregory.  
 Services Offered: Engineering, production, audio for video, remote television audio, original music production.

**ROB FREEMAN**

**Engineer & Producer**  
**TITLEWAVE PRODUCTIONS**  
 135 Nyal Ave., Pelham, NY 10803  
 (914) 738-1310

Credits: Production Credits: Go-Go's debut LP *Beauty &*

*the Beast* (double platinum); Twisted Sister debut single "Bad Boys of Rock 'n Roll"; Tom Moore LP *Flash Forward* (No. 1 single in Brazil "Yes"); Canadian artists: Gowan, Queen City Kids—Regina, Single Bullet Theory, Tom Keegan & the Language, Jailbait. Engineering and remix credits include: Kiss, Blondie, Ramones, ABBA, Rupert Holmes.

Services Offered: Full service record and music production company with strong emphasis on songs and artists' performance; state-of-the-art pre-programming with a "human" touch. Songwriting and arranging a specialty. Rob works closely with his artists to get the best, most expressive performances possible with very organized, cost-effective, radio-oriented production style. Fifteen years of hit-making experience.

**GREGORY FULGINITI**

**Engineer**  
 1600 N. Wilcox, Hollywood, CA 90028  
 (213) 461-275  
 134 E. Rio Grande, Wildwood, NJ 08260  
 (609) 522-4638

Credits: Asia, Count Basie, Pat Benatar, Berlin, Kim Carnes, Wang Chung, John Coltrane, Dio, Bob Dylan, Duke Ellington, Ella Fitzgerald, Peter Gabriel, Whoopi Goldberg, David Grisman, Sammy Hagar, Corey Hart, Heart, Jimi Hendrix, Elton John, Quincy Jones, Nik Kershaw, John Lennon, Madonna, Barry Manilow, REO, 38 Special, Rick Springfield, Joe Walsh, Frank Zappa

**GREG FURGASON**

**Engineer & Producer**  
 198 Bloomfield Ave., Newark, NJ 07104  
 (201) 481-0972, 484-9404

Credits: Wall St. Market Report, Wall St. Journal, Report late news (USA Cable Network), U-68 stereo music video television logo and themes (WWHT-TV), Uncle Floyd Show (WWHT-TV), NY Young Filmmakers Festival (WNET-TV), Manhattan Coffee Soda (WPIX-TV).

Services Offered: 2- to 24-track analog and digital recording studios, 3/4-inch and 1-inch music video and spot production from story board to finished master. Recording classes, studio design and installation.

**REG FURLOUGH**

**Producer**  
**FLAMINGO STUDIOS**  
 P.O. Box 2434, Tallahassee, FL 32316  
 (904) 576-4741

Credits: ADDY award winning producer. Producer of "Eli"; Pirate; Hutch & Brand; and Southern Satisfaction. Writer and producer of *Surrender No Greater Love* album. Writer of national Rawls jingle sung by Johnny Cash. Producer of soundtrack for *Power motion picture*. Writer and producer of regional 1986 NBC campaign theme. Member of ASCAP and BMI.

Services Offered: Pre-production consultation; songwriting; national quality jingles; 45 and album production; 24-track recording; tape duplication; engineering and mixing; full professional staff; endorsements by platinum producer; quality recording at an affordable price.

**WLADEMIRO FURQUIM DA SILVA**

**Engineer**  
**VAVA FURQUIM**  
 Rua Araujo Pinho No. 63, Ap. 604  
 Salvador, Bahia-Brasil 40140  
 (071) 245-0994

Credits: Live mixing for: Aleu Valença (tours in Europe, the USA and South America '80-'86), Paco De Lucia (Brasil tour '86), John Rivers (Brasil tour '86), Gilberto Gil, Caetano Veloso, Simone, Elba Ramalho, Morais Moreira, Fagner, Ney Mato Grosso and the Free Jazz Festival '86 with Ray Charles, David Sanborn, Manhattan Transfer, Winton Marsalis, Stanley Jordan, Egberto Gismonti, Larry Carlton etc. I have worked with these systems: Gabison, Joao Americo, Mac Audio, R-4, Val & Val, etc.

Services Offered: Freelance engineering. Live mixing with custom rack including: Klark Teknik 60 analyzer and DN360 EQ, BSS FDS340 x-over, Valley People Dyna-Mite, Drawmer DS201 noise gates, Roland Dimension D, dbx 165 comp. PCM 70 Lexicon reverb, Roland delay, mics: AKG, Sennheiser, Crown PZM, Shure, E-V, BSS active D.I.

**JAMES GALLAGHER**

**Engineer & Producer**  
 56 Berkeley Pl., Brooklyn, NY 11217  
 (718) 230-4587

Credits: Over 14 years experience, many RIAA Gold and Platinum LPs and singles. Worked with: Michael Sembello, Phil Ramone, Stevie Wonder, Gamble & Huff, Thom Bell, Eddie Murphy, The New Edition, Dexter Wanzel, The O'Jays, The Spinners, Dionne Warwick, Lou Rawls, Michael Henderson, Teddy Pendergrass, and many more. 1984 Grammy nomination for best engineered recording.



**Services Offered:** Successful and diversified experience in audio producing and engineering with state-of-the-art production methods and recording techniques, knowledge of TV/film direction and studio functions; responsible for program development and implementation, customer/client relations and performer/producer relations. Association with major New York, Philadelphia and Los Angeles studios. Capable of training and instruction, planning, coordination and problem-solving with flexibility and versatility. Creative and innovative; member of NARAS.

#### JIM GARDINER

**Producer**  
**LIVE OAK PRODUCTIONS**  
1300 Arch St., Berkeley, CA 94708  
(415) 540-0177

**Services Offered:** Complete music production offered by experienced composer/arranger; film scores and record production. Loaded, E-mu SP12 drum machine, Macintosh with Mark of the Unicorn software. Pre-production room linked to 24-track studio, Q-lock with disk-based automation for mixing.

#### TERRY GARTHWAITE

**Producer**  
Box 14, Geronimo, CA 94963  
(415) 488-4778

**Credits:** Jasmine; Hunter Davis; Ferron; Nicholas/Glover and Wray; my own album as singer, writer, guitarist; and more. Recorded many albums as artist (Joy of Cooking, solo, duo).

**Services Offered:** Record production with energy in pre-production (material selection, instrumentation, vocal integrity, rehearsals, logistics) as well as in-studio care and ease in recording. Especially sensitive to vocalists. My goal is to provide a comfortable, positive, creative environment for the artists to experience, express and enhance their sound.

#### TOM GARTLAND

**Engineer & Producer**  
202 First Ave., #12, NY, NY 10009  
(212) 260-3223

**Credits:** Randy Muller, Full Circle, Bernard Wright, Lenny White, Pieces of a Dream, Jamaica Boys, Jamaica Girls, Rainy Davis, Kraftwerk, Main Ingredient, Crown Heights

Affair, Grandmaster Flash, Noel Pointer, Afrika Bambaata, Francois K. Rappers Convention, RJ's Latest Arrival.

**Services Offered:** The most important aspect of engineering and production is the ability to translate the music within the artist into a recording. With a knowledge of music and recording technology, without turning them into a foreign language to the artist, all it takes is ears.

#### CECIL GASPAR

**Engineer & Producer**  
**BREAKING RECORDS**  
Box 40162, Santa Barbara, CA 93103  
(805) 969-4589

**Credits:** Available on request.

**Services Offered:** I have been known to record anything, anywhere, in any format, from live direct-to-metal mastering to 48-track analog and digital. Have ears, will travel.

#### CHRISTOPHER D. GATELEY

**Engineer & Producer**  
**CHRIS GATELEY AUDIO**  
P.O. Box 526, Bryn Mawr, PA 19010  
(215) 525-3605

**Credits:** WIOQ, WMMR, WYSP, WSTW, WMGK, WPST, Bruce Hornsby, Al Stewart, Renaissance, Hall & Oates, Police, Stevie Wonder, Hooters, Chaka Khan, Pat Metheny, Joe Jackson, Philadelphia Folk Festival 1983-86, much, much more.

**Services Offered:** Remote recording is my specialty, however I have done much work in the studio and for live reinforcement. I have an excellent collection of microphones and outboard gear and am proficient in its use. I have installed over 30 studios in the last seven years. Combined SPARS exam scores: 517. My experience both as an engineer and a technician can be an asset to any production.

#### WHIT GEIER

**Engineer & Producer**  
**CELLAR DOOR RECORDING PRODUCTIONS**  
4326 Villa Dr., Cincinnati, OH 45242  
(513) 984-6148

**Credits:** Have taped many bands for possible recording contract. Done live board taping at several different locations.

**Services Offered:** 4-, 16-, 24-track available. Over 15

#### CELLAR DOOR Recording Productions



#### WHIT GEIER Cincinnati, OH

different guitars—electric, acoustic, guitar synths by Roland; DX7, Moog synth TX7, RX11; drum set. Will do live or basement tapes. Professional musician on staff all times. We will produce and engineer all music.

#### DOLORES M. GELSOMINE

**Engineer & Producer**  
**GELSIE RECORDING STUDIO PROD. & MGT.**  
92 North Rt. 9W, Congers, NY 10920  
(914) 268-5966

**Credits:** Produced *Nasty Rumors* EP; produced and engineered *I'm In Another World Now*, writer Roger Monaco, artist Cathy DeRico. Currently co-management with The Moore Entertainment Group of NYC.

**Services Offered:** 2- to 16-track state-of-the-art recording. Production and artist development available. Also eight-week jingle shop for singers to learn sight reading and the art of singing and competing within the jingle market. Personal management also available with direct major label contact.




### OTARI MX-80 2" RECORDER

AVAILABLE AS: 24-trk, 24/32-trk, 32-trk  
MX-80 features a microprocessor-controlled constant-tension transport, a full-function remote controller, exceptional audio electronics, and connectors for interfacing to any SMPTE/EBU time code based editing system, controller, or synchronizer.

**RETAIL PRICE FROM \$27,950**

### AMEK ANGELA


- 6 chassis sizes—up to 62 line/mic in-outs • Fully modular construction • 4 band EQ, swept mids w/switchable "Q," high/low shelving • 6 sends • 6 returns • 4 stereo subgroups • Dual signal path with in-place solo • 30 segment LED meters • P & G faders • Autoready available • Producer's desk • stand.

**RETAIL PRICE FROM \$39,950**

YOUR EXCLUSIVE AMEK DEALER FOR SOUTHERN CALIFORNIA



**619 South Glenwood Place**  
**Burbank, CA 91506 • (818) 843-6320**



**Our Graduates Work**

A practical education in audio and video recording arts and sciences for anyone who takes recording seriously.

Approved for Foreign Students

Call Toll-Free:  
National 1-800-551-8877  
State 1-800-972-1414  
Local (213) 666-2380  
Telex (910) 240-4388 IAVE HLWD

**Institute of Audio-Video Engineering**

1831 Hyperion Ave., (MI) Hollywood, CA 90027

Circle #105 on Reader Service Card

# Attention!

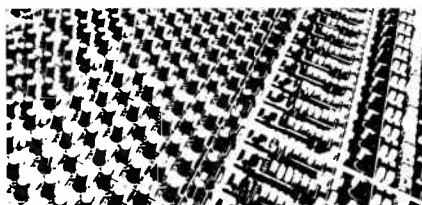
*Studios of the Northeast U.S.:*

## NORTHEAST STUDIOS DIRECTORY

The annual *Mix* Directory of Northeast Studios will be published in May, 1987. If you have not received a questionnaire for your FREE *Mix* listing, call Lauri Newman at (415) 843-7901.

**FINAL DEADLINE:  
FEBRUARY 13th**

## INDEPENDENTS



### PAUL GERRY

**Engineer & Producer**

**THE CUTTING EDGE CUSTOM DISC MASTERING**

Box 217, Ferndale, NY 12734

(914) 292-5965

Credits: Producer and engineer for Revonah Records, Tel-E-Vue Productions Records, Quickway and Studio 17 Records. Production engineer and disc mastering on numerous independent artists LPs, EPs and 45s.

Services Offered: Disc mastering, plating, pressing, engineering, jacket design, layout, photography, artist development and management, studio clips, demo records, tapes and videos. Record production for LPs, EPs and 45s.

### MARC A. GILMARTIN

**Engineer**

**BTTV**

11141 1/4 Hesby St., No. Hollywood, CA 91601

(818) 762-6059

Credits: Movies: *The Nutcracker*, all done by time code synchronization. Television: "Mr. Bill," Zoobalee Zoo, George Plimpton's Comm. World. Commercials: Hitachi, Home Savings, Santa Anita, Nabisco, Black & Decker, Miller Beer. Music Videos: Prince, Sheila E, Smokey Robinson, Jermaine Jackson. Industrials: Datsun, Mitsubishi, Isuzu, Cal Fed. Specials: Billy Crystal, George Carlin.

Services Offered: Stage, field and remote recording for television, movies, commercials and industrials. Full equipment package and easy to get along with. Many years of experience and extensive knowledge of time code systems and applications. I love my work, you will too.

### GREG GINER

**Engineer**

**UNDERGROUND SOUND**

920 Rich Ave., Mountain View, CA 94040

(415) 969-3596

Services Offered: Record and demo production, audio for video, music and sound library, digital mastering, tape duplication, pro engineer and equipment. Call for rates and equipment list. Ask for Greg.

### DAVID GLASSER

**Engineer & Producer**

**AIR SHOW, INC.**

5727 25th Rd. N., Arlington, VA 22207

(703) 237-8312

Credits: *Tribute to Thelma Houston* (NPR & PBS: digital multi-track production); *Hands Across America* (Broadcast and press multi-coordination); Nat'l Folk Festival (Liberty Weekend); Shirley Horn *Garden of the Blues* (Steeplechase); *Sisterfire Festival* (Redwood); *New American Orchestra*; *Modern Jazz Quartet*; *Count Basie Band*; NPR; *American Jazz Radio Festival*; *Murray Street Enterprise*; *Jazz Alive!*; *Skylabs*.

Services Offered: Technical direction for remote recording and broadcasts. Direct to stereo and multi-track mixing—in studio and on location, with emphasis on recording of classical, jazz, and acoustic music for album and broadcast projects. Production mixing for music, documentary, and news broadcasts. Please call or write for a complete description of Airshow's credits and services.

### KEN GLOVER

**Engineer & Producer**

**SOLAR-MILLENNIUM STUDIOS, INC.**

292 Route 9, Howell, NJ 07731

(201) 780-8732

Credits: Manager of large 16-, 24-, 48-track recording—video studio complex; director of production (New Sun Productions, Inc. Artists: "Eros," "Fine Design," "Kill Van Kull"); Engineer (Amek M2500—1500+ hours); former bassist-manager-promoter with "Crystal Ship" and music director with New Jersey Public Schools; B.A. (Music Education); M.A. (Composition).

Services Offered: All the musical and technical production services and standards necessary for getting competitive products together and into the hands of excited buyers. Recording (audio or video); demo or final mix; consultation, promotion, management, duplication, advertising, jingles.

### KHALIQ GLOVER

**Engineer & Producer**

**KHALIQ-O-VISION PRODUCTIONS**

P.O. Box 16415, North Hollywood, CA 91606

(818) 761-1670

Credits: "We Are The World" USA for Africa, Jermaine Jackson, Jeffrey Osborne, Donna Summer, Dolly Parton & Kenny Rogers, Teena Marie, Michael Sembello, George Duke, Dionne Warwick, Christopher Cross, Joyce Kennedy, Barry Manilow.

Services Offered: Record production, engineering, guitar, songwriting, synth programming, sampling, MIDI set-ups, Macintosh sequencing, QX-1 sequencing, background vocals.

### STEVE GOLD

**Producer**

**HIPPOGRIFF PRODUCTIONS, INC.**

246 Fifth Ave., Suite 201, New York, NY 10001

(212) 481-9877

Credits: Recently completed two singles scheduled to be released overseas; was involved with the "Hands Across America" recording project, numerous TV and radio jingles (and scoring); currently working with three major labels.

Services Offered: Production of high quality masters for unsigned artists, networking music to major and subsidiary labels, representing act in contractual arrangements, in-house publishing company with complete catalog of songs. Pre-production equipment includes the Yamaha Computer Assisted Music System (TX816 and QX-1), Oberheim SP-12, DX7, Emulator II+, Oberheim Xpander, Tascam 16 in x 4 out mixing console and various outboard gear. Hippogriff's staff consists of some of New York's top independent producers and arrangers. Major labels and independent distribution firms handle our manufacturing, distribution and promotional tasks. Specialty: Dance/pop and AOR.

### MITCHELL GOLDFARB

**Engineer & Producer**

**KAJEM RECORDING STUDIOS**

1400 Mill Creek Rd., Gladwyne, PA 19035

(215) 649-3277

Credits: Dollar (Arista); Helena Springs (Arista); Teddy Pendergrass (EA); Lou Rawls; Dexter Wansel (Virgin); Michelle Goulet (Island); Judy Mowatt; Dee Dee Sharp; Janice McClain (MCA); Alan St. Jon (Billy Squier Band); The Whiteheads (PIR); Lewis Sisters (Riva); Tenita Jordan (CBS); Shirley Jones (PIR); Frankie Smith (OMNI); House of Assembly; Joey Balin.

### LARRY GONHUE

**Engineer & Producer**

**THE SOUND VENDORS**

10707 Magnolia Blvd., North Hollywood, CA 91601

(818) 985-9774

Credits: Clients include Universal Pictures, Columbia Pictures, Walt Disney Productions; Embassy Home Entertainment, New World Pictures; Cannon Films; Dancer, Fitzgerald & Sample; Albert, Newhoff & Burr; Campbell-Ewald, Cole & Weber, and others.

Services Offered: The Sound Vendors is a full service radio and post-production audio facility specializing in advertising for major motion picture studios and agencies.

### BILL GRABOWSKI

**Producer**

2350 Broadway, Suite 540, New York, NY 10024

(212) 580-2688

Credits: Co-wrote with Jon Bon Jovi, produced "Youth in Asia"; most recently produced "Master of the Metal" by Messiah Prophet; scored and produced soundtrack for motion picture *A Time To Remember*; worked as producer/writer for motion picture *Heart* soundtrack; in-house producer at The Power Station studios; compose or write (music and lyrics); orchestrate (graduate and undergraduate music training) or arrange; have extensive background in many styles from R&B to metal to classical; have Emulator II w/ extensive sound library (350+ disks) and SP-12 w/sounds. Will travel. Also will coordinate acts w/ appropriate studio(s) for good prices to get the max out of your budget!

### ANDREW J. GRAY

**Engineer & Producer**

309 Buckingham Dr., Lynchburg, VA 24502

(804) 239-0732

Credits: Live: Ramsey Lewis Trio, Carl Anderson, Island, Thys, Flawells, Chyna, Torpedo Heaven. Four tours: Breaking Point, City, The Heat, Sassi. Studio: Flawells, Harvey Lee, Mad Money, Sycgy, A-2-Z, Donald Fisher. Produced: Project "YG," Flawells, A-2-Z, Donald Fisher, Andy Gray and students.

Services Offered: Studio and live engineering and production. Studio and live production consultation. Soon to



be opening a second office, on the West Coast in the Bay area. The Flawells are coming! World Tour '87!

#### PHIL GREENE

*Engineer & Producer*  
**NORMANDY SOUND, INC.**  
25 Market St., Warren, RI 02885  
(401) 247-0218

Credits: John Cafferty and The Beaver Brown Band, Jeff Lorber, Steve Smith, Billy Cobham, Jimmy Miller, Maurice Starr, Herbie Hancock, The Brecker Brothers, Bobby and the Midnighters, Tom Browne, Cornell Dupree, Jimmy Smith, Vinnie Calviata, Ron Carter, James Cotton.  
Services Offered: Engineering and line production.

#### TED GREGOREK

*Engineer & Producer*  
1 East 36th St., Apt. 503, Indianapolis, IN 46205  
(317) 923-4130

Services Offered: Complete services for studio and live production. Recording services: studio or remote; engineering and production; 2- to 24-tracks. Live production; engineering, system design, consultation. I will work to give the client the best product within their budget. All projects are considered important. Will travel.

#### NICHOLAS ALLEN GROUF—ASTOR

*Producer*  
**NICK NACK PADDYWACK RECORDS**  
P.O. Box 3248 Yale Station, New Haven, CT 06520  
(212) 348-8288

Credits: Five clients are now signed to Rough Trade Records; "How Civilized Are We?" #1 at 79 Northeastern colleges. I am a music major at Yale University looking to produce new talent; I work extensively with independent British labels as well as The Pedestrians and TBA.

Services Offered: Looking for new material and talent for both record companies and a compilation album. 24-track studio, (2) Yamaha DX7s, Synclavier II, Fairlight, Kurzweil, will produce ten top bands this year and press 1,000 demo 45s. If you think you have today's sound, Nick Nack Paddywack Records could be your vehicle. The productions are all done in conjunction with the student body of Yale University. Please send a demo (regardless of quality) of 3-5 songs. A response is assured.

#### JIM HAILEY

*Engineer & Producer*  
**MY STUDIO**  
1608 Eagle Dr., Ft. Worth, TX 76111  
(817) 838-9312—Studio/(817) 834-5656—Home  
Credits: Lee Pickens, Bugs Henderson, Artasia, Edwards Hall Band, Murray Hill Sound, Ft. Worth Sound, Easter Island.  
Services Offered: 16-track recording, editing, duplication. Most equipment is MIDI compatible. Any type music or recording. Producing specialties are rock, metal and pop. Your studio or mine.

#### THOMAS J. HALL

*Engineer & Producer*  
**TRIAD STUDIOS**  
4572 150th Ave. NE, Redmond, WA 98052  
(206) 881-9322

Credits: UB40, Queensryche, Randy Meisner, Autograph, Rail, Hair Apparent, D.C. Lacroix, Paul Speer, Eric Tingstad, Uncle Bonsai, The Cedar Walton Trio, Dan Foster, Mark Lindsay, Jim Stipech, Chalace Records, Danny Deardorff, Wickline, Pizza Haven, Chris Lobdell, A.M. Productions, Magical Strings, Boeving, China, The Puget Sound, Shakeh, Lemax, Rick Vale, Kathleen Wallace, and many others.

Services Offered: All facets of demo and record production including pre-production, engineering, producing, watchdog supervision of record mastering and pressing. I am sensitive to the artists' creative needs and strive for the best recorded performance possible in a comfortable, low pressure atmosphere.

#### LARRY HARLOW

*Engineer & Producer*  
**BIG APPLE STUDIOS INC.**  
353 West 48th St., New York, NY 10036  
(212) 974-1755

Credits: Produced over 200 LPs. Latin-American specialist, tri-lingual; keyboardist, arranger, producer; Grammy nominee.

Services Offered: 48-track recording, two Neve/Studer studios, special MIDI keyboard room, large outboard section

#### MALCOLM H. HARPER, JR.

*Engineer & Producer*  
**RELSOUND RECORDING CO.**  
2304 Sheri Oaks Ln., Austin, TX 78748

#### (512) 472-3325, 282-0713

Credits: Live concert, film and TV recording engineering: Amy Grant, Rick Cua, Dave Perkins, Eric Johnson, Tears for Fears, Judas Priest, Robert Plant, Journey, The Gap Band, Frankie Beverly and Maze, Willie Nelson, Ray Charles, Lee Greenwood, Eddie Rabbit, Ricky Skaggs, AC/DC, Ted Nugent, Billy Squier, Westwood One, DIR, PBS, Budweiser.

Services Offered: Forty-two foot Tom Hidley-designed remote audio tractor-trailer unit, 46-track automated with SMPTE interlock, overdub room and lounge. Concert recording for radio, film and TV audio support. For those out of the normal album projects and mixing sessions. Seventeen years' experience. A second remote unit located in Nashville, Tenn.

#### DON HARRISS

*Producer*  
**DH PRODUCTIONS**  
910 Celia Way, Palo Alto, CA 94303  
(415) 858-0602

Credits: Our clients include Apple Computer, AT&T, National Semiconductor, Pacific Bell, Ross Stores and many more.

Services Offered: Original music/sound designed and produced for film, television, radio, multi-image, corporate projects and industrials. All styles—electronic or traditional. Demo cassette and brochure available on request.

#### MARTY HASSELBACH

*Engineer & Producer*  
**NO-HASSELTRACKS PRODUCTIONS**  
#305-1872 Barclay, Vancouver, B.C. V6G 1K8  
(604) 685-4009

Credits: Producer: Questionnaires, Herald Nix; numerous jingles, soundtracks, and production work. Engineer: Powder Blues, Wildroot Orchestra, The Villains, Mark Hasselbach, Parallel States, David Raven, Richard Loney, V.E.J.I., John Lee Hooker, The Lawlors, B-Sides, and many nationally aired radio spots and audio post-production for pay TV.

Services Offered: Production services and engineering available. Fully computerized 24-track facility with synchronizer for audio/video post-production. Fee and rates negotiable. Also, available for audio engineering lectures and seminars. Please phone.

#### DANN E. HAWORTH

*Engineer & Producer*  
**HAWORTH PRODUCTIONS**  
7616 West 80th St., Overland Park, KS 66204  
(913) 381-8378

Credits: "Overview" Tony Glise; "Listen To The Wind" Tony Glise; Bon Ton Soul Accordion Band; Gary Kelly; Danny Liston

Services Offered: 24-track recording—record production, music publishing.

#### MARK ANTHONY HEIDE

*Engineer & Producer*  
**DISTANT CLOUD RECORDS**  
P.O. Box 857, Homewood, IL 60430  
(312) 799-8059

Services Offered: Specialized in creating synthesized instrumental music for film and video productions of any genre, for clients with a limited budget who demand high quality. Styles of music include: "Horror" and "Suspense," "Floating" and "Pulsating" electronics, Dance Rock, Atonal, Avant-Garde. Productions are recorded in stereo or mono. Mono versions are available with SMPTE time code. All music is recorded direct to 2-track via MIDI. Equipment used: Otari 5050 BII, Soundcraft 200, dbx Type I NR, Roland MSQ-700, and various synthesizers, drum machines, and signal processing. Fees for services are negotiable. Flat fees are accepted.

#### GENE HEIMLICH

*Engineer & Producer*  
**GENE HEIMLICH SAVAGE ANGEL,**  
**MASADA MUSIC, NEW FRONTIER**  
888 8th Ave., New York, NY 10019  
(212) 757-1953

Credits: Founder of Daily Planet Studios (Planet Sound), manager: George McCrae; production manager: Deodato; A&R director: Billboard Disco Forum '76; production coordinator: Noel Pointer. Clients: RCA, Tropical Boddah, Whole Life Times, Xerox, Halston, Moving Center, Jim Scott (Radiance), Arlen Roth, Mike Mandel, Raphael, Revelation, Bell Sound, Cafe Lamama, Ted Bates, etc. Concerto for Astronauts.

Services Offered: Full production, engineering—multi-track, digital; location recording w/Nagra IV-S and F-1 processor (d/digital); re-mix. Arranging and contracting, studio brokerage and administration. Production especially suited to clients and artists w/packaging needs—for

—LISTING CONTINUED ON NEXT PAGE

# api

a reputation of quality—

- custom products
- equalizers
- the 2520 OP-AMP
- distribution amplifiers
- microphone pre-amps
- replacement parts

File Use  
C40/C41M

Plus these new products:

- 5502 Dual Four Band Rack Mount 550A EQ
- 940M Motorized Servo Fader
- 318a distribution amplifier

**api audio products, inc.**

7953 Twist Lane, Springfield, VA 22153  
(703) 455-8188 tdx: 510-6001-898

#### studio consultants, inc.

321 West 4th Street, New York, NY 10036  
(212) 506-7376

eastern representative

#### ESTABLISHED 1970

16055 Ventura Blvd., Suite 1001  
Encino, California 91436  
(213) 276-1414

western representative

## SOUND SYSTEM

# BUZZ

ITS TOO BAD YOU  
CANT ALWAYS KEEP IT CLEAN

BUT NOW  
ITS ONLY TEMPORARY  
INTERFERENCE WITH

# A MODEL PS-1



In addition to reducing RFI the PS-1 can also protect your sound reinforcement equipment from:

HIGH VOLTAGE TRANSIENTS  
UNEXPECTED POWER UP TRANSIENTS  
IMPROPER LINE POLARITY

■ linear & digital  
systems, inc.  
46 marco lane  
centerville, oh.45459

Circle #106 on Reader Service Card

—LISTING CONTINUED FROM PAGE 161

tape sales. Includes cover design and marketing of tapes, film scoring and BG music, commercials, etc. Analog, digital, record, tape and CD sampler tape available on request.

**JAY HENRY**

*Engineer & Producer*  
**VISUAL MUSIC**

235 E. 13th St., #3-D, New York, NY 10003  
(212) 505-9281

Credits: Fifteen years experience in recording and broadcast industries. Has earned a number of gold records and worked on Grammy nominated albums. Jay has worked on albums for Robin Clarke (Simple Minds), Shannon, Alphonse Mouzon, Larry Coryell, Design for Living; singles on CBS, Atlantic, Emergency, and dozens of independent labels.

**Services Offered:** Software based, audio/video pre- and post-production. Full music production services for albums, singles and master demos including: digital recording and editing; arrangements and lyrics; music video packages; multi-machine lockups; studio and location production services for video and film; MIDI/SMPTTE interfacing to video, film and live performance with MIDISCORE™ custom chip blowing; sample editing; sample library; synthesizer and drum programming; custom signal processor software and unusual equipment rentals.

**J.D. HILL, M.D. ACOSTA**

*Engineer & Producer*  
**SILENCE, INC.**

P.O. Box 710 Maplecrest Station  
Maplewood, NJ 07040

Credits: Nu Shooz, Chuck Berry, Country Joe McDonald, Shadowfax, Rail, Ferron, B.B. King, Roomful of Blues, Dave Mason, Dan Siegel, Bonnie Raitt, The Band, The Byrds, New Riders of the Purple Sage, John L. Hooker, James Cotton, Al Stewart and an abundance of notably dull "pop-stars."

**Services Offered:** We provide to the artist innovative personalization of his sound picture using steady state dimensional collisions created by our oblique procedures and systems. This removes the paradox the artist is trapped in when having difficulty conveying concepts and meaning through performance. This is made possible through our broad overview of all areas of event creation and perception. Production skills being comparable to most (SSL 6000E, Eventide SP-2016, E-mu II, etc.) we add as well extensive backgrounds in systems analysis, critical thinking, human engineering and communications expertise. We are here to pump the nation. Got to make you push that tush and work that miracle...huh!

**BOB HODAS**

*Engineer & Producer*

P.O. Box 2028, Sausalito, CA 94965  
(415) 331-6941

Credits: Doobie Brothers, Village People, Marty Balin, Rick James, Mickey Hart, Dinosaurs, Merl Saunders, Dick St. Nicklaus.

**Services Offered:** Recording and concert engineering; film, album, and demo production.

**RANDY HOLLAND**

*Engineer & Producer*

**RANDY HOLLAND, INC.**

1602 Montana Ave., Santa Monica, CA 90403  
(213) 829-1371. Contact Lisa Roy

Credits: Engineer: Pointer Sisters, Glenn Frey, Paul Davis, others. Producer: Autumn, Compleat/Polygram.

**Services Offered:** Fairlight programming, any and all processing equipment.

**JAMIE HOOVER**

*Engineer & Producer*

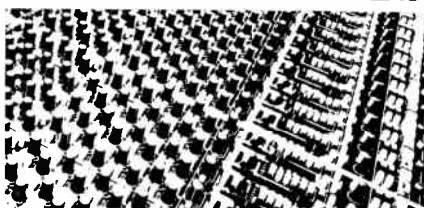
**OVO PRODUCTIONS, LTD.**

410 Greystone Rd., Charlotte, NC 28209  
(704) 523-1117

Credits: Albums by the Spongtones, SugarCreek, The Killer Whales, Robert McClure, Awareness Art Ensemble, Helpless Dancer, The Federal Brothers, Ion Brittan, Don Dixon, The Happy Eggs, and more, all produced by Jamie Hoover and engineered by Mark Williams for OVO Productions, Ltd. Plus, freelance engineering at Reflection Sound Studios, Lamon Studios, etc.

**Services Offered:** Freelance engineering for records, jingles, soundtracks, demos, live productions, and TV. Experienced as engineer on MCI, Trident, Sound Workshop, Tangent and other line boards, and as a session player on guitar bass, vocals, and just about anything that makes a noise.

# INDEPENDENTS



**PAUL HORNSBY**

*Engineer & Producer*

**MUSCADINE STUDIOS**

3078 Vineville Ave., Macon, GA 31204  
(912) 745-2401

Credits: Producer of albums by The Marshall Tucker Band, Charlie Daniels, and many others. Have many major label contacts.

**Services Offered:** Complete 16-track and 8-track recording studio.

**ROBERT HOWELL**

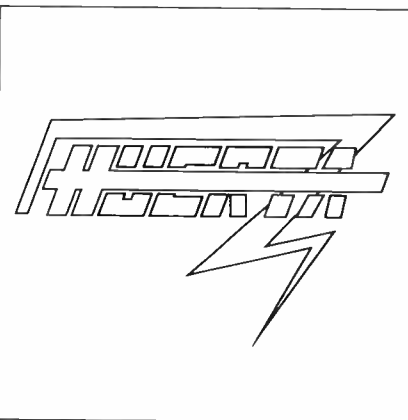
*Engineer & Producer*

**EBONY STAR PROD./BRIEFCASE OF TALENT**

1612 Narlbroad Dr., Atlanta, GA 30307  
(404) 371-8583

Credits: Produced Fairchild, Max Density, Mysti's Live Sound and Production of Shows Southeastern Festival 3 and 4. UT Rockathon '85.

**Services Offered:** Pre-production, engineering, video production, management and a whole bunch of everything else.



**LARRY HUERTA**  
Chicago, IL

**LARRY HUERTA**

*Engineer & Producer*

**HUERTA RECORDING SERVICES**

P.O. Box 25676, Chicago, IL 60625  
(312) 794-0125

Credits: A&M, Arista, Capitol, Columbia, Delite, Elektra, EMI, Epic, Flying Fish, Mercury, Motown, Warner Brothers, Coffee, Linda Lifford, Kurtis Blow, Heaven & Earth, Lettermen, John Campbell, Bonnie Koloc, Chevere, Erwin Helfer, Sheba, Pawnz, Chicago Pops, McDonalds, Taster's Choice, Zenith, RCA, United Air Lines, NBC News, Sears, Kellogg's, Doublemint, Coors.

**Services Offered:** Available for: artists, record companies, advertising agencies, jingle companies and audio-visual companies. Over 12 years experience recording demos, records, commercials, slide presentations, trade shows, locations, and feature films. Can contract professional studio musicians, and have access to studios ranging from mono to 72 tracks, analog or digital. Professional follow through including "quality control" inspection of dubs and record pressings. Rates vary to meet your budget.

**ROD HUI**

*Engineer & Producer*

**RODWAY PRODUCTIONS**

c/o Greene Street Recording, 112 Greene St., New York, NY 10012  
(212) 226-4278

Credits: RUN DMC, Kurtis Blow, Lovebug Starski, Riot, Carol Lynn Townes, Chaka Khan, James Brown, Trouble Funk, Phil Glass, Bonnie Tyler, Shannon, Joclyn Brown,

Confunkshun, Ray Manzarek, John Cale, Joe Piscopo/Edie Murphy, D. St., Brian Eno, Marion Williams, Waitresses, Breakin' soundtrack.

**Services Offered:** Engineer-producer with access to musicians, programmers, etc.

**KIRK HUTCHINSON**

*Engineer & Producer*

**DAYSTAR RECORDING STUDIOS**

1105 Leyden, Denver, CO 80220  
(303) 394-4637

Credits: "Soulscape" (Rob Mullins), "Nite Street" (Rob Mullins), "Geared for Running" (Rob Mullins), nationally archived poetry by Joe Harjo, demos for locally known artists such as Elynn Rucker, The Captain's Red Hot Flames, "You Guys," Images, Ron Henry, Les James; International Broadcasting Network jingle, various local Christian artists.

**Services Offered:** Engineering, production consultation, limited keyboard work, transcriptions, limited equipment rental.

**RANDE ISABELLA**

*Engineer & Producer*

**ARTASIA MUSIC PRODUCTIONS**

410 West Coast Highway, Suite A-440  
Newport Beach, CA 92663  
(714) 722-0797

Credits: TV/Film clients: NBC Sports, Donny Osmond Entertainment, Fawcett Productions, USA Network, Orange County Register. Artists: Dance/Jimmy "Bo" Horne, Jazz; Harold Danko, Christian; Howard McCrary, Phil Keaggy, Rock; numerous "Agora Circuit" bands in Cleveland. Masters Degree in Record Production and Studio Composition from University of Miami.

**Services Offered:** Independent record producer, TV/Film composer and engineer to Orange County area. For TV/radio/film music: composes, arranges, performs all instruments, engineers and mics project. For records: serves as songwriting coach, demo producer and master producer. Complete MIDI studio available with 16-track audio for demo and composition work. Great rates on 24-track automated and 32-track digital. Worked 10 years as producer/composer in Cleveland and Miami. Speaks fluent SMPTTE, MIDI, analog/digital audio and synthesis. Call for demo/ resume. "On target... on budget... on time!" The song is 80% of the record."

**DON JACKOVICH**

*Producer*

**JACKOVICH MUSIC PRODUCTIONS**

P.O. Box 410294, San Francisco, CA 94141  
(415) 431-9408

Credits: Composed and produced my first EP, worked on many local projects as both producer and studio musician. **Services Offered:** Experienced composer, arranger, providing complete production, pre-production, programming, synthesis, and sampling, featuring E-mu SP12, E-mu EMAX, Macintosh/Digidesign system, REV7, SPX90, Efectron, Oberheim Matrix 6, Sony PCM-601ESD digital 2-track. Demos, discs, re-mixes, soundtracks.

**DON JAMES**

*Engineer*

**DON JAMES PRODUCTIONS**

4146 Warwick Blvd., Kansas City, MO 64111  
(816) 931-4102, 931-0617

Credits: Beta Mu-Phi Alpha Sinfonia, Butler Manufacturing, Central Methodist College, Roger Ferris, Hallmark Cards, Jamie Page, Destiny Records, Kroiz, Names Don't Matter, National Cinema Supply, Panhandle Eastern Pipeline, Secret Meeting, Hyde Brier, Southwestern Bell, Yield. **Services Offered:** Audio engineering: 2- to 24-tracks for albums, demos, or remotes. Live sound engineering: house or monitors. Engineering and editing: commercials and industrial soundtracks. Strong music background, versatile in all styles. Local or free to travel.

**The Mix Bookshelf  
Catalog contains the  
best audio, video, and  
music industry texts  
available from over 70  
publishers. For your  
free copy please see  
page 179.**





# NSCA ELECTRONIC CONTRACTORS EXPO '87

• WORKSHOPS  
• EXHIBITS  
... AND MORE

FAIRMONT HOTEL • NEW ORLEANS

MARK  
YOUR  
CALENDAR

APRIL '87						
S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

HERE'S A WORKING VACATION WORTH  
CLOSING UP SHOP FOR

*designed by Contractors — for Contractors*

## 1 NEW PRODUCT EXHIBITS AND DISPLAYS

Hundreds of Exhibitors  
— Thousands of  
Products

## 2 WORKSHOPS, SEMINARS TECH PAPERS

Technical Topics •  
Management Subjects •  
CCTV Topics • Training  
Programs for New  
Sales People

## 3 WORK AND EXPERIENCE EXCHANGES

Talk to Other Electronic  
Contractors from All  
Over the Hemisphere

*"The Industry Event of the Year!"*

### REGISTRATION/BADGE INFORMATION

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Telephone \_\_\_\_\_

☐ Contractor

☐ Representative

☐ Manufacturer

☐ Consultant

☐ Trade Press

☐ Other

Name/Title \_\_\_\_\_

Name/Title \_\_\_\_\_

Name/Title \_\_\_\_\_

Name/Title \_\_\_\_\_

Name/Title \_\_\_\_\_

**EXPO Registrations:** On-Site Administrative Fee ..... \$5.00

**WORKSHOP Registrations:**\* Member Companies 3 Days . . . \$75/Person

\*Non-members: Add \$100 per company 1 Day . . . \$30/Person  
(may be applied to membership dues)

Check for \$\_\_\_\_\_ enclosed as payment for \_\_\_\_\_ conference registrants.

(Make checks payable to NSCA Contractors Expo.)

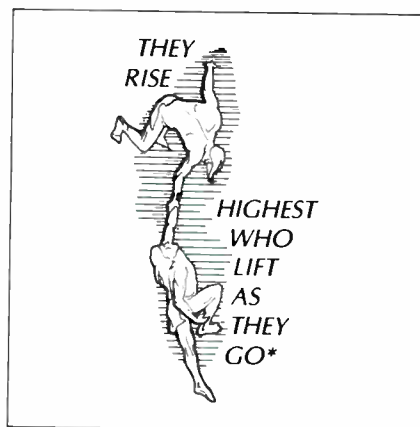
☐ NSCA Member

☐ Non-member



Mail checks to:

**NSCA CONTRACTORS EXPO '87**  
501 WEST ALGONQUIN ROAD  
ARLINGTON HEIGHTS, ILLINOIS 60005-4411



STEPHEN G. JARVIS  
Danville, CA

**STEPHEN G. JARVIS**  
*Engineer & Producer*

**AKASHIC RECORDS GROUP**  
c/o P.O. Box 395, Danville, CA 94526  
(415) 837-7959 (home phone)

Credits: Montrose, Hagar, Journey, John Sebastian, Cat Stevens, Tommy Tutone, Maguire, Judy Fields, Commander Cody, Sopwith Camel, Holly Penfield.

**Services Offered:** In-house 24-track recording mobile modular system. Tube mics, Massenberg preamps, MCI console, 3M M79, 24-track, over 45 various microphones, tube limiters, noise gates, AMS RX16. The Akashic Records Group is a marketing services organization formed to provide business guidance and production services. The company develops recorded products for major label contract solicitations and/or independent release. Recorded products which are released independently are done so under a joint venture label, designed to be a vehicle for the further growth and exposure of the artist. The primary goal of the company is the placement of the artist with a major label or the acquisition of a manufacturing/distribution arrangement for the recorded product. An artist or group who desires to submit song demos or recorded products for A&R consideration should send the materials to: Akashic Records Group A&R, P.O. Box 395, Danville, CA 94526. Please include a stamped, self-addressed envelope, a contact name and phone number, and allow four to six weeks for a response.

**ROBIN JENNEY**

*Engineer & Producer*  
**RJ PRODUCTIONS**

3535 Shaw Ave., Apt. #4, Cincinnati, OH 45208  
(513) 321-3923

Credits: Midnight Star—"Headlines," "Planetary Invasion," George Clinton—"Some of My Best Jokes Are Friends," "Zapp"—"Zapp II," Roger—"The Saga Continues," The Ohio Players—"Graduation," The Deele—"Streetbeat," Boogie Bob—"I'm Almost Famous," Spittin Image, The Movies—"Jukebox," "Visions."

**Services Offered:** Audio engineering and production for demos to major label album projects. Direction includes R&B, rock and roll, jingles, industrial soundtracks, etc. Also available as instructor for audio courses.

**DAVID JOHN**

*Engineer & Producer*  
**ART'S A PASSION RECORDS**

325 Captains Walk, Suite 307, New London, CT  
(203) 447-3438

Credits: Many independent record projects around the world including Amos Lawson, Belgium, Gary Karp, Paris, Shaboo Allstars, Newjohnny 5, Paisley Jungle, USA.

**Services Offered:** Total record production services—beginning to end.

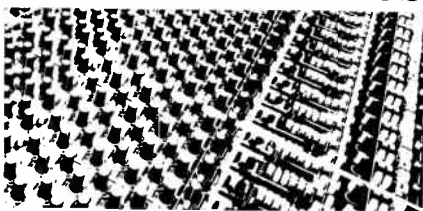
**JOHN JOHNS**

*Engineer & Producer*  
**800 Kinwest Parkway, Suite 197**  
Irving (Dallas), TX 75063  
(214) 556-2275

Credits: *Blood Savage*, (feature) sound mixer; *True Stories*, (feature) video effects; *Benji The Hunted*, (feature) assistant sound and video effects; *End of the Line* (feature) video effects; "Wild, Wild Life," Talking Heads (music video) video effects. Other credits include commercials, industrials and live performance.

**Services Offered:** Location sound mixer, video engineering, video/audio recordist, post-production for video, audio and film video and audio effects.

# INDEPENDENTS



**DANNY JOHNSON**

*Engineer & Producer*  
**MAD DOG PRODUCTIONS**  
P.O. Box 3078, Ft. Worth, TX 76113  
(817) 237-9673 or 244-3254

Credits: Degreed engineer/producer has recorded audio and video projects for Impulse, Ladies Knight, Adams Rib; location video shoots in Arizona, Colorado, Utah and Texas.

**Services Offered:** Multi-track recording engineer/producer; music videos; video editing, sweetening, layback; audio/video system installation and consultation; system troubleshooting; live sound recording/engineering; synthesizer programming.

**STEVE V. JOHNSON**

*Engineer & Producer*  
**ELEGANCE PRODUCTIONS**  
18 Meridian Terrace, Paxton, IL 60957  
(217) 379-3164

Credits: Demo available on request.

**Services Offered:** Remix, mix, ground-up production, engineering. Ready and willing to travel.

**DANNY JONES**

*Engineer & Producer*  
**STAR STAGE, INC.**  
37 East Carolina Ave., Memphis, TN 38103  
(901) 526-STAR/(800) 643-0016 (outside Tennessee)

Credits: Beach Boys, Bobby "Blue" Bland, Jim Corcoran, Creed Jim Dandy, DeGarmo & Key, Farrell & Farrell, Etta James, Jean Knight, Patti LaBelle, Labor of Love, Mylon LeFevre, Ramsey Lewis, Neville Brothers, Billy Joe Royal, Staple Singers, Diane Tell, Allen Toussaint, Irma Thomas, Rufus Thomas.

**Services Offered:** Producing, engineering, music publishing, artist management, artist booking, record label, video, promotion, consulting.

**E. KEVIN JONES**

*Engineer*  
**SOUND & SOUND ALIKE**  
**PRODUCTION MANAGEMENT**  
620 W. 149th St., Suite 6c, NY, NY 10031  
(212) 926-8294

Credits: Ashford & Simpson, Eugene Wilde, Kashif, Lillo Thomas, Atlantic Starr, Harry Belafonte, D Train, SOS Band.  
**Services Offered:** Live sound and monitor engineering and production management. Set production design, personal security as well as full tour staffing.



JEFF JONES  
New York, NY

**JEFF JONES**  
*Producer/Engineer*  
**CINA-TONE INC.**

218 E. 82nd St. Suite 4FW, New York, NY 10028  
(212) 570-2765

Credits: Recorded for: Def Jam, Virgin, Tommy Boy, Streetwise, CBS, Warner Bros., Capitol, Elektra, Atlantic, Cheek, Sony, NBC-TV, CH 13. Recorded with: Planet Patrol, Larry Coryell, Talking Heads, Gang of Four, Plasmatics, Neil Sedaka, Miroslav Vitous, Vikie Sue Robinson, Angela Clemmons, Fonda Ray, Parliament, Brecker Bros., Dave Sanborn, John Hammond Sr., Teo Macero, Don Elliot, Arthur Baker, Ted Currier, Teruo Nakamura, Mike D. Fred Schneider; recorded for Russell Simmons, Spider D, Marley Marl, Roxanne Shante, Boggie Boys; Tashan.

**Services Offered:** Complete 24-track and 32-track digital recording, production services, album, single, EP and CD masters produced. A specialist in location recording, studio recording, mixing, and editing, live PA mixing, mastering, broadcast and video sound. Artist development, video and film production.

**KAREN KANE**

*Engineer & Producer*  
**329 Highland Ave., Somerville, MA 02144**  
(617) 628-6469

Credits: To date I have produced and/or engineered over 50 albums. Many of them on the Rounder Records label, Flying Fish, Folkways, and many independent labels. Have had many rock and roll 45s and demo "hits" on the radio. Have been in the recording business since 1970.

**Services Offered:** I was one of the first successful freelance recording engineers in New England. I offer unbiased advice about recording in Boston and a no-charge pre-production meeting. Recording drums is a specialty of mine as is acoustic music. I am extremely efficient, dedicated and easy to work with. I really listen to my clients and give them what they want to hear.

**DAVID KARR**

*Engineer & Producer*  
**P.O. Box 282, Center Valley, PA 18034**  
(215) 965-4197

**Services Offered:** Video/audio sync. specialist with extensive SMPTE and MIDI experience.

**DAVID KASPERSIN**

*Engineer & Producer*  
**DYNAMIC RECORDING**  
**2846 Dewey Ave., Rochester, NY 14616**  
(716) 621-6270

Credits: Have secured 33 major publishing contracts for artists in the last four years. Engineer for 22 years, producer for ten years.

**Services Offered:** Produce excellent demo tapes/records. Write for free cassette or record to 2846 Dewey Ave., Rochester, NY 14616 or call (716) 621-6270. Specify type of music production you are interested in.

**RICHARD KAYE**

*Engineer & Producer*  
**111 Wadsworth Ave., Apt. 31B, New York, NY 10033**  
(212) 928-1739

Credits: Laurie Anderson, Ashford & Simpson, Roy Ayers, BT Express, Felix Cavaliere, Dennis Collins, Freddie Jackson, Howard King, Audrey Landers, Lenny Kaye, Chuck Loeb, Steve Lunt, Bette Midler, Sheryl Lee Ralph, Julese Shear.

**Services Offered:** Creative, quality engineering. Familiarity with many synthesizers and drum machines. Octave Plateau Sequencer Plus and Patchmaster Programming.

**HELEN KEANE**

*Producer*  
**HELEN KEANE—**  
**ARTISTS MGT. RECORD PRODUCTION**  
49 E. 96th St., New York, NY 10128  
(212) 722-2921

Credits: Producer for LPs by Bill Evans, Kenny Burrell, Tony Bennett, Paquito D'Rivera, Morgana King, Joao Gilberto, Mark Murphy, Steve Kuhn, Adam Makowicz, Joanne Brackeen, Keith Macdonald, Art Farmer, Benny Golson, Chris Connor. Companies produced for: Warner Bros., CBS Records, Fantasy, Muse Polygram, Landmark, CTI, Blue Note, Polydor, MGM, Verne, etc.

**Services Offered:** Full producer/director. Services including choosing musicians, material to be recorded, studio facilities and engineer, cover art, liner notes, etc.

**MARCUS S. KEARNS**

*Engineer & Producer*  
**PERFECT PITCH RECORDING & PRODUCTION CO.**  
Rt. 8 Box 433-A, Statesville, NC 28677  
(704) 872-2360

Credits: Producer, engineer, composer, musician and owner of Perfect Pitch Recording; have produced albums of pop, dance, and fusion music, as well as music for commercials and television themes. Currently involved in pro-



duction of New Age music album; owner of Melomque Publishing Co. and independent record label.  
**Services Offered:** Complete production services. Album production, film music, commercials, composition and arranging. Fairlight computer, drum computer and synthesizer programming. Bachelor's degree in composition with background in classical piano, orchestration, electronic music, and jazz and rock music of all kinds. Automated 24-track studio featuring all Studer machines, top-of-line outboard gear (Lexicon 224XL), Fairlight CMI, drum computers, and full array of synthesizers located on 40 acres of seclusion in beautiful North Carolina.

**PETER R. KELSEY**  
*Engineer & Producer*  
 2038 S. Holt Ave., #10, Los Angeles, CA 90034  
 (213) 837-7939

**Credits:** Fourteen years experience, including six years at Trident Studios, London, with producers: Ken Scott, Roy Thomas Baker, Rupert Hine, Peter Asher, Robert "Mutt" Lange; and artists: Elton John, Jean-Luc Ponty, Graham Parker, The Fixx, Camel, Cate Jacques, "Weird" Al Yankovic, Linda Ronstadt, Zawinul, Weather Report, Bill Ward of "Black Sabbath."

**Services Offered:** Engineering and mixing for any project, co-production with artist and/or producer, full production with or without engineering. I will do everything I can do to make your music the best it can be. Resume on request.

**NORMAN KERNER**  
*Producer*  
 BRILLIANT PRODUCTIONS, INC.  
 617 So. 13th St., Richmond, CA 94804  
 (415) 236-2281

**Credits:** Freaky Executives, Terry Haggerty & House on Fire, Monkey Rhythm, The Chills, Yanks, McGee Street Bunch, Surlin' Fools, many more.

**Services Offered:** Brilliant Productions is a full service record production team. Brilliant Productions is based at Starlight Studio, one of the Bay Area's finest 24-track facilities. Please direct all cassettes/info to P.O. Box 7139, Berkeley, CA 94707.

**CHRISTI KING**  
*Producer*  
 PUMPKIN PRODUCTIONS  
 821 Tamarack Ln., Sunnyvale, CA 94086  
 (408) 985-9961

**Credits:** Ability to work well with a variety of bands, ranging in musical styles, a degree in recording engineering and music production, and experience in a number of different studios.

**Services Offered:** Complete production and assistance from rehearsals to mastering. This includes refining and developing songs for the studio, preparing and rehearsing for the actual recording session, and assisting during mix-down and tape duplication if requested. Management and promotion services available on request.

**PITT KINSOLVING**  
*Engineer & Producer*  
 686 South Arroyo Parkway, Suite 260  
 Pasadena, CA 91105  
 (818) 763-8606

**Credits:** Numerous records on: Angel, Windham Hill, Motown/Latin, Green Linnet, Folkways, Kicking Mule, Flying Fish, etc. Silver Screen Award for slide show. Artists I have worked with include: ShadowFax, Larry Coryell, John McHogan, James Stewart, Chris Proctor and Seamus Eunis.

**Services Offered:** I can travel anywhere in the world to record you in the studio of your choice or on location. I am particularly skilled with acoustic music (classical, jazz, folk, etc.) and can utilize both multi-track and classical techniques to bring out the best in your performance.

**JIM KLEIN**  
*Engineer & Producer*  
 MISTER GUY MUSIC  
 360 8th Street, Brooklyn, NY 11215  
 (718) 768-6725

**Credits:** Producer/songwriter for Downes and Price-Atlantic Records; Stetsasonic M.C.'s-Tommy Boy; The Raunch Hands-Relativity Records; Electric High-Warner Brothers; numerous local artists; finalist American Song Festival. Engineering: Island Records, Warner Brothers, Atlantic, Hannibal, Quality, NBC, PBS, Velvet Underground, Marilyn Martin, Showtime, Jerry Garcia, etc.

**Services Offered:** Production, arranging, engineering and songwriting. Employed as chief engineer of Platinum, Island Recording, a dual 24-track facility with SSL and Amek consoles and Studer recorders. I have my own keyboard/computer/8-track studio for pre-production and songwriting. Close affiliations with record labels, publishers and studios in Northeast. Professional and experienced; call or write for my current reel and credits.

# Professional SOUND recording & duplicating SUPPLIES



**POLYLINE**

- Blank-loaded audio cassettes
- Empty reels and boxes
- Audio cassette boxes and albums

**AUDIO TAPE and CASSETTES from**

- Agfa • FUJI
- Ampex • Maxell
- 3M • TDK
- BASF

**POST-PRODUCTION and MAINTENANCE SUPPLIES**

**SHIPPED FROM STOCK WITHIN 24 HOURS**  
under normal circumstances

**ASK FOR OUR FREE CATALOG**

Call Polyline  
**312 / 298-5300**  
 8:30 am - 5 pm Central Time

**Polyline Corp.**  
 1233 Rand Road  
 Des Plaines, IL 60016

Circle #107 on Reader Service Card

## 2 Ways To Duplicate Your Master Audio Tape For Demos Or Retail Sales

### AUDIO CASSETTES:

Eva-Tone is a full-service supplier, offering duplication, labeling, packaging, additional printing and complete mailing services. Write or call for your free copy of "Cassette Talk," our newsletter complete with information, specs, layout sheets and prices.

### SOUNDSHEETS:

Use these thin, flexible vinyl recorded discs as audio pages in magazines, as direct mail inserts, as handouts at concerts or trade shows, or even as retail products. Write or call for your free copy of our Soundsheet Idea Kit, complete with information, samples, specs, layout sheets and prices.

### PRINTING & MAILING:

Ask your Eva-Tone Representative about our commercial printing and mailing services, too. We just may be the full-service promotional supplier you've been looking for!

**EVA-TONE**  
 INCORPORATED

P.O. Box 7020-MX, Clearwater, Florida 33518-7020  
 Toll-Free 1-800-EVA-TONE (In FL: 813-577-7000)

Circle #108 on Reader Service Card

**LUKE KOYLE/BRUCE FOWLER**

**Engineer & Producer**  
**MODULAR MUSIC INC.**  
 26 Soho Street, Suite 370, Toronto, Ontario M5T-127  
 (416) 593-7676

Credits: Jingles: Budweiser, American Express, Royal Trust, Discount Car & Trucks, Boots Drug Stores, Metro Ford Dealers, Chevy Dealers. Programming-record albums: The Parachute Club *Small Victories*; New Regime *Terminal City*; Images 12-inch EP w/ Michael Beinhord, Kio So Baby; Brian Plummer *Without A Mark*. Theatre: "Tuppies" *The Musical*; Gospel Hour with Brian Plummer. **Services Offered:** Modular Music offers post-film composition with a full MIDI studio featuring the Macintosh Plus with 20 Meg hard disk and various sequencing driving an Emulator II, Oberheim Expander, ESQ 1, DX7 with E System update, Jupiter 6, Roland DDR 30 digital drums, and Simmons drums. Their 16-track recorder is locked to picture via the Postex 4035 synchronizer and the Macintosh is able to sync to tape via the Postex 4050 autolocator. Therefore, most of their compositions are written to a fine cut picture (post audio). With *The Universe of Sounds* compact disc, another full digital PCM sound effects library, there are very few sounds they cannot produce!

**MICHAEL KULIGOWSKI**

**Engineer & Producer**  
**MACH 5 PRODUCTIONS**  
 29 Eileen Way, Edison, NJ 08837  
 (201) 549-4334

**Services Offered:** Very interested in working with reggae, calypso, salsa bands or any band with West Indian influences. Will also consider any band with a truly original sound. I am available throughout the Northeast area. Please call or send demo.

**DAN KUNTZ**

**Engineer & Producer**  
**HARK MUSIC PRODUCTIONS**  
 366 Adelaide Street East, Suite 542  
 Toronto, Ontario, Canada M5A-3X9  
 (416) 865-9611

Credits: Retail and corporate commercials for Honda, Texaco, Toronto Transit Commission, Dodge Trucks, Ontario Hydro, and Swiss Chalet. Radio engineering and production for Canada's Wonderland, Concert Productions International, Cineplex/Odeon, Molson's and Capital Records. **Services Offered:** Engineer/producer with jingle company, will pre- or post-score music to TV, radio, film, or industrials. We will also search stock music, voice-overs, sound effects, and book studios for American producers coming north or producing over a "phone tie." Get your entire production coordinated by us. Let us do the running around in Toronto instead of you.



**LJ PRODUCTIONS**  
 Atlanta, GA

**LJ PRODUCTIONS**

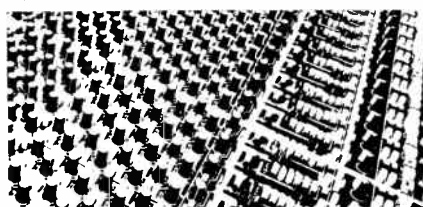
**Producer**  
**AUDIO WORKS PRODUCTION SERVICES INC.**  
 2310-D Marietta Blvd., Atlanta, GA 30318  
 (404) 355-0909

**Services Offered:** 2-inch 16-track facility, Soundcraft 760 16-track; complete MIDI production room; Trident Series 65 24 x 16 console, 1/2-inch mastering/Soundcraft T Series 20; Gauss 3588 Coaxial main monitors; outlitted for up-to-date mixdowns.

**RON S. LAGERLOF**

**Engineer**  
**DBA RECORDING SYSTEMS LTD.**  
 5301 Victor St., Dallas, TX 75214

# INDEPENDENTS



(214) 827-6502

Credits: Presently head of technical operations at Dallas Sound Lab. Studio installations include: DSL (3 studios), TM Communications (2 studios), Studio Centre, Omega Audio, Eagle Mtn., Sierra Audio. Many major label artists recorded and mixed, as well as national and regional television and radio spots.

**Services Offered:** Sony PCM-10 digital processor rental, recording and editing (ELI) format. Custom interfaces for audio/video transport remote and synchronizer control. SSL interfaces. Affiliations: NARAS, AES, SPARS Direction: Dedicated to the achievement of excellence in audio reproduction and aural perception.

**JOSEPH LALIX**

**Engineer & Producer**  
**JLX Productions Inc.**  
 Box 10835, Beverly Hills, CA 90213  
 (213) 655-3136

Credits: Producer/co-producer/engineer. Credits for top mainstream European and U.S. acts in the last seven years. **Services Offered:** Full production, with or without engineering; co-production with artist and/or producer; engineering and mixing for any project; excellent audio and video "demo" productions.

**JACK LANCASTER**

**Producer**  
 315 N. Avon St., Burbank, CA 91505  
 (818) 845-6678

Credits: Produced various artists in top London studios including: Rod Argent, Stephane Grappelli, Gary Moore, Brian Eno, Clive Bunker, Phil Collins, Ella Jordan, Manfred Mann, Cosy Powell, Zeitgeist, Kriska, The Permutations, several film and TV scores, etc. Have had hit singles in Europe and USA.

**Services Offered:** Production, arrangements, compositions, play all saxes, flutes, clarinet, Lyncons. Can supply engineer for productions. Have produced many styles of music including rock, new wave, pop, fusion, etc.

**MICHAEL R. LANE**

**Engineer & Producer**  
**LANE AUDIO & RECORDS**  
 Box 29171, Los Angeles, CA 90029  
 (213) 469-8007

**Services Offered:** Specialists in noise reduction and sonic restoration/rebalancing, using highly specialized equipment such as the Packburn Noise Suppressor, Orban parametric equalizer, etc., in a unique audio restoration system. Our work is oriented toward reestablishing the naturalness and clarity of the original performance, with special attention given to maintaining phase coherence. Our many years of experience and developmental work in the art and science of sonic restoration apply equally well to 78s, transcriptions, LPs and tapes, both mono and stereo. A reprint of our article, "Sonic Restoration of Historical Recordings," will be sent free upon request.

**PAUL D. LEHRMAN**

**Engineer & Producer**  
**LEHWARE/PEA-EL PRODUCTIONS**  
 31 Maple Avenue, Suite 1, Cambridge, MA 02139  
 (617) 497-7522

Credits: *The Celtic Macintosh*, world's first album produced entirely with a personal computer; WGBH-FM themes; George Crumb, *Apparitions* (Bridge Records), winner *High Fidelity* award; *The Design Show* (Century III Teleproductions); *New Music for Guitar Vol. 3* (Bridge Records); Ursula Major dealer demos; numerous films, industrials, multi-media soundtracks; live and studio productions; acoustic, electric and electronic.

**Services Offered:** Complete music and sound production and consultation services for all media; composition, arranging, sweetening, effects, synth and sequencer programming, contracting, recording, and mastering. Specializing in new age, folk, avant-garde, and the unusual. Also scripting and producing product demos and sales presentations, especially for the music and pro-audio industry. Fully-equipped computerized MIDI studio with film/video lock-up for ultra-fast turnaround. As a musician,

engineer and software designer, I can find the best and most efficient way of doing any project, whether it's a quickie demo or a symphonic extravaganza. As a major proponent of do-it-yourself music, I can also help you design your own facility and get it running.

**DAVID LeVAN**

**Engineer & Producer**  
**ALPHA PROF. AUDIO INC.**  
 26 Boulder Rd., Norwalk, CT 06854  
 (203) 852-9220

Credits: Radio production recording studio, sound reinforcement, maintenance.  
**Services Offered:** Audio engineering, production in above categories in NY/CT area.

**GEOFF LEVIN/CHRIS MANY**

**Producer**  
**LEVIN-MANY COMPOSING**  
 719 Main St., Burbank, CA 91506  
 (818) 841-6607

Credits: Television and radio commercials for: Toyota, Mazda, Subaru, Milk Advisory Board, Buick, etc. Industrials: Sprint, Porsche, Alpine-Luxman, Apple Computers, Princess Cruises. TV Shows: "The Sports Column," "Kids-world."

**Services Offered:** Music production house. Full composing and orchestrating from synth tracks to full orchestra. Library tracks. Audio sweetening for video. Sound design. Synth's include: Kurzweil 250, Prophet 2000, Digi-Design soft synth for Macintosh, TX8 rack, (2) DX7s, Oberheim Xpander, Mini-Mooq, Juno 60, 24-track studio.

**LOLLY LEWIS**

**Engineer & Producer**  
**TRANSPARENT RECORDINGS**  
 P.O. Box 880933, San Francisco, CA 94188  
 (415) 563-6164

Credits: Many years experience recording and editing classical music. Clients include San Francisco Symphony, S.F. Conservatory of Music, Telluride Chamber Players, Solisti New York, composers John Adams and David Cope. **Services Offered:** On-location live music recording direct to 2-track master (using Nagra 30-ips recorder and Studer mixing console), high-detail tape editing, and post production services including album production and graphics.

**ERIC LILJESTRAND**

**Engineer**  
 577 Henry St., Brooklyn, NY 11231  
 (718) 624-7712

Credits: Peter Gordon: *Innocent* (CBS); David Van Tieghem: *These Things Happen* (Warner Bros.), "Safety in Numbers" (private music-all digital); "In-A-GADDA-DA-VIDA" (single-Twin Tone); film work: Laurie Anderson's music for *Something Wild*, Jonathan Demme, dir., second engineer on *Key Exchange* and *Working Girls*, numerous dance and theatre scores.

**Services Offered:** Studio engineering; programming on a wide variety of synthesizers and drum machines including the Fairlight CMI; location house and monitor mixing for any kind of ensemble. I believe in a musical approach to engineering. I read music and can mix or edit from a score. Also wiring and maintenance. Call now for your free set of Ginsu knives.

**BORGE LINDQUIST**

**Engineer & Producer**  
**LiPHONE RECORDS**  
 Box 51, S-451 15 Uddevalla, Sweden  
 INT +46 52262081

Credits: Nearly 200 records produced during the past ten years with artists from the Scandinavian countries Sweden, Denmark, Finland and Norway. We produce all kinds of music, mostly pop, rock, C&W, jazz and folk music. **Services Offered:** Record production (LiPHONE records), 24-track analog and 2-track digital studio (LiREC Studios) and publishing company (LiTUNE Music).

**FRANK LIZARRAGA/ADAM D. LIZARRAGA**

**Engineer & Producer**  
**ISRAEL PRODUCTIONS**  
 3121 29th Avenue, Sacramento, CA 95820  
 (916) 455-5278

Credits: Israel has produced one LP, six 45s and three EP albums in Spanish and English. Israel is currently producing two 45s in Spanish and one EP in English to be released in early 1987.

**Services Offered:** Israel is the first studio and production company in the Sacramento area to specialize in Spanish music and has a bilingual staff. Israel also houses a publishing company, Pancho's Music Co., which is affiliated with BMI.



**STEVE LOEB**

**Producer**  
**FIRESIGN LTD.**  
 c/o Greene Street Recording, Inc.  
 112 Greene St., New York, NY 10012  
 (212) 226-4278  
 Credits: Riot, Lovebug Starski, Carol Lynn Townes, Mr Rhymes.

**FOLKLOEHR**

**SCOTT JACOB LOEHR**  
 FolkLoehr Productions P.O. Box 166045  
 Irving, Texas 75016 214/255-7546

**FOLKLOEHR PRODUCTIONS**  
 Irving, Texas

**SCOTT JACOB LOEHR**

**Engineer & Producer**  
**FOLKLOEHR PRODUCTIONS**  
 P.O. Box 166045, Irving, TX 75016  
 (214) 255-7546

Credits: Industrial film scores for LTV Aerospace & Defense Company and General Telephone Company; radio jingles and commercials for TM Communications, Inc. (KPWR-FM, Los Angeles; KFRC-AM, San Francisco; KAMZ-AM, El Paso, WZFX-FM, Whiteville, NC); North Dallas Chamber of Commerce; Studio Southwest; UK Sound, Inc.; Dr. Demento; etc.

**Services Offered:** Composer, arranger, performer, producer and engineer for all types of audio projects, including album production, industrial and theatrical film scores, television soundtracks, radio jingles and commercials. Classically trained pianist, vocalist and percussionist. Synthesizer and drum machine programmer. Musical styles include symphonies and concertos, ballads and love songs, Top 40 and dance rock, new age and techno-pop, and comedy/parody. From Yamaha DX7s to Synclavier, from 4-track analog to 32-track digital, from cassettes to compact discs, FolkLoehr Productions combines the highest quality with competitive prices. Send for a free demo tape.

**LONNIE LONDIN**

**Producer**  
**RAMA DAMA RECORDS**  
 219 State Rd., Eliot, ME 03903  
 (207) 439-5541

Credits: Twenty-five years experience as recording artist/producer. Labels: Glendale Records, Home of the Blues, Keno Records, Motown Records. Three years as session player (bass) and background vocalist in Nashville. Currently producing for own company, Rama Dama Records. Masters, demos, custom recording, jingles, radio and television advertising production, narration for industrial and promotional films, studio rental, publishing.

**NIGEL LUBY**

**Producer**  
**N.L. PRODUCTIONS**  
 49A Kensington Mansions, Trebovir Road  
 London, England SW5 9TE  
 01 373-7897

Credits: LPs: Yes, Yesshows, Yes, *Tormato*, Critical Mass, *It's What's Inside That Counts*, Mike Oldfield/Simon Phillips, *Crises*, *The Alarm*, *Strength* Singles: Chris Squire/Alan White, "Run With The Fox," Mike Oldfield, "Moonlight Shadow," The Alarm, "Spirit of '76." Soundtrack: Mike Oldfield, *The Killing Fields*. Video Sound: Mike Oldfield, "Crises Live." Broadcast Sound: The Alarm, BBC, ITV, UCLA.

**Services Offered:** Experienced studio albums, broadcast, live, and digital applications. Also knowledge of digital audio and lock to 24 fps, 25 fps film free running of camera. Yes live engineer from 1976-1984. Studios: London: Townhouse, Roundhouse, Marcus, Battery, The Manor. Sarm East. BBC Maida Vale, Capital Radio, BBC Manchester, TV South, Tyne Tees, EZZE Studios, The Workhouse, Pavilion, Sarm East. US: Record Plant, LA; Unique, NY; Kajem, PH; Bayshore Recorders, Hollywood; Hollywood Sound, LA; Yamaha, Burbank.

**WILLIAM "BILL" LUCAS**

**Producer**  
**DELEV MUSIC/SIGN OF THE RAM MUSIC**  
 7231 Mansfield Ave., Philadelphia, PA 19138  
 (215) 276-8861

Credits: Executive co-producer of rock group Valhalla's debut album containing: "Weakened Heart," "Fallin,'" "Power," "Unsure Of The Night," "Line of Fire," and "Far Too Long." Project recorded Aug./Sept. '86 at Sigma Sound Studio, Philadelphia, Pennsylvania. Past projects include Dave James & Trilogy's single, "Shadow People" on Surprize Records.

**Services Offered:** Consultation on recording projects, producing, publishing and co-publishing. Affiliated with ASCAP (Sign of The Ram Music), and BMI (Delev Music Company). Also Vice President of Surprize Records, Inc., 421 West Ellet Street, Philadelphia, PA 19119, or for faster response, send correspondence to: P.O. Box 42707, Philadelphia, PA 19104-2707.

**DAVID LUKE**

**Engineer & Producer**  
 3800 Patterson Ave., Oakland, CA 94619  
 (415) 531-3228 or (415) 486-2038

Credits: Rosie Gaines, Timex Social Club, Bruce Hornsby, Jeffrey Osborne, Maze, David Bromberg, New Riders of the Purple Sage, Starship, Eddie and the Tide, Y&T, and Night Ranger.

**Services Offered:** Recording, mixing and production using the latest digital formats. I'm interested in doing co-productions with artist/producers.

**MICHAEL B. LYNCH**

**Producer**  
**C&M PRODUCTIONS**  
 601 NW 80th, Seattle, WA 98117  
 (206) 789-6755

Credits: Album productions for OCP Publications. Rock videos for Nordstrom's stores. Boeing video SFX. Produced "Yes We Can" for "Help America" project. Promotional audio for local towns and communities.

**Services Offered:** Album and single production. Video and film soundtracks. Arranging for strings and horns. Synthesis and SFX for high tech productions. Committed to quality, service and affordability. Capable of providing services at quick notice.

**NIKOS LYRAS**

**Engineer & Producer**  
**COTTON ROW RECORDING**  
 1503 Madison Avenue, Memphis, TN 38104  
 (901) 276-8518

Credits: Has worked with Rufus and Carla Thomas, Tony Joe White, BarKays, David Porter, Xavion, Farrell and Farrell, In Pursuit, The Skwares, Canadian artists Diane Tell and Jim Corcoran. Has produced several Pyramid Award winning jingles; nominated "Engineer of the Year" in 1983 in Canada.

**Services Offered:** Full in-house record and jingle production (producing, engineering, arranging, programming, guitar work), in-house rhythm section, publishing, demo/production room.

**DON MACK**

**Engineer & Producer**  
 6951 Ranchito Ave., Van Nuys, CA 91405  
 (818) 988-3271

Credits: Y&T, Brian Eno, David Byrne, Huey Lewis and the News, Windham Hill Records, Jane Fonda, Dino Fekaris, Odin, Hellion, Jaded Lady, Letchen Grey, Foxx, Quest, Allegiance, Dezire, Kronos Quartet. Films: *Apocalypse Now*, *Plague Dogs*, Walt Disney Productions.

**Services Offered:** Production and engineering with an ear towards the leading edge of tomorrow's music. I work with the artist from pre-production rehearsals to the final mastered product, analog or digital. Music should be fun and a fulfilling, rewarding experience. My goal is to stimulate the artists to push themselves to ever greater creative heights, and to realize their dreams by making them sonically and visually as exciting as possible. I'm interested in all new music and am always looking to stretch the boundaries of today's sound. Artists are encouraged to submit material. I will listen to everything. Please call or write.

**RICHARD MACK**

**Producer**  
**OFF THE RECORD**  
 139 Willard Avenue, Bloomfield, NJ 07003  
 (201) 429-9640

Credits: Have worked with numerous artists including Odette, Olaturji, and Kamuka.

**Services Offered:** In-house arranging specializing in African percussion, Ska, and Latin sounds. Also possess expertise in adapting music to visual media, including business video scoring and audio sweetening for video.

**Burlington**  
**Audio/Video Tapes Inc.**  
 106 Mott St. Oceanside, N.Y. 11572

**Toll Free 1-800-331-3191**  
**In N.Y. (516) 678-4414**

**3M**

**Scotch® Audio/Video Tape**



**Call for Free Catalog**

In Stock and Priced Right.  
 Reels, Boxes, Custom Cassettes,  
 Leaders and Splicing Tapes.

**HARD TO GET ACCESSORY ITEMS**

**106 Mott Street, Oceanside, New York 11572**

Circle #109 on Reader Service Card

**CLEAN  
 PATCH BAYS  
 NO DOWN  
 TIME**



**VERTIGO BURNISHERS AND INJECTORS  
 RESTORE ORIGINAL PERFORMANCE  
 TO YOUR PATCH BAYS**

**VERTIGO 1/4" TRS AND TT BURNISHERS:**  
 Each used to eliminate noise caused by contamination of main contacts in normal patching situations

**VERTIGO 1/4" TRS AND TT INJECTORS:**  
 Each allows injection of cleaning solvent in breaking contacts (normals), to eliminate intermittency that occurs when patch cord has been removed

**STILL ONLY \$29.95 Ea. (Cont. USA).**  
 Please write for additional information and order form  
 Used by Professionals Worldwide. Patent Pending

**VERTIGO RECORDING SERVICES**

12115 Magnolia Blvd. #116  
 North Hollywood, CA 91607  
 Telephone: 818/769-5232  
 Telex: 5106006748 VERTIGO RECRD

Circle #110 on Reader Service Card

**JOSEPH MAGEE****Engineer & Producer**  
**JOSEPH MAGEE AUDIO ENGINEERING**4900 Overland Avenue, Suite 102  
Culver City, CA 90230  
(213) 558-4208

Credits: Audio produced/engineered following ensembles/artists: Orchestras: L.A. Philharmonic, Amsterdam Concertgebouw, L.A. Chamber, "Y" Chamber, Fort Worth; Opera Co.: Royal Opera of Covent Garden, L.A. Music Center Opera; Festivals: New Music America, Olympic Arts, Seattle Chamber; Artists: Andre Previn, Pierre Boulez, Michael Tilson Thomas, Lincoln Mayorga, Marni Nixon. Services Offered: World class audio recording/production for broadcast and record. Specializing in classical, new music and jazz recording. Acoustical or acoustical/electronic ensembles. Expertise in both minimal mic'ing techniques or close mic'ing for any size ensemble. Location or studio recording. Consulting services also available.

**DOMINICK MAITA****Engineer**29 E. 51st St., Bayonne, NJ 07002  
(201) 437-8443

Credits: Bryan Ferry, Bronski Beat, 'till Tuesday, Nona Hendryx, Herbie Hancock, David Byrne, Lori Chacko, The Sharks, Laurie Anderson.

**JOHN J. MANFREDI****Engineer & Producer****MEGA SOUND PRODUCTIONS**P.O. Box 3101, Elmira, NY 14905  
(607) 732-0913

Credits: Written over 300 compositions (all musical styles); 40 commercial jingles being aired (on radio and TV) in upstate NY and Phil. metro area; for political campaigns, retail businesses, car dealerships, restaurants and national charitable organizations. Produced and engineered: rock group projects, jazz, R&amp;B, gospel and bluegrass, contemporary C&amp;W groups and 15th century opera and instrumental music. I am comfortable working with musical projects large and small, and musicians who play loud or soft. Music instructor at local private college.

Services Offered: Owner, engineer, producer, musician, composer, Mega Sound Productions/1-inch 16-track facility. Studio/engineering/production packages available/cassette duplication. Professional musician for over 20 years on lead guitar/keyboards/synthesizers and bass. Fully equipped facility w/guitars, amps and over 20 of the latest keyboards and drum computers.

**JOE MANZELLA****Engineer & Producer****IN SYNC PRODUCTIONS**211 W. 79th St., New York, NY 10024  
(212) 496-2636 or (718) 998-4648

Credits: Engineering and production: Airforce 1-Streetwise Records, Alan Simon Trio-Cadence Records, Paquito D'Rivera, William Robinson-Coast to Coast Records, Thor, Sula-Chauncy Records, Ednah Holt, The Shades, Israel-Bacon Records, Palma-D'Exile Records, Jimmy Faith. Jingles, radio and TV commercials: Good o' Cola, Girl Scouts of America, Quality Dental Care, La Gioconda Clothing. Services Offered: In Sync Productions is a multi-dimensional production company specializing in all facets of audio and visual presentations. We create original music for films, plays, and commercial jingles as well as individual recordings and production for groups and solo artists.

We offer a full production staff for the recording of master tapes and demos as well as the services of session musicians, arrangers, and copyists. We also provide complete video productions for industrials, TV commercials, rock videos.

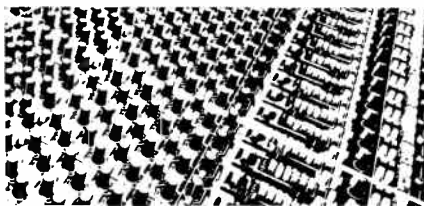
**COOKIE MARENCO****Engineer & Producer****MARENCO SOUND DESIGN**P.O. Box 874, Belmont, CA 94002  
(415) 595-8475

Credits: Pop, R&amp;B dance, instrumental albums. Sound design for advertising, commercial and theatrical projects. Clients include: Nissan, AT&amp;T, Windham Hill, Magic Theatre, Duck's Breath Mystery Theatre, Mark Isham, Flying Karamazov Bros., Neil Young, Rojas.

Services Offered: Complete 24-track facility (please see listing for OTR Studios in the N. California issue). Audio for video synchronization and complete MIDI computer/synthesizer room. Composing/arranging/sound design for film and video. All the latest outboard gear for highest quality album production.

**GEORGE (JORGE) MARTIN****Producer****STREET LEVEL PRODUCTIONS**5741 Carlton Way #305, Hollywood, CA 90028  
(213) 466-8916

# INDEPENDENTS



Credits: Sheila E., Richie Morales (Spyro Gyra), Jim Fielder (Blood, Sweat &amp; Tears), Fred Allen (Buddy Miles), Clayton Richardson (George Benson), Pheerdan Ak Laff (Gremavision), Henry Davis (LTD), Blue Standard Music, Aphex Systems, BASF Corps., American Dance Guild, RPC Records, George S. Clinton (Cannon Films), Raymond T. Santos (Brewster's Million).

Services Offered: Multi-percussion-rhythmist, songwriter and producer combines aural sophistication and primeval ingenuity to translate emotional content. Add realism and dimensionality with an array of indigenous percussives. Coordination of the creative process conducive to achieving the optimum product. Enhance your project to a level never before available. If superior sonic quality, flexibility, reliability, versatility and expanded capabilities are important to you, Street Level Productions is the company you've been looking for. Street Level Productions' unique "back-to-basics" approach assures you efficient performance at all stages of musical creation. Street Level Productions—"Hear the heartbeat of the streets."

**PETER MARTINSEN****Engineer & Producer****PETER MARTINSEN PRODUCTIONS**11160 Anderson Lakes Parkway  
Eden Prairie, MN 55344

(612) 944-2491

Credits: Jesse Johnson's Revue, Centerfold, Janet Jackson, Evelyn King, The Girls, Andre Gymbone.

**KELLEY MASCHER****Engineer****RAMONA STUDIO**P.O. 1087, 647 Locust, Lawrence, KS 66044  
(913) 842-9955

Credits: Eight years' experience in film and video. Over 150 commercial, industrial and educational film and video credits with many national clients.

Services Offered: Location recording for film and video, studio recording, and live sound reinforcement.

**HARRY MASLIN****Engineer & Producer**

1020 N. Sycamore Ave., Los Angeles, CA 90038

(213) 850-1030

Credits: Air Supply, David Bowie, Melissa Manchester, Ada Allister, Eric Carmen.

**MATCHEZ/NICODEMUS****Engineer & Producer****R.A.T. Brothers/Zedkiah Records**

14925 Novara, Detroit, MI 48205

(313) 527-6693

Credits: Nicodemus and Matchez, NMG, Adrian Rock and Roll, Tablet 2, Blue Oinkers, Kuda, Dean Rivers and the Drive, Aurthur Runart Zip Gun Band, Spellbound Eclipse. Watch for the new Nicodemus and Matchez album, titled *Better Art Music*.

Services Offered: Recording, engineering, producing. Both of us are multi-instrumentalists, art design for albums, pressing, etc. We are artists who help bring out the artist in whoever we work with—after all, the "rat" in R.A.T. Brothers stands for "Recording Artist Techniques."

**STEVEN MAYNARD****Engineer & Producer****DOUBLE DOMINO PRODUCTIONS**

P.O. Box 142, Crows Nest

Sydney, NSW Australia 2065

02-6998472/02-9224504

Credits: Editor of Australian sound and broadcast magazine. Engineered and produced mini album *Sons & Lovers*. Singles by Joint Razors, The Deadly Flamers. Mini: theatrical sound series. Live sound engineer various local bands in UK and Australia. Produced live demo recordings and video singles in London and Australia.

Services Offered: Overseas contact and liaison with international artists wanting to visit/tour and record in Australia. I will negotiate and coordinate suitable production

requirements sought by overseas artists. Live performance, audio recording, filming, tour management and good vibes.

**SUSAN McARTHUR and PETER B. LEWIS****Engineer & Producer****AUDISEE**

124 NW 56th St., Seattle, WA 98107

(206) 784-4624 or (206) 775-2416

Credits: Well over 200 awards during the past eight years, including gold Clis, Addy's, ANDY's, Cannes Film Festival, One Show and IBA "World's Best Radio Commercial." Clients: Nike, Boeing, TRW, IBM, NBC, CBS, HBO, Cole &amp; Weber, Chiat-Day, Apple Computers, and others. Hours of programming and thousands of spots, regional and national. Services Offered: Complete sound design from story board to finished productions. For radio, TV, corporate communications, etc. Casting, music scoring (stock and original), effects development (deepest sound effects library in the Northwest), production recording and editing. We work with the latest equipment including Synclavier, AudioFILE, Studer, Sony and NEVE. With extensive PRE-production, we can take your project to completion more efficiently with higher production values and a lower hassle factor. We bring more experience to every job than all our Seattle competitors combined. We interlace with all forms of video and film. We deliver.

**STEVEN McCLINTOCK****Producer****HEADWAY PRODUCTIONS**

7560 Garden Grove Blvd., Westminster, CA 92683

(714) 891-0868

Credits: Currently producing Dexter, OH-10 (formerly Perfect Stranger) and Brian Wixia: co-produced Exude and Private I: produced and arranged for many commercial jingles; looking for recording pop acts with label deal.

Services Offered: Own 24-track studio with Trident console and Otari tape machine plus 16-track room with Tascam console; publishing company; photography studio, vocal instruction and two small independent labels; very active—good talented staff.

**RANDY B. MCCOY****Engineer & Producer****LONGHORN SOUND PRODUCTIONS**

P.O. Box 630, Clyde, TX 79510

(915) 893-2616

Credits: Engineered and produced all varieties of music and jingles for over seven years: classical, contemporary Christian, rock, country, etc. Eager to apply experience gained to your project.

Services Offered: Production emphasis on contemporary Christian projects. BMI affiliated writer. Will travel to work on outside-of-area projects. Sincere, hard-working and straightforward in methods and builds client relationships on a one-to-one basis. Call for production/engineering rates, please.

**STEVEN McVICKER****Engineer & Producer****MIC-VIC PRODUCTIONS**

77 N. Third St., 3rd Floor, Meriden, CT 06450

(203) 238-7263

Credits: Robert Crossland, Scott Chaloupka, Rob Darrel and Transit, Anna King and Dirty Works, The Majik, Ed Markiewicz, Steven McVicker, Mr. Mehta, Jim Murtaugh, Press, Winters Run, Ron Rockett and The Tuners.

Services Offered: Live and studio engineer/producer. A 4-track demo studio with MIDI and analog keyboards, MIDI drums etc. is available at reasonable rates, to help artists work out their ideas before spending their entire budget "getting the bugs out" in a larger studio. Specializing in production for new artists and song writers. Demo and promotional packages, live show production and general help in sorting out the confusing music industry. BMI publisher.

**DAVID MERRILL****Engineer & Producer****CASTLE CORPS. INC.**

47 Renwick St., New York, NY 10013

(212) 219-8693

Credits: Wrote, produced, performed and engineered music for Atlantic Records and other independent labels. Arranged, wrote, and produced music for documentaries, industrials and theater companies in New York and Florida. Former engineer at Master Sound Astoria.

Services Offered: Production, engineering, writing and arranging. Have well facilitated 8-track studio but will work at studio of your choice.

**MICHAEL MIKULKA****Engineer & Producer****GOPHER BAROQUE PRODUCTIONS**



7560 Garden Grove Blvd., Westminster, CA 92683  
(714) 893-3457

Credits: Berlin, Exude, Juice Newton, Dexter, Carl Verheyen/Chad Wackerman Band, OH-10, Otha Young, Dorothy Hamill's "Fantasy on Ice," Charmaine, Jeff Pearson, George Merrill/Shannon Rubicon.

**Services Offered:** Office at Headway Productions (inc. two studios) as well as independent work. Connections with various studios (all price ranges). Access to outside financing/investors (if warranted). Looking for self-contained bands w/ writers (but willing to do outside material). Pop, "New Music," Rock, Country. Writers who can write MELODIES!

#### TONA MILOSZ, aka TECHNICAL TONY

**Producer**

**PEAKDESIGN**

6114 La Salle Ave., Suite 314, Oakland, CA 94611  
(415) 531-5331, Telex: USA 755056 PEAKDESIGN CA  
UD WU Easylink: 62483200

**Services Offered:** MIDI mastering, production, technical and composition assistance in the creation of finished product from sequencer data. Also general production services for demos, CDs, albums and soundtracks. See the PEAKDESIGN 24-track+ Northwest and annual studio listing.

#### JOE MIRAGLILO

**Engineer & Producer**

**FISHBOWL PRODUCTIONS**

89 Clinton St., Suite #3, Everett, MA 02149  
(617) 389-5816

Credits: Finished and current projects include jingles for American Vision Center and WMRQ in Boston.

**Services Offered:** Preproduction for any project on 512/10mb Macintosh with most major software for sequencing, voice librarian and sampling. Keyboards available with many sounds. 4-track or 2-track production. Rock modules available for guitarists.

#### ROBERT L. MISSBACH

**Engineer & Producer**

**REAL LIVE MUSIC**

P.O. Box 864, Mill Valley, CA 94942  
(415) 383-8919

Credits: Huey Lewis & the News, Journey, Santana, Van Morrison, Jimmy Barnes, Con Funk Shun, Tom Brown; Windham Hill Records, Megatone Records, Rising Sun Records.

**Services Offered:** Independent audio production and engineering; live mixes to multi-track recording; audio for film/video; demos, records, commercials, soundtracks.

#### PETER MOORE

**Engineer & Producer**

**MDI PRODUCTIONS**

116 Beaconsfield, Toronto, Ontario, Canada  
(416) 588-5054

Credits: Cowboy Junkies, Suffer Machine, Sheep Look Up, Garbage.

**Services Offered:** Live-to-2-track digital original recordings employing Calrec Soundfield MK IV; supervision and engineering of all phases of LP production; remote recordings of classical, jazz, plus alternative music a specialty.

#### ERIC MORGESON

**Engineer & Producer**

**EMP PRODUCTIONS**

5619 N. Beech Daly, Dearborn Hts., MI 48127  
(313) 561-7489

Credits: George Clinton, Ready For The World, Michael Henderson, Adrenalin, Mano, Earl Klugh.

**Services Offered:** Complete production and engineering services.

#### STEVEN MORSE

**Engineer & Producer**

**MUSIC GALLERY PRODUCTIONS**

23 Carver Street, Brandon, VT 05733  
(802) 247-6634

Credits: Morse Code, Brandonwise, Love, Inc., Jessica Myers, Vanessa Mills, various demos for local artists.

**Services Offered:** 8-track recording studio, rehearsal facilities, Tascam 388, Yamaha SPX90, Yamaha keyboards (DX21, 100, 27, 7, 9, PF 70), duplication facilities. Mics: (2) Shure 55s; (2) Sennheiser 421s; (2) E-V PL80, (2) PL20; Shure PE80. Writing and arranging services offered at competitive rates. Original material available.



**TAAVI MOTE**  
Sherman Oaks, CA

#### TAAVI MOTE

**Engineer & Producer**

**RUF-MIX PRODUCTIONS**

4931 Coldwater Canyon #9, Sherman Oaks, CA 91423  
(818) 760-0269

Credits: Production: Jeff Lorber, Keith L'Neire. Engineering: Patti LaBelle album, and *Beverly Hills Cop* soundtrack; Ready for the World; New Edition; Klymxxx; The Jets; *Miami Vice* soundtrack; *Running Scared* soundtrack; Gladys Knight; Midnight Star; The Whispers; Shalimar; Giorgio; L.A. Dream Team; Andre Cymone; Jimmy Jam III & Terry Lewis SOS Band and Cherelle Rock & Jazz.

**Services Offered:** Giving you the best in pre- and post production in R&B, recording basic tracks; overdubs; mixing and remixing (12-inch versions, LP versions and single version.). Using only the best recording studios in Los Angeles, you can be assured of the most dynamic sound in analog or digital recording and mixing. Excellent variety of outboard equipment is available. Please call for further information.

#### TOBY MOUNTAIN

**Engineer & Producer**

**NORTHEASTERN DIGITAL RECORDING, INC.**

12 Sadler Ave., Shrewsbury, MA 01545  
(617) 753-1192

Credits: Frank Zappa, Arlo Guthrie, Rubber Rodeo, soundtrack to *Diva* (CD), Polygram, RCA, Rykodisc, A&M, Rounder, Second Hearing, Titanic, Musical Heritage Society. Extensive music background (MA, PhD) and training in audio and digital signal processing (Stanford CCRMA, MIT).

**Services Offered:** Digital recording in studio or remote. Digital editing, mastering for LP, CD, and cassette with Sony PCM-1310/30 system. Complete compact disc services.

#### WILLIAM P. MUELLER

**Engineer & Producer**

13816 Sunny Brook Rd., Phoenix, MD 21131

(301) 628-7260 or (301) 666-0196

Credits: 1985 Grammy nomination—Best Engineered Album. Michael Hedges, *Aerial Boundaries*. 1986 Grammy nominated album, Douglas Miller, *Unspeakable Joy*. Six Top Ten gospel albums. Remote recordings: Journey, Mr. Mister, Barry Manilow, Ella Fitzgerald, Oscar Peterson, National Symphony, Charlie Pride, Chuck Brown, DIR Broadcasting. Audio for video: Michael Hedges, Will Ackerman, Shadowfax, Exile, MPT.

**Services Offered:** 48-track digital, 48-track analog studio: SSL 4000/Sony or Studer. Remote: Trident/Sony or Otari, Sony 3202 DASH, BTX Shadow, AMS 1580s, RMX 16, EMT Plate, Lexicon 224 XL, LEX 202, (3) SPX 90, BBE 202, SONTEC EQ, assorted gates, DDLs, compressors, etc.

#### RICHARD A. MUSK

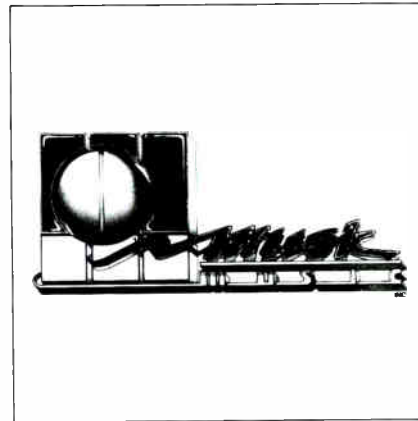
**Producer**

**MUSK MUSIC INC.**

455 Hope St., Stamford, CT 06906  
(203) 323-7022

Credits: HBO, Cinemax, IBM, Armstrong Tire, Hueblin, Capitol Records, Universal Studios, Wyeth Laboratories.

**Services Offered:** Original composition and arrangement for film, video, industrial, documentary, jingles, logos, songs. Fairlight CMI rental and programming.



**MUSK MUSIC INC.**  
Stamford, CT

#### ROBERT NATHAN/JOANNE GEORGIO-NATHAN

**Producer**

**UNIQUE RECORDING**

701 Seventh Avenue, New York, NY 10036  
(212) 921-1711

Credits: Founder and co-owner of Unique Recording and Mayor of Mid-City. *Keyboard* magazine columnist.

**Services Offered:** Full production, programming, sequencing, recording.



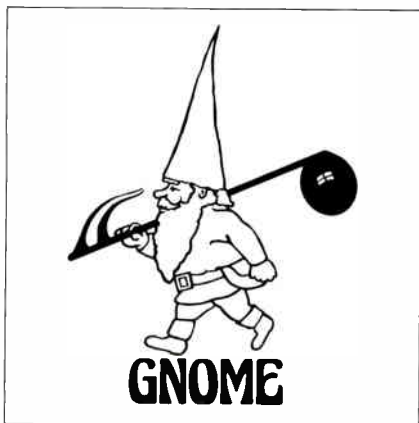
**NATIONAL VIDEO CENTER/  
RECORDING STUDIOS, INC.**  
New York, NY

#### NATIONAL VIDEO CENTER/ RECORDING STUDIOS, INC.

460 W. 42nd Street, New York, NY 10036  
(212) 279-2000

Credits: Broadway's "Sweet Charity," The Count Basie Orchestra, the Philip Morris "Superband," Christopher Cross "That Girl," Kurtis Blow's "America," Billy Chinook's "Somewhere In The Night," Outfield's "Your Love," Also: The Pretenders, Mick Jagger, Cyndi Lauper, Adam Ant, Billy Idol, Annie Lennox, Frank Zappa, John Cougar Mellencamp, commercials, industrials and network programming.

**Services Offered:** National's new music studio, "The Edison," (50 x 40) with SSL 6000 56-channel console, 48-track recording, video/audio interlock, all outboard equipment, microphones, etc. The Edison's enormous recording space and Tom Hidley designed control room make this studio ideal for acoustic recording of major acts, orchestras, commercial jingles, etc. Also: two interlock video sweetening rooms, live voice studios, time compression, reel-to-reel and cassette duplication, transfers, music and FX libraries, scoring and soundtrack design. Video: three shooting stages (60 x 80, 40 x 50 and 20 x 30), seven on-line computer editing suites, two off-line/interformat suites, negative color correction, remote production, video-disc premastering, computer graphics, animation stands, duplication—all formats.



**BRUCE C. NAZARIAN**  
New York, NY

**BRUCE C. NAZARIAN**  
*Engineer & Producer*  
**GNOME PRODUCTIONS**  
251 W. 30th St., New York, NY 10008  
(in Planet Studios Building)  
(212) 594-7554

**Credits:** LP projects for MCA, ATCO, Island/4th & Broadway Records. Six *Billboard* Top 20 dance records since 1984 as producer/engineer. Experienced studio musician (ten+ years) as guitarist, bassist, keyboardist and drum programmer. Five years' experience with MIDI and sequence programming—experienced Synclavier programmer.

**Services Offered:** Unique, musical approach to contemporary recording. As an experienced musician, programmer, engineer and producer, my overview of the recording process is both technically competent and musically sensitive. I specialize in relaxed recording environments designed to promote the artist's best performance. In addition—highly experienced with MIDI/SMPTE sequenced productions and Synclavier programming. My studio facility includes an in-house Synclavier with lots of memory, voices and storage!

**JOHN NEFF**  
*Engineer & Producer*  
**MAUI RECORDERS**  
380 Dairy Road, Kahului, Maui, Hawaii 96732  
(808) 871-1141

**Credits:** Twenty-one years' studio experience on both sides of the console. Former session musician Detroit, Phoenix, Los Angeles, Hawaii. Producer on many 45s, LPs, jingles and commercials. Own 16-track MIDI-based studio on Maui. Have custom local label.

**Services Offered:** Can bring in your project, be it record, demo, jingle or audio-for-video, on time and in budget, in Hawaii or on the mainland. Complete computer-based MIDI studio, with on-island recording facilities from 8-track to PCM-3324 digital/SSL. Can arrange for complete Maui recording package, from air travel to accommodations, transportation, rehearsal space, pre-production, video documentation, block recording time, instrument rentals, public appearances, recreation.

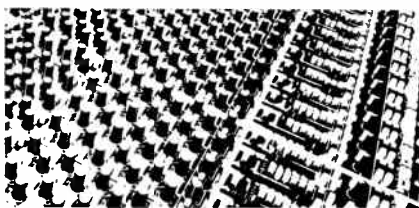
**LAURENCE "LARZ" NEFZGER**  
*Engineer & Producer*  
**TRIAD STUDIOS**  
4572 150th Avenue NE, Redmond, WA 98052  
(206) 881-9322

**Credits:** Over 12 years of engineering and production experience including many award winning albums and productions. Many top national and regional Northwest recording artists including: Deniece Williams, Danny O'Keefe, Cedar Walton Trio, Danny Deardorff, Randy Meisner, Steve Miller, Uncle Bonsai, Eric Tingstad, Spencer Brewer and Michael Tomlinson.

**Services Offered:** Believe that record or commercial productions demand 100% collaborative effort. Total communication in an atmosphere of support and technical excellence equals a superior end product. Have vast experience in all facets of recording, album production, commercials or audio for video post production.

**GREGORY L. NEU**  
*Producer*  
**CHELONIAN MUSIC**  
51 West 81st Street, New York, NY 10024  
(212) 362-3386  
**Services Offered:** Production of demo recordings.

## INDEPENDENTS



**JOHN NEVIN**  
*Engineer & Producer*  
**NEVIN CONSULTING AND RECORDING**  
P.O. Box 46016, Chicago, IL 60646  
(312) 763-8738

**Credits:** Graham Nash, Billy Coghlan, Wild Blue, John Hunter, Cryin' Shames (mixed to broadcast); Vince Lawrence, Jesse Saunders, Liz Torres, Kenny Jason, Masters C&J, Free Force, Five Point Star, Stan Nevin, Leslie Simons, Bob Allison, Craig Conley.

**Services Offered:** Studio recording and production, video demo production, location recording with Metro Mobile Recording and GHL audio engineering.

**GASTON NICHOLS**  
*Engineer*  
**PROFESSIONAL AUDIO SERVICES**  
5337 5th Ter. South, Birmingham, AL 35212  
(205) 595-3116

**Credits:** Over 100 live albums and numerous live television shows.

**Services Offered:** Live recordings and television audio, equipment rentals and service.

**BOB NICHOLSON**  
*Engineer & Producer*  
**BOB NICHOLSON PRODUCTIONS**  
20 Hyde Road, Stockholm, NJ 07460  
(201) 697-4580

**Services Offered:** Engineer/producer with good ears and attitude available for your next record.

**MICHAEL NISS**  
*Engineer & Producer*  
**NISS PRODUCTIONS LTD.**  
1803 South 55th Court, Chicago, IL 60650  
(312) 780-1754

**Credits:** Engineered for small studios in and around Chicago and Dallas, Texas. Have worked with Nigel Gray (Police), Larry O'Conner and Chuck Archer (Laughing Sam's Dice), No Excuse, Ruf'N'Ready, Willie Beeter, Chuck O'Malley, Dallas Dostal, and Bob Slaheadka.

**Services Offered:** Multi-track recording/mixing, producer services. Staff rhythm section, video soundtracks, independent film scores, jingles, specializing in achieving the world's best hot guitar sounds for vinyl and live concert sound. Interested in hearing new music—send tapes for review. Background includes professional musician working with Styx in Europe and Japan for Paradise Theater tour, being a hired independent guitarist for several Chicago area bands doing work with major label interest.

**DAVE NODIFF**  
*Engineer & Producer*  
**DAVE NODIFF RECORDING**  
706 Waverly St., Framingham, MA 01701  
(617) 872-6843

**RICK NOWELS**  
*Producer*  
**RICK NOWELS PRODUCTIONS**  
7469 Melrose, Ste. 33, Los Angeles, CA 90046  
(213) 655-7990

**Credits:** Songwriter/producer of the Stevie Nicks LP *Rock a Little*.

**JEANNINE O'NEAL**  
*Engineer & Producer*  
**TIKI RECORDING STUDIOS**  
195 S. 26th St., San Jose, CA 95116  
(408) 286-9840

**Credits:** Suzanne Lorente "Walk In The Spirit" (contemporary Christian); Fabrizio Oria (pop/international); Sharon Faye (country); Ed Brown (country); Horsefeathers (comedy Christmas album, combination pop/country/jazz); Johnny Guitar (Spanish); Jimmie Garewal, Jr. (soul/pop); Carlos (Spanish).

**Services Offered:** Complete arrangements for pop, coun-

try, gospel, international and soul; from rhythm section to full orchestra. Package prices available including studio time, musicians, tape and engineer. Established record company Rowena Records. Let us work out a budget suitable for your needs.

**LARRY OPPENHEIMER**  
*Engineer & Producer*  
**TOYS IN THE ATTIC**  
P.O. Box 590145, San Francisco, CA 94159  
(415) 346-7666

**Services Offered:** Live and studio engineering, consultation in audio and music technologies. Effects and drum machine programming.

**BUCK ORMSBY**  
*Producer*  
**ETIQUETTE PRODUCTIONS**  
2442 NW Market St., #273, Seattle, WA 98107  
(206) 789-3658, 783-3552  
**Credits:** Produced: Sonics, Wailers, Jr. Cadillac, Jerry Roslie, Kent Morrill, Neil Rush Band, The Heats, The Cowboys.  
**Services Offered:** Producer, consulting, various music-related services.

**JERRY J. PACHER**  
*Engineer & Producer*  
**PAC-MAN PRODUCTIONS**  
P.O. Box 3562, Lennox, CA 90304  
(213) 672-5484

**Credits:** Engineered and produced numerous LPs, 45s, EPs, commercials and jingles in both Europe and the United States. Specializing in FM rock, pop and "smooth, big and clean." Twelve years track record as keyboardist/arranger/songwriter in the studio as well as live and on international tour. Polygram, Capitol, Motown...

**Services Offered:** Full record production: planning, budget, studio, musicians, organization and capturing the magic on tape. Engineering: specialize in microphone technique, special pressing and making the most out of whatever is available. All pre-production, arranging, keyboards and computer interfacing, advertisement composition and anything else to "make it work" on time, on budget and sounding great. Call for reasonable rates. No job too big or too small. I want to help you get it right.

**MICHAEL PANEPENTO**  
*Engineer & Producer*  
**PANDEM RECORDS INC.**  
225 Oxmoor Circle, Ste. 812, Birmingham, AL 35209  
(205) 942-3222, 985-9336

**Credits:** Telluride, KD Rzyer, Pandem Sampler, Daughter Judy, Ian Hunter, Disney on Ice, various local and regional jingles. Has performed as a percussionist with such people as: Temptations, Four Tops, Commodores, various Broadway shows, symphonies, and rock and roll acts.

**Services Offered:** Both live and studio production/engineering. Can produce and is familiar with all types of music from baroque to techno-pop. If there's a groove to be found in your music, he'll find it. If not, he'll put one there!

**DENA M. PAPONIS**  
*Engineer*  
3730 McClintock Ave., #145, Los Angeles, CA 90087  
(213) 746-4681

**Credits:** Sound design/operation including Kvetch (Odessey Theatre, L.A.), The Pearl Fishers (Dorothy Chandler Pavilion, L.A.), The Real Thing (Willamette Theatre, Portland), Henry VII and Cromwell (The Globe Playhouse, L.A.), November Wives (The Galaxy Stage, Hollywood), Little Shop of Horrors, Baby (West Coast premieres), A Life, Home and a Nightingale Sang... Isn't It Romantic (San Francisco Bay Area).

**Services Offered:** Theatre sound reinforcement/effects design and operation throughout Los Angeles and San Francisco Bay Area.

**TONY PARISSI**  
*Engineer & Producer*  
310 Edward Street, Mingo Junction, OH 43938

**Credits:** Co-production platinum single/album.  
**Services Offered:** Specializing in live performance audio. Reality can be had. Sound reinforcement systems can be invisible.

**JOE PEDI**  
*Engineer & Producer*  
**JOE'S STUDIO**  
150 Warren Ave., Boston, MA 02116  
(617) 262-7263

**Services Offered:** Demonstration tapes for artists, songwriters, vocalists, musicians, etc. Professional quality and low cost. Call for sample and more information



**JULIE PEREZ****Engineer**

30 Rockefeller Plaza, Rm. 670C, New York, NY 10112  
(718) 263-6067

Credits: Phil Donahue with guest performances by Wynton Marsalis, Kenny Kirkland, The Judds, Amy Grant, Andrae Crouch, Joe Williams, Billy Eckstine, Carmen McCrae and others.

Services Offered: Audio for video including post-production. Specializing in audio for live television.

**JOHN PERGAMO****Engineer & Producer**

J.P. PRODUCTIONS/ACE RECORDINGS

414 Vanderbilt Ave., Brooklyn, NY 11238  
(718) 622-7524

**JODY EVERETT PETERSON****Engineer & Producer**

BRANDY CAMP MUSIC, INC.

P.O. Box 7418, Incline Village, NV 89450  
(702) 832-7711

Credits: Merle Haggard, Willie Nelson, Henson Cargile, Lou Rawls, Paul Revere and the Raiders, Mark Lindsay, Lee Greenwood, Hoyt Axton, Doug Clifford, Freddie Powers, Busch Beer, Aunt Jemima (Quaker Corp.), Harrahs.

**CLIFF PIA****Engineer & Producer**

PIA PRODUCTIONS

1253 Norman Street, Bridgeport, CT 06604

(203) 336-1614, (203) 853-2270

Credits: Produced videos for IBM, Emery Worldwide, City Trust Bank, Norden Systems; produced/engineered original music scores for AAA, United Way, United Technologies, Alpha Romeo, Marketing Corp. of America; engineered music for Academy Award nominee film (*Dr. De Soto*), 162 films for the New York Times EEM Company.

Services Offered: Video production, audio/video sweetening, original music composition/production/engineering, remote sound recording services, talent casting and direction.

**JOHN POPPO/GREG RILES****Engineer & Producer**

PROTOCOL PRODUCTIONS, INC.

35 W. Pine St., Islip, NY 11751

(516) 581-3375

Services Offered: Record and demo production, record promotion and marketing, consultation, mixing and remixing, engineering, editing, synthesizer, drum machine and sequencer (computer) programming, song writing and arranging, publishing, artist management.

**CHUCK PRESTON JR.****Engineer**

POSSIBLE PRODUCTIONS

1821 Eustis St., St. Paul, MN 55113

(612) 644-7497

Credits: Music: Anne Murray, Rosanne Cash, Kenny Rogers, Oak Ridge Boys, Ron Carter, Dizzy Gillespie, Time, Iggy Pop, Vopos. Television: PBS specials: *One Last Song*, *Route 66*, Newton's Apple, ESPN Sports, local commercial and industrial audio for video.

Services Offered: Engineering for music projects. Audio mixing for video production and post-production, sound recording for film.

**BOB PRUITT****Engineer**

UNITED RECORDING STUDIO

4024 State Line, Kansas City, KS 66103

(913) 262-3555

Credits: Album engineering for Bel Airs, Bob Dyer, Festival, Signals, East Ash. Soundmixing for Bel Airs, Willie Dixon, Gatemouth Brown, Cris Williamson, Sam & Dave, John Lee Hooker.

Services Offered: Studio and live sound mixing and engineering. Recording studio equipment maintenance shop serving greater Kansas City area.

**DIANA RAE****Engineer & Producer**

PHOENIX RECORDING

135 Redrock Way, #L302, San Francisco, CA 94131

(415) 695-9385

Services Offered: Demo production; "Music-Minus-One" services for musician demos; soundtracks for video productions.

# The Dallas Record Pressing Plant since 1967!

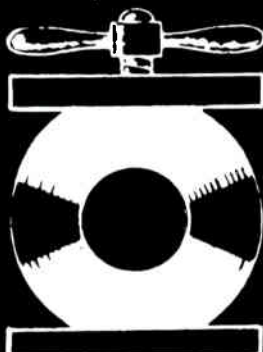
## TAPE DUPLICATION

- Any quantity, large or small
- Custom packaging
- Demo tapes (real time copies)
- Blank tapes—ANY length needed

## RECORD PRESSING IN HOUSE

- Custom Albums • 45 RPM Singles
- Stereo Mastering With Neumann VMS70 Lathe & SX74 Cutter
- Plating With Europa Film Equipment
- 1000 7" 45 RPM Record Package \$469.
- 1000—1 Color 12" Album Package Records & Printed Covers \$1372.

Type Set & Proofs Included (FOB Dallas)  
(To receive this special price, this ad must accompany order)



# q+r

## RECORD & TAPE MFG. CO.

902 North Industrial Blvd., Dallas, Texas 75207

214-741-2027

Toll Free 1-800-527-3472



Circle #111 on Reader Service Card

## CUT YOUR CASSETTE COSTS IN HALF!



Why pay for 3 layers of markups (manufacturer — distributor — retailer) on your blank cassette needs?

Or fancy throw-away packaging (often costing you as much as the cassette itself)?

Order your cassettes factory-direct and save up to **50% — or more!** We manufacture all of our cassettes on the latest "state-of-the-art" equipment. Premium quality — completely guaranteed. *Call today for prices.*

BULK BLANK CASSETTES: C-62 @ 29¢ ■ C-92 @ 36¢

CASSETTE DUPLICATION: C-62 @ 55¢ ■ C-92 @ 65¢

### Lowest Prices Nationwide!

Recording Industry  
Prices On All Audio  
Tapes. Highest Quality  
— Five Screw Shells



AMERICAN  
TAPE WAREHOUSE

SHOP BY PHONE: 1-800-848-TAPE

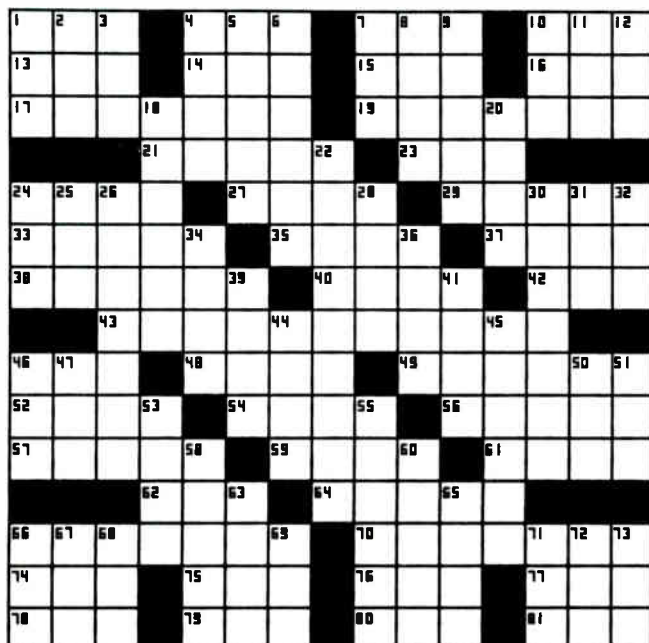
693 S. Raymond Avenue  
Pasadena, CA 91105

California: (818) 792-6400  
Toll Free: 1-800-848-TAPE

Circle #112 on Reader Service Card

# MIX WORDS

—CONTINUED FROM PAGE 12, SESSIONS  
STUDIO NEWS



©1987 Armand E. St. Martin

## "CAN IT BE, OR CAN IT NOT BE"

### ACROSS

1. Routine
4. Sprite
7. I, in Essen
10. Fire
13. To's partner
14. Roof sealer
15. Also
16. Rubber tree
17. Orchestral boomers
19. Angelic axe
21. Songwriters' org.
23. Latin study word
24. Cicatrix
27. Leaves the path
29. Planter
33. Test
35. Dover
37. Donate
38. College

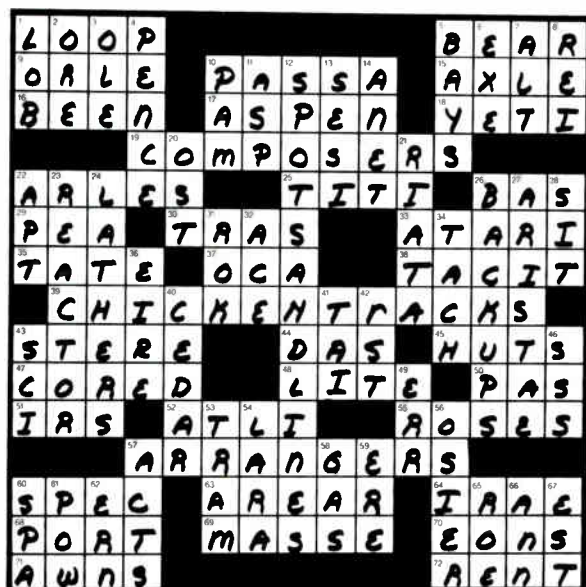
40. Noise
42. Type of cartridge
43. See 22D
46. Rocky Raccoon's girlfriend
48. Volcano
49. Type of eyes
52. Pronto
54. Reservoir
56. Hot spot
57. Certain Indian
59. Que
61. Hied
62. Palmas
64. Red ink item
66. Strings
70. Double reed
74. Metric measure
75. Meadow
76. Another Indian
77. Hwy.
78. Household god

79. Baste
80. "Blues"
81. "Holy"

### DOWN

1. Ship segment
2. wolf
3. Cat
4. Greek letters
5. Poker
6. Padres
7. A great communicator
8. Earth's center
9. Payroll concern
10. It runneth over
11. Pub quaff
12. Butterfly
18. "Bourbon St."
20. Synthesis pioneer
22. With 43A, questionable stage practice
24. Engine additive
25. Tract of land (archaic)
26. Result of independent promotion
28. Bridge play
30. Plugged in or anxious
31. A Peron
32. Sleep abbr.
34. Fisher's need
36. Eskimo settlement
39. Newts
41. Bible name
44. Obligation
45. Shores
46. On the
47. ben Maryyam
50. Compass pt.
51. Pops
53. Mall
55. Pay for in advance
58. Toughness standard
60. Reced
63. Snicker
65. European river
66. Comics prince
67. Kind of account
68. Poetic preposition
69. See
71. Tolkien bad guy
72. Hearing prefix
73. Riders of the Purple Sage

## Solution to December Mix Words



Corey Kissinger has joined *Sigma Sound Studios* in Philadelphia as manager of the Technical Services Department. And "Abe" Taylor Abercrombie is that studio's new media services engineer. . . David Locksley has joined the creative staff of *Sea-West Productions* and *Sea-West Recording Studios*, Hauula, Hawaii. . . *Omega Audio* in Dallas has installed a new CMX CASS I audio post-production editing system. . . *Goodnight Dallas* recently purchased Yamaha REV7 and SPX-90 processors, two Nakamichi MR-1 cassette decks, the Sony 501 ES PCM digital processor, and an assortment of microphones. . . *Studio Unicorn* in Bridgeport, CT, recently added the Yamaha TX-816 (eight DX7s), the SP-12 Turbo sampling drum machine and DX-Droid/EZ-Tracks software. . . *Greene Street Recording* in New York City has become the first studio in the United States to receive the AMEK APC1000 console. The desk was to be installed and functional in December. . . *Quantum Sound Studios* in Jersey City, NJ, has installed their SSL-4000 (48 input) console with Total Recall. . . *Trod Nossel Recording* in Wallingford, CT has purchased a Sony JH-24 with Autolocate from Lasalle Pro Audio Boston/Hartford. . . *Creative Audio/Video Engineering* has opened in Prescott, AZ, offering complete music and video production for radio, television, single artists, etc. Equipment includes a Soundcraft 1600 console, Tascam MS-16, 16-track recorder, Yamaha REV7 and SPX-90 digital effects units, dbx comp/limiters and noise gates, Lexicon PCM41 and UREI 809 monitors. . . *Studio Ultimo* in West L.A. completed installation of a custom 3-way TAD/JBL component monitor system. . . *Quest Recording*, Oshawa, Ontario (Canada), has upgraded to 24 tracks with the addition of a Studer A80 MkIV multi-track and Quad Eight Westar 36-input console with Compumix automation. . . *Bob Harman* and *Jim Cook* have joined *Walt Disney Pictures* as re-recording mixers in the studio's newly renovated Burbank sound facility. . . *The Enterprize* in L.A. has obtained some equipment for its electronic keyboard facility including a Lexicon 480-L, two Massenberg pre-amps, and six Lynx synchronizers. . . *Barbara Jefferies* has been appointed scoring administrator for *Record Plant Scoring, Inc.*, which leases and manages studios "L" and "M" on the Paramount Pictures movie lot. . . *Acoustic Spaces Inc.* has completed the designs for *Fantasy Factory's* new 24-track studio building. Construction will begin in the Spring in Sugarloaf, NY. . . *Solid Sound's* offspring business, *World Class Tapes* located in Ann Arbor, MI, purchased a new Infonics cassette master, model 204A, as well as a new Infonics cassette slave, model 364A. This enables them to produce real time quality at high speed time. . . *Greg Youngman Music* in Long Beach, CA, recently purchased a Prophet 2000 to aid in producing music and effects for radio/TV commercials. . .



**JULIE PEREZ****Engineer**

30 Rockefeller Plaza, Rm. 670C, New York, NY 10112  
(718) 263-6067

Credits: Phil Donahue with guest performances by Wynton Marsalis, Kenny Kirkland, The Judds, Amy Grant, Andrae Crouch, Joe Williams, Billy Eckstine, Carmen McCrae and others.

Services Offered: Audio for video including post-production. Specializing in audio for live television.

**JOHN PERGAMO****Engineer & Producer**

J.P. PRODUCTIONS/ACE RECORDINGS  
414 Vanderbilt Ave., Brooklyn, NY 11238  
(718) 622-7524

**JODY EVERETT PETERSON****Engineer & Producer**

BRANDYCAMP MUSIC, INC.  
P.O. Box 7418, Incline Village, NV 89450  
(702) 832-7711

Credits: Merle Haggard, Willie Nelson, Henson Cargile, Lou Rawls, Paul Revere and the Raiders, Mark Lindsay, Lee Greenwood, Hoyt Axton, Doug Clifford, Freddie Powers, Busch Beer, Aunt Jemima (Quaker Corp.), Harrahs.

**CLIFF PIA****Engineer & Producer**

PIA PRODUCTIONS  
1253 Norman Street, Bridgeport, CT 06604  
(203) 336-1614, (203) 853-2270

Credits: Produced videos for IBM, Emery Worldwide, City Trust Bank, Norden Systems; produced/engineered original music scores for AAA, United Way, United Technologies, Alpha Romeo, Marketing Corp. of America; engineered music for Academy Award nominee film (*Dr. De-Solo*), 162 films for the New York Times EEM Company. Services Offered: Video production, audio/video sweetening, original music composition/production/engineering, remote sound recording services, talent casting and direction.

**JOHN POPPO/GREG RILES****Engineer & Producer**

PROTOCOL PRODUCTIONS, INC.  
35 W. Pine St., Islip, NY 11751  
(516) 581-3375

Services Offered: Record and demo production, record promotion and marketing, consultation, mixing and remixing, engineering, editing, synthesizer, drum machine and sequencer (computer) programming, song writing and arranging, publishing, artist management.

**CHUCK PRESTON JR.****Engineer**

POSSIBLE PRODUCTIONS  
1821 Eustis St., St. Paul, MN 55113  
(612) 644-7497

Credits: Music: Anne Murray, Rosanne Cash, Kenny Rogers, Oak Ridge Boys, Ron Carter, Dizzy Gillespie, Time, Iggy Pop, Vopos. Television: PBS specials: *One Last Song*, *Route 66*, *Newton's Apple*, ESPN Sports, local commercial and industrial audio for video.

Services Offered: Engineering for music projects. Audio mixing for video production and post-production, sound recording for film.

**BOB PRUITT****Engineer**

UNITED RECORDING STUDIO  
4024 State Line, Kansas City, KS 66103  
(913) 262-3555

Credits: Album engineering for BelAirs, Bob Dyer, Festival, Signals, East Ash. Soundmixing for Bel Airs, Willie Dixon, Gatemouth Brown, Cris Williamson, Sam & Dave, John Lee Hooker.

Services Offered: Studio and live sound mixing and engineering. Recording studio equipment maintenance shop serving greater Kansas City area.

**DIANA RAE****Engineer & Producer**

PHOENIX RECORDING  
135 Redrock Way, #L302, San Francisco, CA 94131  
(415) 695-9385

Services Offered: Demo production; "Music Minus-One" services for musician demos; soundtracks for video productions.

# The Dallas Record Pressing Plant since 1967!

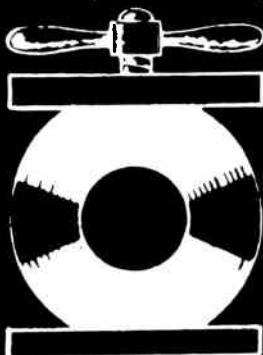
## TAPE DUPLICATION

- Any quantity, large or small
- Custom packaging
- Demo tapes (real time copies)
- Blank tapes—ANY length needed

## RECORD PRESSING IN HOUSE

- Custom Albums • 45 RPM Singles
- Stereo Mastering With Neumann VMS70 Lathe & SX74 Cutter
- Plating With Europa Film Equipment
- 1000 7" 45 RPM Record Package \$469.
- 1000—1 Color 12" Album Package Records & Printed Covers \$1372.

Type Set & Proofs Included (FOB Dallas)  
(To receive this special price, this ad must accompany order)



## RECORD & TAPE MFG. CO.

902 North Industrial Blvd., Dallas, Texas 75207

214-741-2027

Toll Free 1-800-527-3472



Circle #111 on Reader Service Card

## CUT YOUR CASSETTE COSTS IN HALF!



Why pay for 3 layers of markups (manufacturer — distributor — retailer) on your blank cassette needs?

Or fancy throw-away packaging (often costing you as much as the cassette itself)?

Order your cassettes factory-direct and save up to **50% — or more!** We manufacture all of our cassettes on the latest "state-of-the-art" equipment. Premium quality — completely guaranteed. *Call today for prices.*

BULK BLANK CASSETTES: C-62 @ 29¢ ■ C-92 @ 36¢

CASSETTE DUPLICATION: C-62 @ 55¢ ■ C-92 @ 65¢

### Lowest Prices Nationwide!

Recording Industry  
Prices On All Audio  
Tapes. Highest Quality  
— Five Screw Shells



AMERICAN  
TAPE WAREHOUSE

SHOP BY PHONE: 1-800-848-TAPE

693 S. Raymond Avenue  
Pasadena, CA 91105  
California: (818) 792-6400  
(Toll Free): 1-800-848-TAPE

Circle #112 on Reader Service Card

**ROBERT RAINES****Producer****LITTLE RED PRODUCTIONS**

261 West 19th Street c/o Little Red Hen Studio  
New York, NY 10011  
(212) 989-3954

Credits: I specialize in Rock/Pop/R&B; The Chickletts, RBI Records; Judy Congress, Country Eastern Music; Reve Time (album in progress at INS/Unique Studios NY); Moogy Klingman Rock Videos; Orchestra Chameleon, electronic music; many master and demo projects over last several years.

**Services Offered:** Have own pre-production studio equipped with computer, tape sync, multi-track, synthesizers, sequencing and all MIDI. Extensive arranging and performance experience (Berklee/Julliard grad.). Work regularly in several major NY studios. Can direct project for cost effective use of 24-track studios, and produce excellent low cost demos in my own studio. Have access to and knowledge of many state-of-the-art synthesizers: Emulator II, DX7, Fairlight. Play several instruments, write, sing and work well with other musicians. Looking for projects large and small that I can sink my teeth into, where all will profit from hard work.

**MICKEY RAT****Engineer & Producer**

**CHEEZBOX 1332, Silver Springs, MD 20902**  
(301) 942-9007

Credits: Send for text.

**Services Offered:** Non-fast-food oriented music recording. Owner of 72-track automated production facility (Power Plant Recording Studios 72). Send me any tapes and photos of your best and worst work to the address above. I promise (an honest rat!) to check everything out but please try not to phone, I receive tons of tape daily (wanna buy some tape?). Thank... The Rat.

**JEFF RAY****Producer**

838 Meadowsweet Dr., Corte Madera, CA 94925  
(415) 924-6559

Credits: Seventeen years songwriting experience with many bands and solo projects. Seventeen years song arrangement experience on solo and band projects. Twelve years producer experience with various writers from pop-jazz to rock. Eight years producer experience in radio and television advertising for local, regional and national accounts.

**Services Offered:** I am a producer/composer. Being a songwriter enhances the approach to producing a writer's song. Retaining the writer's concept and then expanding on that idea, to achieve the most creative and fulfilled composition of a song is my primary concern. I have produced musical styles ranging from pop-jazz to hard rock. My services also include being a multi-keyboardist and a lead/back-up vocalist and are available at your request.

**JIM REEVES****Engineer****REEVES AUDIO RECORDING**

Yonkers, NY  
(914) 793-6496

Credits: Albums: ZZ Top, Lou Reed, Gregg Allman, Mott The Hoople, Johnny Winter, Edgar Winter, Bobby Vinton, Chambers Bros., Al Kooper, Don McLean, Count Basie, Leslie Gore, Johnny Ray, John Davidson, Martin Mull, Tom Rush, Frankie Valli, King Crimson, Queen. Concert Tours: Dave Mason, Manhattan Transfer, Patty Smythe & Scandal, Angela Bofill, Booker T. & the M.G.'s. Jingles: Wang, Match Game-Hollywood Squares, Consumer Reports, WPIX-"It's Alive," USFL ABC Football, Coleco-Vision, Technics, Bayer Aspirin, Alpo.

**Services Offered:** Studio engineering, mobile recording, live PA mixing, audio consulting, studio design, maintenance, vocals, piano, synthesizers, bass, drums. Own and operate a 16-track fully-equipped recording studio and jingle production house.

**GARY REMAL****Producer****MUSIC DESIGN**

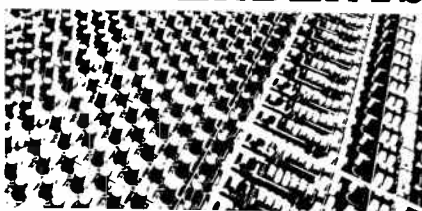
2949 Jackson St., Suite A, San Francisco, CA 94115  
(415) 885-4651

539 South Niagra Blvd., Burbank, CA 91505  
(213) 826-3181

Credits: Features such as *Breakin'*, *Maria's Lovers*, *Dark Circle*, *Twilight Zone*; Norma Kamali fashion videos; some commercial clients include: Bank of America, Soloflex, Safeway, Chevron, Avon, Hunt Wessen, two NBC specials and HBO specials. Two time Emmy award-winner.

**Services Offered:** Original music designed, composed, arranged and produced for feature film, television, radio I.D. packages, commercials, fashion videos, and multimedia/industrial projects. Extensive private library available for lower budgets. Music Design specializes in turning imagination into sound. Offices in Los Angeles and San Francisco.

# INDEPENDENTS

**STEVEN REMOTE****Engineer & Producer****REMOTE MEN VISUAL MUSIC ENT.**

P.O. Box 791, Flushing, NY 11352-0791  
(718) 886-6500, Telex: 271382 ASL UR

Credits: TV/audio: Lloyd Cole and the Commotions, Tommy Keene, Black Uhuru, Frank Zappa, James Brown, Lena Lovich, Bad Brains, NY String Orchestra, Yello, Simple Minds, MTV, BBC, PBS, FM Live broadcasts: Howard Jones, Reflex, Ramones, Blasters, The Police, XTC, Sadao Watanabe, Ron Carter, Jerry Lee Lewis, Joan Armatrading, Records: Elvin Jones, Stevie Wonder, Simple Minds, David Sanborn, Marcus Miller, Boy George, Cro Mags, plus various gospel artists for Atlanta International and Prelude/Savoy Records.

**Services Offered:** 24-track mobile audio/video for pre- and post-production, audio mixing, engineering and producing, digital recording. Also 24-track in-house studio and live sound reinforcement via Aurasonic Ltd.

**RAY E. RETTIG****Engineer & Producer****COTTON HILL RECORDING, INC.**

RD #1 Cotton Hill Rd., W. Berne, NY 12023  
(518) 872-2505

Credits: Engineer on numerous albums, demos and jingles; producer of many local Albany, NY artists; producer for Cotton Hill Records; session player (keyboards) on all styles of recordings. Produced my own record.

**Services Offered:** 16-, 8-, and 4-track recording. All phases of production including arrangements, musicians, copyists, composers, singers, etc. We do our own songwriting for singles and demos for singers. We have a fully equipped MIDI set up in the studio including synthesizers, drum machines and sequencers. All Otari tape decks featuring the new MX-70. AMEK console. dbx 180A noise reduction for all tracks.

**MARK 'THE KNIFE' RICHMAN****Engineer & Producer****KNIFE PRODUCTIONS**

2405 N.E. 10 St., Hallandale, FL 33009  
(305) 454-8431

Credits: Miami Sound Machine, Nicole, Betty Wright, Ike Turner, IBM, Spels Music, Noel Williams, Awesome MCs, Clintile, Hot Ice, Italoheat GmbH (Germany).

**Services Offered:** Complete musical engineering and production of all dance-rock-funk oriented material. Specializing in progressive multi-edited club versions mixed to digital with "live edit" dubbing.

**TIMOTHY ROCHON****Producer****WALL STREET PRODUCTIONS**

1189 East 14 Mile Road, Birmingham, MI 48009  
(313) 646-2054

Credits: Music scores and jingles for Corvette, IBM, Chevy Trucks, General Dynamics, Ford, Beckwith Evans, General Motors/Fanuck Robotics, various aerobic programs.

**Services Offered:** Specializing in contemporary music composition and production for video and film commercials and instructional programs; as well as contemporary album and demo projects.

**MIKE ROSENMAN****Producer**

3334 89th Street, Jackson Heights, NY 11372-1665  
(718) 779-2312

Credits: Records: Ronnie Dyson, Blue Magic, Karen Young. Commercials: Apple Computer, Shearson/Lehman Bros., Consumer's Reports, Pennsylvania Lottery.

**Services Offered:** Commercial music production, 48- to 4-track for pop music, commercial and industrial scoring. Pre-production, arranging, scoring, MIDI/synthesizer/sequencer programming, drum machines, sampling. Musicianship combined with technology, custom-tailored to your project.

**DAVID ROSENTHAL****Producer****MASTERPIECE PRODUCTIONS**

378 Carlton Ave., Piscataway, NJ 08854  
(201) 968-7361

Credits: Rainbow *Straight Between the Eyes* (Polygram), Rainbow *Bent Out of Shape* (Polygram), Rainbow *Finyl Vinyl* (Polygram), Roger Glover *Mask* ("21" Records), keyboardist for Cyndi Lauper, Little Steven, Rainbow. Produced Hammerhead *Heart Made of Steel* (EMI). Graduate of Berklee College of Music.

**Services Offered:** All aspects of production, arranging, and orchestration; songwriting and jingle writing; synthesizer and drum machine programming; all styles of piano and synthesizer performance.

**STUART A. ROSENTHAL****Engineer & Producer****FIDELITY LOCATIONS**

3145 Geary Blvd., Ste. 344, San Francisco, CA 94118  
(415) 665-1035

Credits: National Public Radio (NPR), American Public Radio (APR), Public Broadcasting System (PBS), Santa Fe Chamber Music Festival, San Francisco Symphony Orchestra.

**Services Offered:** "Live" remote recording specialist. Broadcast/recording audio engineering and production music, voice, sound design, reinforcement, consultant. Pristine collection of Neumann tube microphones.

**JOHN "ROCK" ROTHROCK****Engineer & Producer****ROTHROCK PRODUCTION ENTERPRISES**

P.O. Box 1624, Boulder, CO 80306

(303) 499-5475

Credits: Expertise: nightclub sound, live recording. Degrees: BA 1979 Communication Arts, BA 1979 Theatre. Acts: Two Bucks n' Change, Winchester, Cahoots, Cutter, Heartbreak Radio. Albums: *Eccentrics Lost in the Tone Zone*, John Rock Band *Launched from Earth*.

**Services Offered:** Production management, live sound mix, sound system placement and interface, studio engineering, producing, sound design for theater and dance, sound effects tapes, live recordings.

**BARRY RUDOLPH****Engineer & Producer**

5627 Irvine Avenue, North Hollywood, CA 91601  
(818) 985-1855

Credits: Engineered for: Hall and Oates, Lynyrd Skynyrd, Rod Stewart, Waylon Jennings, Al Wilson, Johnny Mathis, Shalamar, Lakeside, O'Bryan, Don Cornelius, Juice Newton, Jessi Colter, James Last, John Prine, Cher, Roy Buchanan, Stanley Clarke, Natalie Cole, Levon Helm, Steve Cropper, Duck Dunn.

**Services Offered:** Complete engineering and/or production services for record, video or demos.

**JEFFREY RUST****Engineer & Producer****JASIR PRODUCTIONS**

539 So. Barksdale, Memphis, TN 38104  
(901) 728-6271

Credits: Composition/production: musical underscore for *Zoo Story* and *American Dream*, two plays by Edward Albee in production at MSU Theatre; music for the international film, *Entrance* by Eric Hirsch; other productions including fashion show tapes for modeling agencies, and demonstration tapes for college jazz players which have won awards in *Downbeat* magazine's student music awards.

**Services Offered:** 4-, 8-track in-house recording; 2-, 4-track remote. Songwriting and arranging, jingle writing and production, scoring for film and TV, music and effects production for fashion shows and theatre. Jeff Rust received his BA in music from the Berklee College of Music with a major in scoring for films.

**KEITH RUST****Engineer & Producer**

4902 Don Dr., Dallas, TX 75247  
(214) 630-2957

**Services Offered:** My professional and enthusiastic approach to recording allows me to work comfortably in any situation, from commercials to album production, and all points in between.

**JAMES SABELLA****Engineer & Producer****SABELLA STUDIOS**

49 Oakdale Road, Roslyn Heights, NY 11577  
(516) 484-0862

**Services Offered:** Complete production services for jingles, voiceovers, master recording for original music. Cus-



tom catalog music. Full 24-track recording studio with MCI 24-track machine and Neve 8068 console with full line of outboard equipment.

#### RICK SANDIDGE

**Engineer & Producer**

#### SANDCASTLE RECORDING STUDIO

Ste. 109 Wade Hampton Mall, Greenville, SC 29609  
(803) 235-1111

Credits: Rick Sandidge has produced the following: The Killer Whales, The Rob Cassels Band, The Pilots, Sonny Turner, Panic, Grace Capps, Country Gold, J.D. Wilson, Harrey Willis, Barry De Fleron Band, The Drifters, The Grapes.

Services Offered: Producing, engineering, video producing.

#### SILVER J. SARGENT

**Engineer & Producer**

#### SILVER SARGENT

P.O. Box 897, Hartford, CT 06120

(203) 522-2371 or 724-9814

Credits: Has worked with: Mike Jonzun, Maurice Starr, New Edition, Sugar Hill, Tommy Boy, Profile Records, Atlantic Records. Studied at the New England Conservatory in 1978/co-owner of L.U.V. Sound Studios, Hartford, CT. Hands on training at Mission Control (24) tracks in 1985. Services Offered: Specializing in record producing 12-inch singles or LPs. Songwriting, computer MIDI pre-production and/or master recording. "Labels"—S.O.C. Records, LUB Sound and Artist Collective.

#### ALWIN SAUERS JR.

**Engineer**

#### MIRAGE PRO RECORDERS

1139 1/2 E. 88th Pl., Los Angeles, CA 90002

(818) 242-4129 24 hrs. service.

Credits: Radio: *Billboard's* Radio Show of the Year, Doors *Three Hours of Magic*, Rockline's *Holiday Show* world broadcast. Demos and LPs: *Babalade Come With Me*; *Sweet Singing Cavaliers*; *Great Vision Records*, Wilton Felder Jr. Live: *Dazz Band*; *Sam & Dave*; *Bo Diddley*; *Big Mama Thornton*; *Herb Jeffries*; *Tsunami*; *Patty Weaver*; *Susan Lynch*; *Vixen*.

Services Offered: Studio engineering, 2- to 24-track formats, radio pre-production engineering/editing, studio design, studio builder, studio management, live front mixer, live monitor mixer, tour and stage management. Currently engineering at Mirage Pro Recorders, L.A., CA. I bring a professional attitude to all projects and strive to bring out the best in your music.

#### SKIP SAYLOR

**Engineer & Producer**

#### SKIP SAYLOR RECORDING

506 N. Larchmont Blvd., Los Angeles, CA 90004

(213) 467-3515

Credits: Chico DeBarge, Con Funk Shun, Don Siegel, Phyllis Nelson, Carl Anderson, Maria Conchita Alonso, Gene Clark, Osborne & Giles, Joyce Kennedy, Gary Taylor, E.T. Van Dyke Pons, King Erisson, Scottsdale, Scott McCarl, Kelle Rhodes, Steve Narahara, Shattered Faith, Spittin' Image, Don Hamilton, Rodon, Pam Nivens, J.T. Tolia, various movie soundtracks.

Services Offered: Engineering and producing. In-house 24-track facility available.

#### MARK SCHULTZ

**Engineer & Producer**

263 Washington Terrace, Audubon, NJ 08106

(609) 547-8928

Credits: Ben Vaughn *Combo Beautiful Thing*; Kenn Kweider *Kitchen Folk*; Das Yahoos *Sturm und Drang*; Social Voyeurs *The Boy & The Beat*; Baba Lou *Baba Lou at Bob's*; The Big People *Modern Girl*; The Johnstons *Long Way Home*; Larry Norman; Ed King; Five Story Fall; Terry Dan; Scott Anderson; Jane Roman.

Services Offered: Engineering and music production by Mark Schultz means: access to a complete 24-track facility with emphasis on sampling/sequencing/digital equipment (too numerous to list); knowledge of excellent musicians for all types of music; keyboard, guitar and vocal arrangements; charting service; consultation for any aspect of recording and post-production; cost-efficient, creative sessions that are fun, loose and drug-free. I specialize in taking good "new" artists in the studio and making their first project sound great. Brochure and rates on request. No metal/rappers please.

#### RANDY L. SCRUGGS

**Producer**

#### RANDY SCRUGGS PRODUCTION CO.

2828 Azalea Pl., Nashville, TN 37204

(615) 383-0486

Credits: Produced projects on Sawyer Brown, Bobby Bare, Earl Scruggs, Waylon Jennings, Michael Card, the DMB Band, Jessy Dixon, Jessi Colter, The Burrito Brothers.

#### STEPHEN J. SELTZER

**Engineer & Producer**

P.O. Box 234, Somerville, MA 02143

(617) 623-1066

Credits: Call or write for demo tape and rates.

Services Offered: Engineering and production—meditation music to dance mixes.

#### PAUL SETSER

**Producer**

#### PAUL SETSER CREATIVE SERVICES

2930 N. Newhall St., Milwaukee, WI 53211

(414) 962-9174

Credits: The five-channel soundtrack for "The Spirit of Milwaukee" '57-projector slide show, plus multi-image and video scores for major corporations in the Midwest and across the country. Numerous contributions to AMI and ITVA award-winning productions.

Services Offered: A nationally recognized audio producer specializing in all audio-visual performance media. Original music and conceptual savvy create the "setsurround" touch, informing the industry standard.

#### LEROY SHYNE

**Engineer & Producer**

#### SHYNE SOUND

Box 9906, San Rafael, CA 94912

(415) 459-2833

Credits: Chilton Chenier live at the San Francisco Blues Festival (Arhoolie 1093). *Mix* magazine article December '84 on San Francisco Blues Festival.

Services Offered: Live concert production, sound reinforcement service, mobile live to 2-track unit (analog or digital), cost effective stereo PZM recording of sound system, and editing/mastering of 2-track recordings.

#### BARRETT SILVER

**Engineer & Producer**

#### SILVER LINING PRODUCTIONS

2304 Colston Dr., Suite 103, Silver Spring, MD 20910

(301) 495-9460

Credits: "Quality Health Care & The Cost Squeeze" aired on Hospital Satellite Network this summer. Also a segment for Randolph Macon College for Learning Resources Network's videodisc library.

Services Offered: Video production for associations and corporations as well as the educational market. Complete services from scripting and pre-production to production, post, and distribution. Ikegami 79 EAL as well as Sony cameras. Professional results with a personal touch. Silver Lining Productions.

#### JERRY SKORA

**Engineer & Producer**

#### PRODUCERS VIDEO

805 West Wollram, Suite #5, Chicago, IL 60657

(312) 525-3109

Credits: Technical producer for concerts: 1981 Rolling Stones tour, Chicago documentaries, Chicago Lawndale Project test commercials.

Services Offered: Single and multi-camera packages: Ikegami HL79EAL, HL-95 (up to six cameras) from mobile unit or on site anywhere in any size club or performance area or recording studio. Ikegami EC-35s also available with all Prime Lens' and accessories. Tape Formats: Beta or 1-inch Sony systems. Also available: Ultimate and video assist, engineering consultant and maintenance services.

#### TOM SOARES

**Engineer & Producer**

#### NORMANDY SOUND, INC.

25 Market Street, Warren, RI 02885

(401) 247-0218

Credits: John Cafferty and The Beaver Brown Band, Maurice Star, Bill Hagens (Starpoint), Jimmy Smith, Cornel Dupree, Paul Nisen, Billy Cobham, Bobby and The Midnights, Foghat, Herbie Hancock, Cheech & Chong, Eddie Martinez, Steve Elson.

Services Offered: Engineering and line production.

#### JIM STABILE

**Engineer & Producer**

#### PYRAMID RECORDING


1228 Lula Lake Rd., P.O. Box 331

Lookout Mtn., TN 37350

(404) 820-2356

Credits: Alabama, Allman Brothers Band, Monkees, Wet Willey, Alvin Lee, Humble Pie, Bertie Higgins, Point Blank, Melissa Manchester, Bonnie Bramlett, Kristie McNichol, Toronto.

## RTS-321



EVERY AUDIO PROFESSIONAL NEEDS THIS VERSATILE "PHONE" / "XLR" ADAPTER IN THEIR TOOL KIT

**RTS-321 FEATURES:**

- 1/4 RTS Male Phone and 3 pin Cannon Female XLR
- 32 position switch instantly changes the internal wiring to match your specific interconnection needs

ASK YOUR DEALER FOR A DEMONSTRATION  
CALL OR WRITE FOR FREE BROCHURE

FOUR DESIGNS COMPANY

6531 GROSS AVENUE • CANOGA PARK, CA 91307  
(818) 716-8540

## FX RACK

ECONOMICAL 19" RACK MOUNT "FURNITURE" FOR THE PROFESSIONAL OR HOME STUDIO.



**FX RACK FEATURES:**

- Holds up to 18 "spaces" of equipment.
- Attractive black textured vinyl laminate.
- Shown with optional wheels.

ASK YOUR DEALER FOR A DEMONSTRATION  
CALL OR WRITE FOR FREE BROCHURE

FOUR DESIGNS COMPANY

6531 GROSS AVENUE • CANOGA PARK, CA 91307  
(818) 716-8540

Circle #113 on Reader Service Card

## A SINGER'S DREAM!



**REMOVES VOCALS FROM RECORDS!**

Our VOCAL ELIMINATOR can remove most or virtually all of a lead vocal from a standard stereo record and leave most of the background untouched! Record with your voice or perform live with the backgrounds. Used in Professional Performance yet connects easily to a home component stereo system. Not an equalizer! We can prove it works over the phone. Write or call for a free brochure and demo record.



### Listen..

**Before You Buy!**

- Time Delay
- Reverberation
- Crossovers
- Noise Reduction

- Compressor/Limiters
- Expanders
- Spectrum Analyzers
- Parametric EQ

Don't have regrets about paying too much for a lesser product. In demos and comparisons, we'll show you why we're Better! Our Factory Direct sales allow us to produce a Superior product and offer it to you at a Lower price. Call or write for a free full length Demo Album and 24 page brochure.

Write to: **LT Sound, Dept. MX, P.O. Box 338**  
Stone Mountain, GA 30086  
In Georgia Call (404) 493-1258

**TOLL FREE: 1-800-241-3005 - Ext. 8-A**

# RCA Test Tapes

*A Sound Measure*

- Cassettes
- Open Reel up to 1"
- Custom Formats

For a catalogue of standard test tapes or further information contact:

**RCA TEST TAPES**  
DEPT M  
6550 E. 30th St.  
Indianapolis, IN 46219  
(317) 542-6427

Circle #115 on Reader Service Card

## The art of shaping sound.

SONEX is a high-performance acoustical foam that upgrades your studio inexpensively. Ideal for a temporary isolation booth, it can also eliminate slap echo and harsh resonances in the main room or silence noisy tape equipment in the control booth.

Write for our color brochure today.

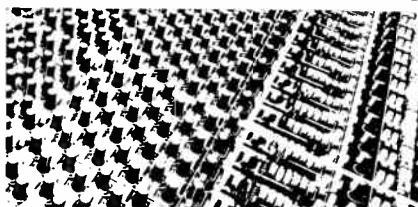


**Alpha Audio®**

2049 West Broad St.  
Richmond, VA 23220 (804) 358-3852

Circle #116 on Reader Service Card

## INDEPENDENTS



### BOB STONE

*Engineer & Producer*  
**BOBCO MUSIC**

P.O. Box 27728, Los Angeles, CA 90027  
(213) 281-7367

Credits: Frank Zappa, including *Boulez Conducts Zappa, Shut Up 'n Play Yer Guitar, The Old Masters, Valley Girl*, etc. Dweezil Zappa, Donna Summer, Missing Persons, The Go-Go's, The Whispers, Loleatta Holloway, Shalimar, Eloise Laws, Teri De Sario, Randy Brown, Noel, D.C. La Rue, Arpeggio, Pamela Stanley, Mickey Mouse Disco.

Services Offered: All phases of production, recording and re-mix requiring creative and quality attention are offered, including 12-inch single mixes and digital remastering for CD. Extensive multi-track analog/digital experience to provide world-class results world-wide.

### RON STREICHER

*Engineer & Producer*

**PACIFIC AUDIO-VISUAL ENTERPRISES**

545 Cloverleaf Way, Monrovia, CA 91016  
(818) 359-8012

Credits: Audio engineer for Mann Music Center/Philadelphia Orchestra; radio broadcasts for the Los Angeles Philharmonic Orchestra; live "direct-to-stereo" broadcasts and recordings for National Public Radio, American Public Radio, Calif. Radio Music Network, Public Broadcasting System, et al; recordings for Angel, CMS Desto, Mobile Fidelity, Discovery, CRI, SAZ, and of numerous technical papers on microphone and recording techniques for the Audio Engineering Society, *Mix* magazine, and others.

Services Offered: Pacific Audio-Visual Enterprises provides cost-effective, quality-oriented services by specializing in basic, time-proven production techniques—without unnecessary fuss or gimmickry. The result: a successful job... on time, and within budget. And with my lifelong involvement in music presentation, I can also serve as a musical consultant, as well as a recording engineer. Complete facilities are maintained ready to travel for in-studio or on-location audio projects across town or around the world: analog or digital recording, editing, and post-production; record and/or cassette duplication; radio or television audio broadcast production; live mixing for concert sound reinforcement; music and performance coordination; audio systems design and consultation; lectures and seminars on recording techniques.

### JOHN STRONACH

*Engineer & Producer*

**JOHN STRONACH PRODUCTIONS**

c/o Record Plant, 1032 N. Sycamore  
Hollywood, CA 90038

(213) 653-0240, 545-8234

Credits: 70 gold and platinum records including REO, Joe Walsh, Dan Fogelberg, Steven Stills, Rutus, Jacksons, Diana Ross, Supremes, 3 Dog Night, Tim Weisberg, Keith Moon, Jimmy Cliff, Alvin Lee, John Mayall, Steel Breeze, Robin Williams, Jr. Walker, Sarah Vaughn, and many more. Services Offered: Complete production and engineering services as well as music supervision and mixing for film scores (film credits by request). I have worked in studios all over the world and I'm ready to discuss your next project now!

### MICHAEL S. SULLIVAN

*Engineer*

**FORMULA ONE SOUND**

4716 Dewey Ave., Riverside, CA 92506  
(714) 686-5809

Credits: Live sound, recording, fully qualified engineer. In industry since 1972. Some production experience. Work with many bands. Punk to jazz!

Services Offered: Recording engineer—all aspects, tracking through mastering. Live sound—have complete sound system.

### HILL B. SWIMMER

*Engineer*

**UPHILL MUSIC**

1626 N. Wilcox, Suite 703, Los Angeles, CA 90028

(213) 666-8388

Credits: Current projects include: Patti LaBelle, Gladys Knight, Stephanie Mills, Teena Marie, Klymaxx, Pointer Sisters, Julio Iglesias, Jose Jose, Jose Feliciano, Bob Seger, Tom Petty and Rosemary Clooney. New Artists: Skipworth and Turner, Body.

Services Offered: Analog and digital recording and mixing of records, video, film and compact disc. Pre-production and conception recording services offered. New artist tapes received and reviewed.

### TECHNISOUND PRODUCTIONS, INC.

*Producer*

**STEPHEN KAY**

140 Madison Avenue, Westfield, NJ 07090  
(201) 233-2026

Credits: MTV (Lance Reynolds Productions). Pepsi-Cola, Michael Anthony Jewelers, Gateway Oldsmobile, Kaplan & Barry Advertising, Weissberg Associates, Gianettino & Meredith, Moore Entertainment Group; session work for: The Power Station, House of Music, Grand Slam, Eras Recording, M&I Studios, The Daily Planet, Grand Master Flash, All Star Sound, David Scance Productions, more.

Services Offered: Record, film score, jingle, and demo production featuring the unbelievable Fairlight CMI Series III, the state-of-the-art digital keyboard/audio production device. Fully equipped spacious 8-track studio, 24 x 8 board, effects, DX7 w/1500+ sounds, 7-ft. Yamaha grand, two vintage customized ARP 2600s. Complete your project in-house, or do Fairlight III production for transfer at a larger facility. Will travel with Fairlight III to location of your choice for session work. Thirteen years of professional studio experience. Reasonable rates—demo tape available. Call Stephen Kay at (201) 233-2026 for more information.

### CHRIS TERGESEN

*Engineer*

**310 East 89th St., New York, NY 10128**

(212) 996-0803

Credits: Albums by many artists including Roberta Flack, David Bowie and Melba Moore. Film experience includes feature films, movies for TV, home videos, documentaries and industrials. Jingles include Ford, Norelco, Max Factor, Lipton Cup-A-Soup, Bojangles, GTE, Tropicana, Dean Witter, USA Today, Puroater Courier, Folgers

### IAN TERRY

*Engineer & Producer*

**IAN TERRY PRODUCTIONS LTD.**

417 East 74th St., No. 16, New York, NY 10021  
(212) 628-8650

Credits: Engineered 150 LPs, 24 film scores, 3000 commercials. Produced 25 LPs.

Services Offered: Engineering—all types—production.

### STEVE THOMAS

*Engineer & Producer*

**LAKESIDE PRODUCTIONS**

P.O. Box 1914, Forest Park, GA 30051-1914  
(404) 366-4553

Credits: Regional radio commercials for retail and political clients; various single releases on independent labels; hundreds of master quality demos.

Services Offered: Complete in-house production of radio commercials, industrial music and demos. We have a full-line 8-track studio with software-based MIDI capabilities and are experienced with working with clients not only in our area, but out of state as well.

### GERALD THOMASON

*Engineer*

**VIDEO, AUDIO, LIGHTING**

P.O. Box 1396, Lawrence, KS 66044-1396  
(913) 841-4915

Credits: Live recordings of Charlie McClain, his company and Torch II crew reinforcement for eight years, recording engineer four years, lighting eight years, video one year, Chapman Recording Workshop 1985. Services Offered: Reinforcement and recording engineer /consultant, lighting/video director/consultant.

### BILL THOMPSON

*Engineer & Producer*

**1978 Ardith Dr., Pleasant Hill, CA 94523**

(415) 689-1197

Credits: Debora Iyall, Sheila E., Ronnie Montrose, Sylvester Radance, Sam Bostic, The Freaky Executives, Walter Hawkins Choir, Pete Escovedo, 700 Club, Thrill of the Pull dance mixes and re-mixes for Atlantic, Virgin, CBS, Island, Polydor, and UK Records.

Services Offered: Engineering and production from pre-production to mastering: demos, LPs, re-mixes, soundtracks, location recording.



**DAVID THOR****Engineer & Producer****TALENT CENTER**#10 McLaren, Ste. A, Irvine, CA 92718  
(714) 837-3521

Credits: Production manager for such acts as Robin Trower, Ronnie Montrose, Gregg Allman, Stephen Bishop, Al Stewart, Dave Mason with other successful western U.S. tours. House and monitor mixing for The Replacements, Social Distortion, Busboys, James Harman. Currently sharing house engineering position at the Whiskey A Go Go. **Services Offered:** Available for live and studio production with 15 years experience. Currently moving into video, movie and jingle soundtrack work with world class session musicians and songwriters to suit every musical need. We at the Talent Center are interested in developing the Orange County and Southern California music market into a recognized worldwide entity, coordinating our efforts with the already established L.A. based majors. We offer pro 1-inch 16-track ability for EP to LP and cassette release productions. With full sound stage studio we're capable of in-house live or lip sync music videos. Call for more information.

**RICHARD TIEGEN****Engineer & Producer****PLUM STUDIO, LTD.**2 Washington St., Haverhill, MA 01830  
(617) 372-4236

Credits: Atlantic Records, 1968-1969. Produced over 30 independent records. Own a state-of-the-art 24-track facility. Musician, having played with the legends, including Sam & Dave. Member of BMI.

**Services Offered:** Complete record production in our 24-track facility. Will supervise all phases including: arrangements, session players (some of the best) pressing and mastering. Also, video production from cost-effective live in-house shoots to fully edited 3/4-inch and one-inch music videos. Plum Records, our own label, now publishing and distributing independent product throughout New England.

**TIFFANI TIME****Producer**315 East 56th Street, New York, NY  
(212) 758-5094

Credits: Credits available upon request.

**Services Offered:** Translating your ideas and artistic concepts onto vinyl, CD, video, or film. Will oversee entire project from start to finish, or work on only one aspect. Experience in all phases of multimedia production, pre- and post- (including: composition, arranging, scoring, song picking, editing, 12-inch mixes, remixes, and mastering). Other services include: Drum and synth programming; musician contracting; in-house development for bands, solo artists, musicians, and composers; publishing and placement services for your songs; extensive industry contacts in the U.S. and abroad.

**HORUS JACK TOLSON****Producer**228 Haight St., San Francisco, CA 94102  
(415) 626-4373

Credits: Record Production: *Die Hard Lover*, Loverde, *Give Me Back A Little Piece of My Heart*, Norma Lewis. Remix credit: *Keep on Holding On*, Margaret Reynolds. *Technique* (ERC/Polygram). Commercials: Zing Ring, Wells Fargo Bank, Cal & Class. *Life is the Reason*, Norma Its Gonna Happen.

**Services Offered:** Full production in soul/disco and pop records, demos, and full production of music for commercials, jingles. Synthesizer and keyboard work. Arrangements and orchestration. Extensive custom electronics and microphones available (direct-coupled all-FET designs). Call for rates.

**JAN TOPOLESKI****Engineer & Producer**62 Van Ness Dr., Brick Town, NJ 08723  
(201) 477-1860

Credits: Engineered "J.A.M. '86," which included performances by Bruce Springsteen, Clarence Clemons, Frankie Valli, Tal Farlow, and Southside Johnny. I have also engineered sessions with Marshall Crenshaw, Clarence Clemons, Nils Lofgren, Max Weinberg, Garry Tallent, Evan Johns and the H-Bombs, and various local New Jersey acts performing all types of music.

**Services Offered:** Engineering; production; drum, sequencer and MIDI programming, and custom sampling.

**GREG TRAMPE****Engineer & Producer****MUSIC MASTERS**17 Ponca Trail, St. Louis, MO 63122  
(314) 821-2741

Credits: Albums: Terry Aden (country). Boyfriend (rock).

Painkillers (rock), Lisa Joy (Top 40), Kevin Daniels (cont. Christian), Jim McNeil (gospel) etc. Corporate credits: AT&T, Anheuser-Busch, Mel Bay Publications, Suburban Journals, Jefferson Smurfit Corporation, etc. **Services Offered:** Album production, music video production, original soundtrack music for multi-image, film and video.

**SCOTT TUTT****Producer****SCOTT TUTT MUSIC**P.O. Box 121213, Nashville, TN 37212  
(615) 329-0856

Credits: Has never produced a record that didn't chart nationally. Also president of Reptile Records. Has published several #1 records. Instrumental in the careers of: Alabama, Earl Thomas Conley, Jerry Dale McFadden, Pat Garrett, Brice Henderson, Susan Marshall, Government Cheese, The Dusters and The Bigamy Brothers.

**Services Offered:** Scott Tutt Music is an independent publishing house and record production company. Services offered: studio production and music publishing. From this point, depending on particular artist and project, Scott Tutt Music can assist in many facets, from label shopping to pressing to promotion. Whether you want to sell LPs off the stage or record for a major label, you've got to have great music, and quality product. That's what you'll get from Scott Tutt. Recording is not limited to Nashville, although there are many excellent studios in Music City.

**ERIC TYLER****Engineer & Producer****IN SYNC STUDIOS/T-JAM PROD.**1858 Ontario Place N.W., Washington, DC 20009  
(202) 332-4869

Credits: Responsible for creating the "DC Sound" T-Jam Productions and In Sync are definitely on the one.

**Services Offered:** We offer complete production services in our spacious studios. We also offer MD421, 441 mics, Emulator II, SP12, DX7, Mirage SQD1 REV7, PCM-70, RX11, Yamaha Acoustic, Simmons drum kits, various guitars and basses. Give us a call for record and jingle work. Rates upon request.

**STEVE TYRELL/BARRY MANN****Producers****TYRELL-MANN PRODUCTIONS, LTD.**

8295 Sunset Boulevard, Los Angeles, CA 90046

(213) 656-7244

Credits: The Jets, Rickie Lee Jones, Bonnie Raitt, Tracey Ullman, Mann/Weil, Richard Kerr, Will Jennings. Films: *An American Tail* (Spielberg/Universal), *Extremities* (Atlantic Releasing), *Flight of the Navigator* (Disney), *Eight Million Ways To Die* (Tri-Star), *Teen Wolf* animation (Southern Star Prod.).

**Services Offered:** Three studios with all major amenities including Synclavier and video lock-up available only to in-house clients.

**STEVE VAVAGIAKIS****Engineer & Producer**118-17 97th Ave., Queens, NY 11419  
(718) 849-5725

Credits: Films: The WNBT-13 televised film *It's The Real Thing*, *Ain't No King Coming*, *In The Dark* and *Battery Film*. Jingles: Cole Furniture, Tenex Communications, Creative Papers, WEVD-FM spots for Good Deal Windows and Fantis Foods. LPs include projects for Red Rhino Records, Slash, Rough Trade, Rohit International, Peter's International, and Vasipop. Tutorial: Lang Percussion Music Minus One, and audio magazine *International Percussionist*.

**Services Offered:** Pre-production consultation covers: scope of project, picking the right material, organizing a performance group, optimizing tempo, lyrics and arrangements. Access to Inner Ear Recording, a complete two-inch, 16-track recording studio featuring: Neumann tube microphones, a vintage Steinway grand, Emulator II, Yamaha DX7, Simmons and Oberheim digital drums. Specialties include drum machine and synthesizer programming, highly developed editing skills, and special effects generation. Post-production overview of quality control from listening to pre-lacquer cut acetates through listening to test pressings and cassette recordings.

**EMILSAM VELAZQUEZ****Engineer & Producer****JOGAL MUSIC**230 West 55th St., (9H), New York, NY 10019  
(212) 245-3392

Credits: I am a professional musician who has worked with Tito Puente, Willie Colon, Larry Harlow, Celia Cruz, Roy Ayers, Luis "Perico" Ortiz, and others.


**Services Offered:** I have specialized in the Latin market for eight years, am fluent in English and Spanish, and have

—LISTING CONTINUED ON NEXT PAGE

# Dimension



## BE THE FIRST TO OWN

- World's Only Music Library Containing  Holophonic's™
- Digitally Mastered
- Lifetime Blanket License  
(No Needle Drop or Annual Renewal Fee)
- Available in C.D.'s or L.P.'s

FOR FREE CASSETTE SAMPLER, CONTACT:

P.O. BOX 1561 • JUPITER, FLORIDA 33468 PHONE: 305/746-2222

(HOLOPHONICS IS A TRADEMARK OF ZUCCARELLI HOLOPHONICS, INC.)

Circle #117 on Reader Service Card



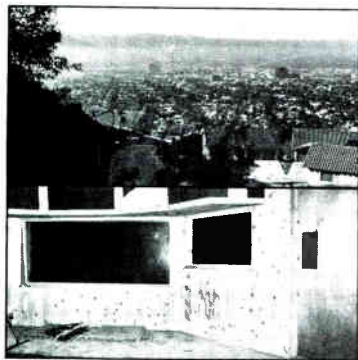
## LET US TAME THE BEAST

**DRC ReBuilders**  
2541 Nicolett Avenue  
Minneapolis, MN 55404  
(612) 872-0646 OR  
(612) 724-5291

Excessive wow, flutter, noise and slow startup speed with over-heating driver transistors usually mean a bad capstan servo motor. We can in most cases rebuild any MCI DC permanent magnet motor for under \$200. For more information call Dave R. Comer.

Circle #118 on Reader Service Card

## Professional Studio— Great Home



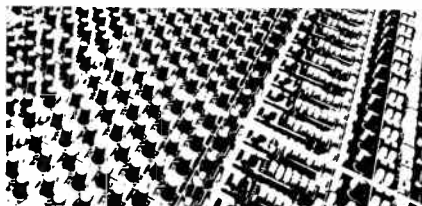
Spectacular Burbank Hills view home—5 BR/2½ BA/3600 sq. ft. of amenities—custom designed Westlake 16 TR Audio Studio-Isolation Booth, Studio & Control Room—designed in original construction.

Asking \$349,000.

Contact:  
Bill Nicoll (818) 240-1111  
Merrill Lynch  
(818) 507-5857 (eves.)

Circle #119 on Reader Service Card

## INDEPENDENTS



### —LISTING CONTINUED FROM PAGE 175

worked with a variety of musical projects. My primary interest is engineering and producing. I am a studio contractor, an arranger, an engineer, a jacket designer, and am generally qualified to handle pre- and post-production work, carrying out projects from start to finish.

#### BRIAN A. VESSA

**Engineer & Producer**

**BV PRODUCTIONS**

P.O. Box 3272, Santa Monica, CA 90403

(213) 453-3636

Credits: Underscore to Michael Mann films *Band of the Hand* and *Manhunter*; four gold albums and assorted recordings for Ariola and Melody Records; Brett Perkins *Let It Show*; numerous commercials and industrials for Porsche, Disney, Del Monte, etc.

**Services Offered:** Production and engineering, music for records, film, and video, Synclavier and computer/synth programming, studio design and maintenance. With over 20 years experience as a musician, ten years in the professional audio field, and a degree in electronics, I can provide the necessary link between concept and realization of a musical project, whether for an album or in the world of video, synchronizers and SMPTE. My interest is being a catalyst in the creative process.

#### MATTHEW WALLACE

**Engineer & Producer**

**DANGEROUS RHYTHM PRODUCTIONS**

2321 Russell St. Ste. 1-H, Berkeley, CA 94705

(415) 843-3923

Credits: Faith No More, Legal Reins, Shy Hands, Yo, Party of Five, Naked Into, Monkey Rhythm, All Fell Down, Bandaleers, Santa Clan, Ten Tall Men, McGuire's, Love Overdose, Tom Fogerty, Glorious Din, My Sin, Necropolis of Love, Spoon Ranch, Pray for Rain, Jeff Fogerty, David Crosby, Three Day Stubble, Marshall Fields, Castle Blak.

**Services Offered:** Pre-production, engineering, producing and post-production.

#### GREG WARD

**Engineer & Producer**

**EARZ ENTERPRISES**

3633 Crooks Rd., #7, Royal Oak, MI 48073

(313) 549-0268

Credits: Engineering, mixing and production credits on several major labels. Artists include: Parliament/Casablanca, Funkadelic/WB, Red Hot Chili Peppers/EMI, Bobby Barth/ATCO, Automatrix/MCA, George Clinton/CAP, Zapp/WB, Bootsy Collins/WB. TV/audio prod. Sat. Nite Music Machine/WDIV-TV. Currently eng./prod. two projects, new groups of new rock persuasion.

**Services Offered:** Engineering and/or production services offered. Specialty in rock, funk and pop music. Ten years' professional experience. Adaptable to any studio, project or relationship to project. Based in Detroit, willing to travel. Connections in Japan within the next 12 months. For a great sound and a good time call EARZ.

#### ROBBY WEAVER

**Engineer & Producer**

**BERTUS PRODUCTIONS/THE STUDIO**

22723 Berdon St., Woodland Hills, CA 91367

(818) 883-1920

Credits: Engineer: film scores: James Newton Howard *Eight Million Ways To Die*; Patrick Leonard *At Close Range*; and film mix Madonna title song; Jay Ferguson *Quiet Cool*. Albums: Johnny Gill, Teddy Pendergrass, Spirit, Rory Block.

**Services Offered:** Serving a select clientele with advanced music/audio technology and state-of-the-art production techniques in an intimate, comfortable environment. 24-track music production, post-production sound, ¾-inch video lock-up, polysampling Synclavier, voice-overs, special effects sound and digital sound library, composition.

#### STEVEN WELLNER

**Engineer & Producer**

370 Kerrwood Drive, Wayne, PA 19087

(215) 964-0564 or (305) 774-1634

Credits: Sound Reinforcement: 1984-86 *Antics*, *Front Page East* Coast tour. Demo: Dan Traynor Band, *Mix* rock interview.

**Services Offered:** Engineering and production assistance.

#### PAUL WICKLIFFE

**Engineer & Producer**

**SKYLINE PRODUCTIONS/SKYLINE STUDIOS, INC.**

36 West 37th St., New York, NY 10018

(212) 594-7484

Credits: 1986 Grammy Nominee for Engineering; Album—*Modern Manners* by Special Eix. Principal owner of Skyline Studios, NY and Horizon Sound, NJ. In the past ten years, I have recorded with name talents such as Pat Benatar, Jimmy Buffet, Irene Cara, Judy Collins, Sammy Davis, Jr., Steve Forbert, Robert Gordon, John Hall, John Hammond, Jr., Phyllis Hyman, Grace Jones, Maria Muldaur, Nile Rodgers, Shannon, The Spinners and Loudon Wainwright; and jazz artists Wynton Marsalis, Kevin Eubanks, Hank Jones, Chico Freeman, Mel Lewis, Bill Finsell and Marc Johnson.

**Services Offered:** Production and/or Engineering for records or commercials.

#### JOHN WICKS

**Engineer & Producer**

**THIRD STORY RECORDS, INC.**

5120 Walnut, Philadelphia, PA 19139

(215) 747-1201

Credits: Produced: The Dead Milkmen, Monette Sudler, The Nik Everett Group, The Johnsons. Engineering clients include: Patti LaBelle, Dexter Wansel, Eric Bazilian and Rob Hyman of "The Hooters."

**Services Offered:** Complete production service and record label.

#### PETER B. WILDER

**Engineer & Producer**

**APEX—ADVANCE LTD.**

44 Church St., Burlington, VT 05401

(802) 863-8652

Credits: Engineering: audio-for-video, Vermont Educational Television; remote audio broadcast, Vermont Public Radio; live audio mix for B.B. King, Randy Newman, Richard Thompson, others. Several albums and over 100 jingles. Production credits: Arranging, composition, and production of several regional albums, cassettes and jingles. **Services Offered:** Total audio services, from inception forward. Engineering, studio, live or broadcast. Production including composition, arranging and instrumentals. Jingle production and composition. Synthesizer programming; studio design; studio equipment sales and installation, complete packages with and without MIDI compatibility. Our convenient location and friendly staff will be able to assist on any audio endeavor, be it record production, concert sound, audio for video, jingles, studio consulting or equipment supply. We're the one stop for Northern New England. "Have Ears Will Travel." Rates and prices on request.

#### W. BYRON WILKINS

**Producer**

**SYNTAX PRODUCTIONS**

30W141 Lindenwood Drive, P.O. Box 149

Warrenville, IL 60555-0149

(312) 393-4100

Credits: AT&T/Bell Labs, Pillsbury/Green Giant Co., Caterpillar Products. Member: AES, ITVA and AFI.

**Services Offered:** 4-track studio, computerized scripting, graphic/title slides, 35mm photography, multi-media program production, video soundtrack production, narration talent, original music production, radio commercial production.

#### JOHN D. WILSON/JOE P. ROBERTSON

**Engineer & Producer**

**CAVE PRODUCTIONS/**

**RECORDING ARTS CONSULTANTS**

114 E. Union, Prescott, AZ 86301

(602) 445-0413

Credits: John D. Wilson/Synchestra—Mother Earth's Lullaby, Daydreams, Silver Ships and Electric Snowflake—cartoon, Music From Left Field—Haven, They're Here, Ramada Inn—TeleSound, Joe P. Robertson/John D. Wilson; The Beamer Project-Sidetracked, Santa Fe—Promises, Pledges & Lies, The Record Peddler Sharlet Hall Museum /Earl Rodgers.

**Services Offered:** Complete budget planning, pre- and post-production, in-house, 16-track facilities for full production and demo projects. Access to 24-, 48-track studios available. Offering total project planning and development. Television and radio commercials, original music and video production.



**ROBERT WINSOR**  
**Engineer & Producer**  
 Normandy Sound, Inc.  
 25 Market Street, Warren, RI 02885  
 (401) 247-0218

Credits: Beaver Brown, New Man, K.K. Proffitt, MX, Neutral Nation, The Fools, and many others.  
 Services Offered: Record engineering and production.

**GREGG WINTER**

**Producer**  
**EXTRATERRESTRIAL SOUND**  
 174 Pacific Street, 1G, Cobble Hill, Brooklyn, NY 11201  
 (718) 834-1441

Credits: Debut album for The Nails entitled *Mood Swing* on RCA Records Worldwide, *The Pleasure Principle* by Treat (a Scandinavian hard rock band) on Polygram International, 12-inch mix of *After the Fire's Der Kommissar* on Epic Records, *Army of One* on WEA Records International, as well as numerous independent label productions.  
 Services Offered: Being a songwriter and musician (I wrote and sang background vocals on "Eyes on Fire" for Blue Oyster Cult's *The Revolution by Night* album) is extremely helpful to my work as a producer. Helping bands get the most out of their songs and then tweaking the arrangements is priority one. From that crucial starting point the right performance and the right sounds can naturally flow.

**HOWARD WOLEN**

**Engineer & Producer**  
 11016 Kittridge St., North Hollywood, CA 91606  
 (818) 508-1259

Credits: Smokey Robinson, Herb Alpert, Roberta Flack/Peabo Bryson, Thelma Houston, The Temptations, Natalie Cole, Dionne Warwick, Robert John, Kim Carnes, Barry White, Alphonse Mouzon/Herbie Hancock, Jack Miller Reggae, Teddy Pendergrass, Jennifer Holiday, Hollywood Beat, Solid Gold Show sound mixer/recordingist, various others.  
 Services Offered: Engineering, producing, songwriting and collaboration, mixing, fixing, editing

**GEOFFREY WORKMAN**

**Engineer & Producer**  
**ORIGINAL PROJECTS UNLIMITED**  
 7926 So. Alder Way, Littleton, CO 80123  
 (303) 972-3679

Credits: 22 platinum records and over 50 million plus in record sales. Credits include Journey, The Cars, Queen,

Toto, Foreigner, Sammy Hagar, Molley Crue, Twisted Sister, Tommy Tutone, Dokken, Ron Wood, Gary Nynck and more.  
 Services Offered: Original Projects Unlimited's primary interest is in original bands that have the potential to be commercially unique and marketable. The company specializes in recording production and packaging independent records, including production, engineering, art direction, and marketing strategies. Management available. Fees vary. Bands may submit bios and demos. All studios welcome to send brochures.

**BENJAMIN F. WRIGHT, JR.**

**Engineer & Producer**  
**RITESONIAN PROD. INC.**  
 7454 Vista Delmonte, Van Nuys, CA 91405  
 (818) 989-5373

Credits: Arranger on many hits: Michael Jackson, Earth Wind & Fire, Janet Jackson, DeBarge, Aretha Franklin, Whispers, Shalamar, Tavares, Gladys Knight & The Pips, Temptations, Paul Anka, Sergio Franchi, Diana Ross, Quincy Jones and many commercials.  
 Services Offered: 24-tracks with lots of digital equipment and computers. Arranger, producer (records, commercials, stage), songwriter, publisher, record label.

**CLEVELAND WRIGHT III**

**Producer**  
**MOTIVATOR MUSIC PRODUCTIONS**  
 1591 Bruckner Blvd., Suite #8-C, Bronx, NY 10472  
 (212) 328-8323

Credits: Temper, Anthony Malloy, Russel Patterson, Black Ivory, Impact, Instant Funk, Wayne and Charlie, Omar Chandler, Kid's At Work, Master's of Ceremonies.  
 Services Offered: Songwriting, arranging, producing, 32-track pre-production MIDI recording studio.

**PHIL YORK**

**Engineer & Producer**  
 705 E. Pioneer Dr., Irving (Dallas), TX 75061  
 (214) 438-8248

Credits: Twenty-year veteran has recorded gold and platinum records, musical numbers to Oscar-winning feature movie soundtrack. Was voted "Best Recording Engineer" 1983, by Texas Music Association. Skilled in all music styles. Produces and engineers audio for MTV type videos. Has recorded over 30 Billboard chart records. All in Texas.  
 Services Offered: Familiar with major Dallas area recording studios. Produces and/or engineers only highest quality products. A knowledgeable and easy-to-work-with pro-



**PHIL YORK**  
 Irving, TX

fessional. Can provide complete studio or location recording and production services for rock, pop, country, and other styles of music. Offers fast, excellent judgment in recording and mixing. Specializes in music recording for record release and sale. Offers introductory and advanced multi-track recording engineer training classes in Dallas Metroplex.

**MICHAEL YOUNG**

**Engineer & Producer**  
**MOTOR CITY MEDIA CORP.**  
 13121 W. Seven Mile Rd., Detroit, MI 48235  
 (313) 342-6550

Credits: Sound reinforcement engineer; Paradise Valley Revisited, Lerbe, Moment's Notices, Howard Baker, Mayor Frederico Pena, Mayor Coleman Young, Faith for Miracles. Video sound engineer; Faith for Miracles, Community Highlights, Golden Moments. Producer/engineer; Will Harris Band, Knots.  
 Services Offered: Live sound, video sound and recording engineering. Independent record and video production. Technical consultant for sound reinforcement and digital audio.

# 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 Burt on ImaX. Nile Rogers.
- ☐ 1985 November, North Central & Canadian Studios. George Massenburg. Video Supplement. Alligator Records. Women in Media Production.
- ☐ 1985 December, Tape-to-Disk 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 Titleman. 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 Kasen.
- ☐ 1987 January, Northwest Studios. Alternate Tunings. REM. Sampling. Polygram's Dick Asher. Jack Nitzsche.

## CHECK THE ISSUES YOU'RE INTERESTED IN.

# of BACK ISSUES CHECKED ABOVE at \$5.00 each  
 (\$6.00 outside U.S.) \_\_\_\_\_

CHECK ENCLOSED FOR TOTAL (U.S. Funds)  
 Payment must accompany order. \$ \_\_\_\_\_

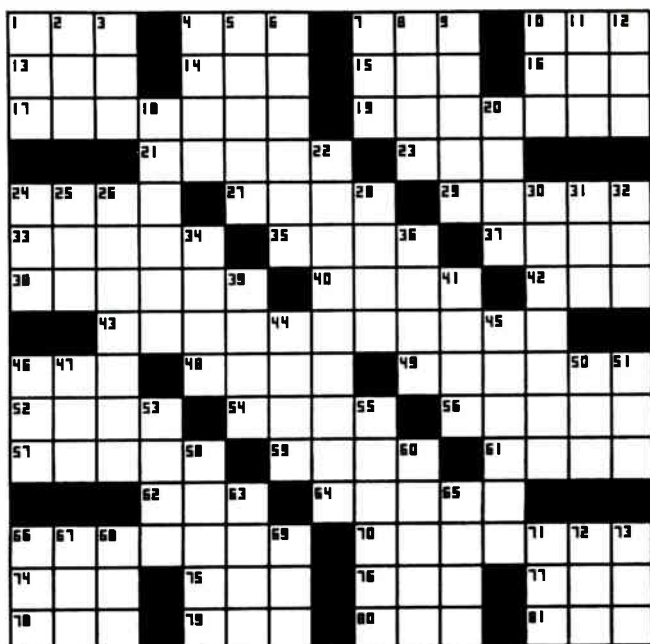
NAME \_\_\_\_\_  
 ADDRESS \_\_\_\_\_  
 CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

MAIL TO: Mix Back Issues, 2608 Ninth Street, Berkeley, CA 94710  
 Make checks payable to Mix Publications; allow four weeks for delivery within U.S.

# MIX WORDS

—CONTINUED FROM PAGE 12, SESSIONS

## STUDIO NEWS



©1987 Armand E. St. Martin

### "CAN IT BE, OR CAN IT NOT BE"

#### ACROSS

1. Routine
4. Sprite
7. I, in Essen
10. Fire
13. To's partner
14. Roof sealer
15. Also
16. Rubber tree
17. Orchestral boomers
19. Angelic axe
21. Songwriters' org.
23. Latin study word
24. Cicatrix
27. Leaves the path
29. Planter
33. Test
35. Dover
37. Donate
38. College

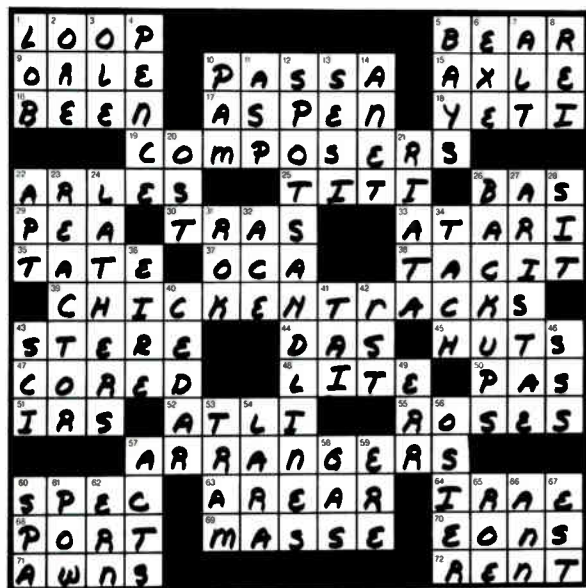
40. Noise
42. Type of cartridge
43. See 22D
46. Rocky Raccoon's girlfriend
48. Volcano
49. Type of eyes
52. Pronto
54. Reservoir
56. Hot spot
57. Certain Indian
59. Que
61. Hied
62. Palmas
64. Red ink item
66. Strings
70. Double reed
74. Metric measure
75. Meadow
76. Another Indian
77. Hwy.
78. Household god

79. Baste
80. "Blues"
81. "Holy"

#### DOWN

1. Ship segment
2. wolf
3. Cat
4. Greek letters
5. Poker
6. Padres
7. A great communicator
8. Earth's center
9. Payroll concern
10. It runneth over
11. Pub quaff
12. Butterfly
18. "Bourbon St."
20. Synthesis pioneer
22. With 43A, questionable stage practice
24. Engine additive
25. Tract of land (archaic)
26. Result of independent promotion
28. Bridge play
30. Plugged in or anxious
31. A Peron
32. Sleep abbr.
34. Fisher's need
36. Eskimo settlement
39. News
41. Bible name
44. Obligation
45. Shores
46. On the
47. ben Maryyam
50. Compass pt.
51. Pops
53. Mail
55. Pay for in advance
58. Toughness standard
60. Reced
63. Snicker
65. European river
66. Comics prince
67. Kind of account
68. Poetic preposition
69. See
71. Tolkien bad guy
72. Hearing prefix
73. Riders of the Purple Sage

### Solution to December Mix Words



Corey Kissinger has joined *Sigma Sound Studios* in Philadelphia as manager of the Technical Services Department. And "Abe" Taylor Abercrombie is that studio's new media services engineer... David Locksley has joined the creative staff of *Sea-West Productions* and *Sea-West Recording Studios*, Hauula, Hawaii... *Omega Audio* in Dallas has installed a new CMX CASS I audio post-production editing system... *Goodnight Dallas* recently purchased Yamaha REV7 and SPX-90 processors, two Nakamichi MR-1 cassette decks, the Sony 501 ES PCM digital processor, and an assortment of microphones... *Studio Unicorn* in Bridgeport, CT, recently added the Yamaha TX-816 (eight DX7s), the SP-12 Turbo sampling drum machine and DX-Droid/EZ-Tracks software... *Greene Street Recording* in New York City has become the first studio in the United States to receive the AMEK APC1000 console. The desk was to be installed and functional in December... *Quantum Sound Studios* in Jersey City, NJ, has installed their SSL-4000 (48 input) console with Total Recall... *Trod Nossel Recording* in Wallingford, CT has purchased a Sony JH-24 with Autolocate from Lasalle Pro Audio Boston/Hartford... *Creative Audio/Video Engineering* has opened in Prescott, AZ, offering complete music and video production for radio, television, single artists, etc. Equipment includes a Soundcraft 1600 console, Tascam MS-16, 16-track recorder, Yamaha REV7 and SPX-90 digital effects units, dbx comp/limiters and noise gates, Lexicon PCM41 and UREI 809 monitors... *Studio Ultimo* in West L.A. completed installation of a custom 3-way TAD/JBL component monitor system... *Quest Recording*, Oshawa, Ontario (Canada), has upgraded to 24 tracks with the addition of a Studer A80 MkIV multi-track and Quad Eight Westar 36-input console with Compumix automation... *Bob Harman* and *Jim Cook* have joined *Walt Disney Pictures* as re-recording mixers in the studio's newly renovated Burbank sound facility... *The Enterprise* in L.A. has obtained some equipment for its electronic keyboard facility including a Lexicon 480-L, two Massenberg pre-amps, and six Lynx synchronizers... *Barbara Jefferies* has been appointed scoring administrator for *Record Plant Scoring, Inc.*, which leases and manages studios "L" and "M" on the Paramount Pictures movie lot... Acoustic Spaces Inc. has completed the designs for *Fantasy Factory's* new 24-track studio building. Construction will begin in the Spring in Sugarloaf, NY... *Solid Sound's* offspring business, *World Class Tapes* located in Ann Arbor, MI, purchased a new Infonics cassette master, model 204A, as well as a new Infonics cassette slave, model 364A. This enables them to produce real time quality at high speed time... *Greg Youngman Music* in Long Beach, CA, recently purchased a Prophet 2000 to aid in producing music and effects for radio/TV commercials...



# Mix BOOKSHELF

**The MIX BOOKSHELF Catalog is a selection of the best audio/video/music books and tape courses currently available from more than 60 leading industry publishers.**

Now it is simple and convenient to order these hard-to-find items from a single source by phone or through the mail. Send for our free catalog with hundreds of titles.

**1031C) MODERN RECORDING TECHNIQUES, Robert Runstein, David Huber** The updated 1986 edition of this classic book contains state-of-the-art technical developments and practices in recording. Practicing engineers and students will find comprehensive coverage of equipment, acoustics, controls and techniques, as well as information on proper and creative production and sound measurement. 366 pp.(P) \$18.95

**1340B) THE MASTER HANDBOOK OF ACOUSTICS, F. Alton Everest**  
An all-inclusive sourcebook that fully explores the world of acoustics and sound reproduction, transmission, and reception. Includes much detail on hearing, ear anatomy and sensitivity, and audibility, room testing, and loudness vs. frequency, and intensity, and bandwidth.

337 pp.(P) \$12.95

**1415B) SUCCESSFUL SOUND SYSTEM OPERATION, F. Alton Everest**  
This excellent new book provides background information on the physical nature of sound, electricity and electronics. It also gives in-depth detail on current equipment with a very useful section on equipment usage including microphone placement and usage, speaker care and placement, the working mechanics of amps, mixers, and signal processors, tips on troubleshooting and repairing audio equipment, detailed information on noise reduction, room acoustics, sound equalization, and more.

336 pp.(P) \$17.95

**1440B) THE DIGITAL DELAY HANDBOOK, Craig Anderton** An outstanding book to help unlock the hidden potential in virtually any delay line. In addition to long, short, and multiple delay line techniques, it contains 66 different applications including auto flanging, sound pre effects, tuning percussive sounds, phase shifter simulation, reverb pre-delay, synco-sonic echo effects, and much more. 134 pp.(P) \$9.95

134 pp.(P) \$9.95

**1353B) AUDIO SWEETENING FOR FILM AND TELEVISION, Milton Hubatka, Frederick Hull, Richard Sanders** This excellent new guide explains all current post-production techniques and equipment for sweetening audio tracks. The basic techniques of spotting, laydown, track building, mixing, and layback are covered as well as the advanced techniques for treatment of on-camera dialog music, sound effects, Foley, narration, background presence, stereo mixing and more. Includes sections on smaller scale TV productions, the history of sweetening, and state-of-the-art developments. 240 pp.(H) \$29.00

**3010B) THIS BUSINESS OF MUSIC (REVISED AND ENLARGED), Shemel & Krasilovsky** This highly comprehensive 1985 reference provides detailed explanations of legal, practical, and procedural problems of our industry. Part 1—Recording companies and artists; Part 2—Music publishers and writers; Part 3—General music industry aspects. Includes over 200 pages of contracts, forms, and licenses. 646pp.(H) \$22.95

**3250B) SINGING FOR THE STARS, Seth Riggs** This complete program for voice training was written by one of the most respected vocal coaches in the world. His students have included Michael Jackson, Al Jarreau, Bette Midler, Stevie Wonder, James Ingram among others. No matter what style of music you sing, from pop to opera, Seth Riggs' techniques will increase your vocal strength, clarity, flexibility, and range. 146 pp. plus two cassettes \$29.95

**3570B) MIDI FOR MUSICIANS, Craig Anderton** This brand new 1986 release is by far the best book we've seen on the subject. Clearly and thoroughly it discusses the evolution toward Musical Instrument Digital Interface, how MIDI solves musician's problems, the MIDI language and what it means in musical terms, how computers work in musical applications, MIDI applications both live and in studio, typical features of MIDI gear and their musical uses, set up and use of MIDI-based studios, MIDI accessories, musician-oriented software, and much more.

104 pp.(P) \$14.95

**3580C) FOUNDATIONS OF COMPUTER MUSIC, Edited by Curtis Roads & John Strawn** This superb reference book from MIT is the most complete overview of the field for serious students and practitioners. In four sections it covers Digital Sound-Synthesis Techniques, Synthesizer Hardware and Engineering, Software Systems for Music, and Perception and Digital Signal Processing. It contains many classic articles in revised and updated versions and should be in every contemporary composer's library. 736 pp.(H) \$50.00

736 pp.(H) \$50.00

**MIX BOOKSHELF • CALL TOLL FREE (800) 233-9604, IN CALIFORNIA (800) 641-3349**



# MIX BOOKSHELF

PLEASE SEND BOOKS TO:

NAME \_\_\_\_\_

COMPANY NAME

ADDRESS

CITY

ZIP

☐ Please send complete Bookshelf Catalog (FREE)  
MIX Bookshelf, 2608 Ninth St., Berkeley, CA 94710. Allow 3  
to 4 weeks for delivery. FEBRUARY

FEBRUARY 87

Book #

Quantity

### Price

**SUBTOTAL**

Postage & handling \$3.00 first book, \$1.50 each additional book

CA residents add 6.5% tax

TOTAL

☐ Check enclosed for total.  
☐ Bill to: ☐ VISA ☐ MC

Credit Card #

Expiration Date

Signature

# F E E D B A C K

## Dear Mix:

The article entitled "Cassette Tapes: A Critical Survey" which appeared in the December, 1986, issue of *Mix* described tests of cassette tapes by an "expert." The method of testing and the criteria for judging performance are extremely questionable and contrary to tape manufacturers' methods of testing and the IEC testing standards. Any conclusions drawn from such testing would tell *Mix* readers very little about tape quality and perhaps mislead those readers who did not see the obvious flaws in test procedure.

The first and most obvious problem is introducing a variable such as noise reduction into the test. When one tests tapes, one must always realize that the recorder's influences are also being tested. This is inescapable. To introduce another variable such as noise reduction into the test removes the tape further from definite conclusions about its own performance. A second problem is the choice of test parameters. Frequency response depends on the bias signal, record preemphasis (assuming the playback equalization is correct), the record and playback heads (the widths of the gaps in particular), the flux level on the tape, and other, lesser factors. Frequency response is *not* a measure of tape quality. It is a measure of compatibility between tape and machine.

Tape quality is measured by dynamic range at high and low frequencies, modulation noise, print-through, consistency, and mechanical properties of the tape. The only parameter of quality mentioned in the article was the bias noise portion of dynamic range, which is the spread between bias noise and maximum output of a particular signal at a given limit of distortion.

As a "General Observation," the author claims type II tapes outperform type I tapes if the type II bias and record equalization are used for recording and the wrong 120-microsecond playback equalization is used for playback. This is not true. Such a tape will have more treble response, but it will also have more noise and be an inaccurate copy of the original signal. No true tape expert would make

such a suggestion without such a warning, and no expert would consider such a result to be better performance.

The article is interesting in that it represents an attempt by a creative and curious tape user to sort out cassette tape quality. *Mix*, as a recording industry magazine, should identify articles as written by true experts or by amateurs so that readers can better interpret the information. There were too many mistakes in this particular article that could mislead non-technical readers and injure the reputations of manufacturers of high quality products.

Sincerely,  
Terence D. O'Kelly  
National Sales Manager  
Professional Products  
Audio/Video  
BASF Corporation, Bedford, MA

## Dear Mix:

Cassette tape has lived with a mysticism surrounding it for as long as the medium has existed. The lack of correct information concerning cassettes has been reinforced by your magazine's publishing the cassette tape comparison in your December 1986 issue. The test methods used in this article bear no resemblance to correct test methods used in any professional recording situation.

After many years of working with magnetic tape both large and small, I have found that if one treats the cassette medium as a magnetic tape, and respect it the way we respect tape at any other point in the recording chain, it can give us reasonable renditions of what we attempt to record. Continuing to treat cassettes as some dark phenomena as this article implicitly does, only reinforces the inability of so many to deal with cassettes correctly. Truly, this article has shown the need for much more information about the cassette medium.

Matthew J. Sutton  
Sutton & Associates, Seattle, WA

**Note:** The cassette tape survey in our December issue represented the author's attempt to quantify differ-

ences between tape types and brands using simplified methods and test gear such as a pink noise generator and audio frequency spectrum analyzer. The procedure was far removed from sophisticated and established practices such as the IEC testing standards and should have been plainly identified as such. Our apologies to all concerned for any misconceptions this may have caused.

## Dear Mix:

As someone who subscribed to [another pro audio magazine] for many years, I find your format very refreshing. Articles on the video as well as audio aspects of studio and live work broaden perspectives on the marriage of the mediums which will soon occur. I've been doing live shows (concerts and video) up here in the Great White North for about 15 years and have always relied on professional audio publications for new products and skills information. The evolution of the digital world doesn't make it far past Toronto, Montreal or Vancouver; therefore your mag is of great service to us snowbunnies who try to keep up with the real world while trying to keep our snowblowers running.

As part of my business is becoming more video than audio, I would appreciate the addresses of some large-screen projection system companies (i.e., Barco and General Electric). This is definitely on my buying list for Spring '87, since there are none in this area and I feel it would be a good business move. Anyway, keep up the good work and keep your skis waxed.

Sincerely,  
Michael Plant  
Great Northern Sound  
Hamilton, ONT, Canada

**Dear Michael:** For more information on the systems you mentioned, contact: General Electric Company, Projection Display Products Division, Electronics Park 6-206, Syracuse, NY 13221; and Barco Industries, Inc., 2211-B Executive St., Charlotte, NC 28208.



echo left/right" providing an echo return effect taken from the snare 1/4 cart; according to the Wendel manual this was designed to provide a less expensive alternative to renting a digital echo unit just to provide a snare drum echo in the studio.

This brings up the subject of documentation, which in the case of many products is unreadable, or at best confusing—often seeming to have lost something in the process of being translated from Sanskrit to Nahuatl. Happily, the Wendel jr manual doesn't follow the norm: it is concise (18 pages), helpful and informative, while keeping instructions in a light and occasionally even amusing vein. This is really how manuals should be written and many manufacturers could learn a thing or two by checking out Wendel's.

Triggering accuracy is excellent, and *fast*. Wendel's specifications state total trigger delay does not exceed 32 microseconds, which is roughly equivalent to 1/30th of a millisecond. In comparison, MIDI propagation delays are commonly encountered in the three to 15 millisecond range, and sometimes go much higher. In a variety of studio situations, triggering from drum machines, taped tracks, and live from a preamped mic signal, Wendel triggered so fast as to be considered instantaneous.

So, Wendel jr triggers like lightning, is versatile, and even comes with understandable instructions. But how does it sound? While the evaluation of the quality of sounds is largely subjective, I can safely state that Wendel's samples are excellent. We played the kick/snare cart (included with the unit) using an alternating bass/snare quarter note beat and synched it up to "Time Out of Mind" from the Steely Dan *Gauche* CD. The drum sounds were identical. So you don't have to trust my opinion—if you've heard *Gauche* or Donald Fagen's *The Nightfly*, then you've already auditioned the original Wendel, and Wendel jr's sounds are the same. By the way, the Wendel samples are all recorded fairly dry, so users are free to add their own favorite signal processing as required.

At \$995, Wendel jr is priced right, and it's a real studio timesaver, especially in those situations where the drum sound is somewhat lacking. The optional cartridges are priced in the \$75 range, and Wendel Labs recently announced an agreement to provide software of the Wendel sounds transferred directly in the digital domain to the Fairlight format, so CMI users can also take advantage of Wendel. Either way, Wendel jr is a winner—an indispensable tool with much to offer the creative producer. ■

## Your Career In Audio, Recording and Broadcasting

# Learn the LIVE Way at Interlochen

An intensive, full-time clinic workshop which helps prepare students for a career as recording engineers in radio, tv, film and theatre.

### FEATURES

- Hands-on participation in recording daily concerts and rehearsals. Special emphasis on recording for Summer Arts Festival which has featured internationally known artists such as Chuck Mangione, Bob James, Woody Herman, Wynton Marsalis, Ella Fitzgerald and others.
- Full range of recording experiences — orchestra, band, chamber music, choral performances, opera, contemporary music, jazz.
- Produce radio programs for national broadcast.
- Study with top professionals using top-of-the-line equipment.
- Academic credit available through the University of Michigan.
- One 2-week session and two 3-week sessions beginning June 22.

**Enrollment is Limited. For a Free Brochure, Write or Call.**

**Interlochen**  
Center for the Arts  
Interlochen, MI 49643  
Phone: (616) 276-9221, ext. 360

Name _____			
Address _____			
City _____	State _____	Zip _____	
Phone _____			

Circle #123 on Reader Service Card

## MIX CLASSIFIEDS WORK!

- **PROVEN RESULTS** — Classified advertisers report quick turnover in the buying and selling of equipment/services. You get increased sales and opportunities!
- **LARGEST READERSHIP** — *Mix*, the only BPA audited pro-audio magazine, has a monthly circulation of 42,000 people with an estimated pass-along readership of over 75,000 industry professionals. We've got your market covered!
- **ASSISTANCE IN AD PRODUCTION** — The *Mix* Classifieds Department will help you write and produce your ad copy to ensure the best results for your business. We guarantee accuracy!
- **GET IN ON THE ACTION!** — To place an ad, call the Classifieds Department, (415) 843-7901 or send ad to: *Mix* Classifieds, 2608 Ninth St., Berkeley, CA 94710. (Please see the Classifieds section in back of the magazine).

# CLASSIFIEDS

## Employment Offered

EXPERIENCED AUDIO TECHNICIAN FOR DEALERSHIP TO FIX CURRENT AND VINTAGE EQUIPMENT. SEND RESUME AND SALARY HISTORY TO: CITY SOUND, BOX 9830, BERKELEY, CA 94708.

TECHNICAL MANAGER to augment Audio Kinetics technical support division. An electrical engineering degree and broad studio background preferred. Salary commensurate with experience. Write to: Iain Roche, 1650 Hwy. 35, Suite 5, Middletown, NJ 07748. (201) 671-8668.

MAINTENANCE ENGINEER NYC 24-trk studio seeks all-around in-house tech. engineer. Some engineering or 2nd engineering possible. Familiarity w/SSL preferable. Will train. Salary and benefits. (212) 840-3285. Call 10-5 (est) days.

**SALES—MONSTER CABLE.** If you are energetic, hard working and love audio, we need you! Small, fast growing audio accessories company is looking for bright sales minded individuals for management positions. Insert your ideas in sales, marketing strategies. Must be familiar w/audio industry and have sales exp. Growth opportunities abound. Call Julie at (415) 777-1355 between 2-4 p.m. pacific standard time.

## Employment Wanted

**MAINTENANCE ENGINEER AVAILABLE** with over nine years experience in TV and production studios (wants to relocate to So. Calif.) Have experience on most state-of-the-art audio and video systems including Neve, SSL, Studer, Ampex, Sony, GVG, Quantel, RCA and many others. For further information contact G.H. Whitehead, 1403 West Cuyler, Chicago, IL 60613, (312) 935-8905.

## Equipment For Sale

### LEASE/BUY/SELL

Great prices and great service on over 200 lines including Otari, Harrison, Soundcraft, Tascam, JBL, Lexicon, AMS, Akai, Fostex, KT, dbx and all the rest for the best in new or used. Call for our latest listing. **AVC SYSTEMS (800) 323-0281**, in MN call (612) 729-8305.

LOW OVERHEAD MEANS LOWEST PRICES. We carry most major lines of pro audio & recording equipment. **Get your best price, then call me.** 3M Tape and accessories at factory prices.

**S.C.M.S.**  
East U.S. Toll Free:  
**(800) 438-6040**  
West & N.C.: (704) 889-4509

**VINTAGE TUBE MIKES**  
Call Bill Bradley  
(312) 751-1216

## Reliable Music

featuring  
RECORDING STUDIO BROADCAST AUDIO &  
SOUND REINFORCEMENT EQUIPMENT

## HOW CAN WE HELP YOU?

• QUALITY AUDIO • GUARANTEED PERFORMANCE  
• DEPENDABLE SERVICE • COMPETITIVE PRICES  
704/375-8662  
PRO AUDIO DIVISION 1001 S INDEPENDENCE BLVD  
CHARLOTTE, NC 28202

## SIGMA SOUND STUDIOS GREAT EQUIPMENT BUYS:

2, 4-trk recorders, synchronizers, hi speed dupe equip plus lots of audio processing gear.

Call or Write:  
212 N. 12th St., Phila., PA 19107  
(215) 561-3660

KURZWEIL, AKAI, TANNOY & AUDIO-TECHNICA. Best prices on the new Kurzweil 250 & Akai MG1212. Complete studio and sound system packages available. New & used, buy and sell. **SOUND ADVICE** (205) 592-4555, (800) 826-6552.

## IF YOU'RE NOT USING IT —SELL IT!

Your national clearinghouse for used audio and video! Call for free copy of our latest listings, or to list your used gear free.

The Bertech Organization  
Call toll free: (800) 992-2272  
In Calif. call: (818) 909-0262  
**THINK BERTECH FIRST!**

**24 TRK: \$16,800. 16 TRK: \$5,400.** British-made ACES equipment features 24 TRK, 2", 30&15 ips, 50% vari, remote, a solid deck. 32 input, 24 subgroup mixer, \$12.5k. 16 TRK 1/2", built-in NR, ind. bypass, O-search, nice! 2 YR warranty. Factory distributor **ROCK STUDIO SUPPLY**, Box 5997, Norman, OK 73070, (405) 329-8431.

## USED EQUIPMENT

Bought & Sold  
List on request.



**Summit  
Audio  
Inc.**  
P.O. Box 1678  
Los Gatos  
CA 95031  
408-395-2448

## MCI PARTS & MACHINES

Specializing in JH416, JH428, JH10, JH100, JH114 parts. Used heads, cards, new lamps, assoc. spare parts. Call for list and prices. Randy Blevins (615) 361-8429.

## NEW, USED, DEMO SALE RECORDERS, CONSOLES, OUTBOARD EQUIPMENT

Ampex ATR102 2trk, 4trk,  
Tascam 80-8 w/DX8,  
Soundcraft 2400, JVC, Sony  
3/4" VCRs, Monitors, Lexicon  
200, Tangent 20X4, Yamaha  
REV7s and SPX90s, Crown  
Amps, Telex 300 Duplicator.  
**E.A.R. PROFESSIONAL  
AUDIO**  
(602) 267-0600

## NATIONAL SOUND & VIDEO ENGINEERING Recording,

Sound Reinforcement, Video  
Tape Duplication & Broadcast  
Equip. Dependable Personal  
Service. Major lines at very low  
prices. Get your best price then  
call us. **NATIONAL SOUND &  
VIDEO ENGINEERING**, 6350  
J. McDonough Dr., Norcross,  
GA 30093, (404) 447-1717.

Neve 8108 console, 32x24x32: 64 inputs available at mixdown, 32 Necam I faders, (7) "Touch for combine" fader options, updated electronics, all pots & switches refurbished by Neve 6-86. Installed in private studio since new & used by the following artists: Sammy Hagar, .38 Special, Heart, Pat Benatar, John Waite, Kim Carnes, Joe Walsh, Stevie Nicks, Rick Springfield, Loverboy, Journey, Bad Company, and many more... Asking \$90,000 or BO. Contact Vicki Seeger at Good-night LA Studio (818) 782-0221.

## ORIGINAL MCI FADERS

Large inventory of impossible-to-find original and new MCI Faders for the following consoles: MCI part # ASA-6000-330-01, VCA channel fader stereo/line modules; ASA-6000-330-02, Mono channel fader w/detent switch for 500 series consoles; ASA-6000-330-03, Mono

non-automated audio fader; ASA-6000-0340-11, Stereo audio fader for 600 series consoles. If your MCI board needs a replacement fader, or if you simply anticipate needing spares, don't try a different manufacturer with a different "feel"—use an OEM MCI fader at a wholesale price.

Call: Control Technology, Inc.  
2950 S.W. 2nd Ave.  
Ft. Lauderdale, FL 33315  
(800) 327-4121 (Outside FL)  
(305) 761-1106

**New Used & Demo Soundcraft** Neotek, Otari, Akai, Klark-Teknik, dbx, E-V, **LEXICON. USED NEOTEK CONSOLES**, microphone sale, over 200 mics in stock. E-V, AKG, Beyer, Sennheiser, etc. New E-V N-Dyn mics in stock. Call **Pyramid Audio Inc (312) 339-8014.**  
**Call Us Last!**

## 48 TRACK CONSOLE:

Sphere Eclipse C—48 inputs, outputs, & monitor, plus 12 returns. Automated, 4-band parametric EQ, plasma meters—many other features. Asking \$75,000. Call Arthur Stoppe at Sigma Sound, (215) 561-3660.

## STUDIO SUPPLY

New Equip. Sales—AMS, Lexicon Sony, Amek, Tascam. Other New products avail. Used Equip. avail.—Harrison 3232C 28 I.O., Harrison 2824 auto, MCI 416 LM 24 I.O. w/spares, 2 Prod. desks, Sphere C w/auto. & light meters, 1 Quantec room siml., (2) MCI JH-100 16-trks, 1 MCI JH 110C w/Full Remote, Neumann tube mics. Other machines & consoles avail. Call (615) 366-1890 —Randy or John.

24-trk home studio—aces ML32 console, PB, Aces TR24 24-trk, Otari 5050B 2-trk, Nakamichi MR-2, JBL 4411s, Auratone 5C, Klark-Teknik DN780 digital reverb and DN760 1/3 octave graphic EQ—drums—amps—guitars—mics—much more—package price or individual price—Call David Artis (813) 887-1711 (8 to 4), (813) 962-2709 (6 to 10).

Synclavier II Computer Music System, w/24 voices, stereo for 24 voices, \$19,500. Digital guitar interface, \$3,500. A.S.L., 832 N. Cole Ave., Los Angeles, CA 90038. (213) 462-5923.

## API CONSOLE

Original Sound Factory Studio A console. 28 input, 16 bus, 24 monitor. 2520s & 550A EQs. \$29,500. Ask for Jon — (213) 467-2500.



**COMPLETE INFONICS 200A TAPE DUPLICATION SYSTEM** for sale. Mint condition. Best in-cassette system. Call for full details: (213) 434-5355

**PENTAGON DUPLICATOR C322** \$500, LEXICON 224 w/4.4, remote \$4,000. Wollensack 2770 w/slave \$1,000. (816) 931-8735, Grant.

**BTX Package:** Shadow II and Cipher. ADR Panscan, Buchla synths, Prophet-10, 6-trak, HM80 Harmonizers, Yamaha MEP4, Drumulator, Rane SM26 6-ch. mixers. (16) Aphex 500A VCA's in 19" rack mount w/XLR's. (212) 645-6319. Leave message.

Ampex AG-440-B 2-trk rec. factory console \$1,900, Ampex 351 2-trk console \$1,100. Ampex 351 full trk \$700. Ampex AG-350 full track factory console \$900. Ampex AG 600-B 2-trk 3 1/4 and 7 1/2 \$550. Interface console 24 x 16 mainframe 20 in x 8 out \$2,700. Sony MX-20 8x4 console \$840. McIntosh MC-75 power amp \$275. Call David (606) 546-6650.

#### "LUCY"

Ampex MM1000 16-trk (2") dc Servo updates, vari-speed 15-30 ips, exc. heads, remote carefully maintained, reliable \$6,250. (415) 655-9490.

**FOR SALE:** MCI 416-24x24 \$12.5K, Ampex MM1100-16 \$10K, over 50 mics, U87, KM84, C-500, etc. Send for list. All equipment is in perfect condition and is available for immediate pick up in Palm Beach, FL. Jon Lind, Box 024453, W. Palm Beach, FL 33402, (305) 391-3793.

**SIDEREAL KAP.** The SiderealKap was designed from its inception to be the finest sounding capacitor available for audio today. Find out what the music lover's capacitor doesn't sound like. Free literature and price information upon request. Dealer inquiries invited. **SIDEREAL AKUSTIC**, 1969 Outrigger Way, Oceanside, CA 92054, (619) 722-7707.

#### FOR SUPER SAVINGS CALL MONTANA SOUND

(406) 252-2198  
 AKG D321 ..... \$103  
 APHEX TYPE C ..... \$209  
 JBL 4430 L, R ..... \$1,580  
 PROPHET 2000 512K ..... \$1,890  
 SOUNDCRAFT 600-24 ..... \$6,098  
 TASCAM 38 ..... \$1,966

APSI console 34x24, 3M-79 24-trk recorder w/Selectake II, outboard effects by UREI, Lexicon, Eventide, etc. All equipment very clean and meticulously maintained. Complete 24-trk studio liquidation priced to sell! Call for list (313) 531-5354.

Shadow IIs w/latest software, \$2,200 ea. (four avail.) AMEK 2500 36x24 auto., expanded patchbay, exc. cond. \$29,500. Call Dave (818) 843-4762.

4 trk, 8 trk and MIDI studio gear. Best prices—courteous, knowledgeable staff. Most major lines of pro audio keyboard and studio equipment. Call our toll free watts line 1-800-354-7252 when you're ready. Mike, Bill, Terry or Marty.

**SONY PCM's**

Audio Gallery has hard-to-find Sony PCM-501ES, PCM-601ES, Portable PCM-F1. CALL!

**HIGH-END AUDIO**  
 PCM • LC-OFC WIRE • SOFTWARE  
 ANALOG PLAYERS

Also call us for the finest in TURNTABLES, TONEARMS, CARTRIDGES and revolutionary new LC-OFC WIRING, BANSEI SOLDERLESS PLUGS & MORE. BEST PRICES!

AUDIO GALLERY • Tues - Sat, 10AM-6PM  
 (213) 829-3429  
 2718 Wilshire Bl., Santa Monica, CA 90403

**LOST LEASE GOING OUT OF BUSINESS**  
 16 track; Everything must go! All equipment under three years old. Will sell as package for \$30,000, or break up. Call for price list. (516) 661-4831.

Brand new 2" 24-trk, never used ACES MT24 HS with nine position autolocate \$12,500. Soundcraft Series II 24x8, Sweep EQ, P&G faders, with full patchbay and cabling \$4,200. (604) 875-6821 DON.

#### DEALER CLEARANCE SALE

Act now! Save big!  
 KLARK TEKNIK DN780 digital reverb, \$4450 (U.S.); URSAMAJOR 626 Stargate digital reverb & effects, \$2150 (U.S.); TASCAM M-15 24x8x16x2 used—like new! \$6500 (U.S.); MCI JH-16/24 16-trk on 2-inch w/autolocator, \$11,500 (U.S.); CHILTON QMII 16x8x16x2 loaded, \$5750 (U.S.); STUDIO-MASTER 16x8 recording board, \$2850 (U.S.); DYNAMIX 3000 16x8x2 recording board, \$3650 (U.S.); SOUNDTRACS MR Series 24x8x16, \$7950 (U.S.); FOSTEX LS-3 studio monitors, \$2600/pair (U.S.); TANNOY BM-8 broadcast monitors, \$850/pair (U.S.); RANE SM-26 splitter/mixer, \$275 (U.S.); TASCAM MU-40 meter unit, \$185 (U.S.); REBIS effects rack—loaded, call us; AHB CMC-24 w/meter bridge, \$6150 (U.S.)

**RICHARD AUDIO INC.**  
 (514) 487-9950 Montreal

## Equipment Rental

On-Call 24 Hours



1619 Broadway, N.Y., N.Y. 10019  
 (212) 582-7360

#### The Best That Money Can Rent

- Digital Multitrack
- Outboard Equip
- Time Code Equip
- Mixing Consoles
- PA Equip
- Walkie Talkies
- Wireless Mikes
- Video Playback

**SONY PCM-3324, 24-TRACK RECORDING SYSTEM** available for daily/weekly rentals. Currently housed in a San Francisco studio. Available for studio clients or outside rentals. For information, please contact Suzi Peterson at Windham Hill Productions, (415) 331-1502.

#### DOLBY SR RENTALS

also: TIMELINE LYNX, VCRs, QUANTEC, PCM-F1/SL2000, U67, LEXICON 480, ETC. ETC. JOHN FRANCOMBE (415) 383-4018.

### Design Fx Audio

#### DIGITAL AUDIO RENTALS

Specializing in digital tape machines, reverbs and effects processors. Technical consultation included.  
 (213) 838-6555  
 Outside CA (800) 441-4415  
 P.O. Box 491087  
 Los Angeles, CA 90049

KURZWEIL MIDI BOARD and EXPANDER 250 with all options, E-MU SP-12 Turbo, OTARI 5050BII and other keyboards and effects. Call for complete listing on rentals. Lowest rates in the Chicago land area Stage Fright Inc. P.O. Box 237, Dolton, IL 60419 (312) 849-3735.

## Instruction

#### BE A RECORDING ENGINEER!

New classes quarterly.  
 INSTITUTE OF AUDIO/VIDEO ENGINEERING  
 1831 Hyperion, Dept. E  
 HOLLYWOOD, CA 90027  
 (213) 666-3003

#### LEARN FROM THE PROFESSIONALS

By Carol Kaye:

How to Play the Electric Bass . . . \$4.95  
 Electric Bass Lines #1 . . . 3.95  
 Electric Bass Lines #2 . . . 3.95  
 Personally Yours . . . 4.95  
 Electric Bass Cassette Course . . 35.00  
 Electric Bass Lines #3 . . . 3.95  
 Electric Bass Lines #4 . . . 4.95  
 Electric Bass Lines #5 . . . 3.95  
 Electric Bass Lines #6 . . . 3.95  
 How to Play Elec.  
 Bass Chords . . . 4.95

#### And Much More!

Please write for a free catalog.

Foreign postage: \$2.00 1st book, \$1.00 ea. additional. \$1.50 for cassette. \$8.50 C.K. Bass Cassette Course - \$13.50 to Australia, N.Z. & Asia.

Sorry, no CODs. Colorado add 6% tax. Good store discounts.

**GWYN PUBLISHING CO.**  
 177 Webster St., #272  
 Monterey, CA 93940

GOOD MUSIC MAKES A HAPPY WORLD

**INSTITUTE OF COMMUNICATION ARTS.** Commercial Music Performance, Audio Engineering/Prod., Vid-

eo Prod./Sound Reinforcement, Music & Entertainment Bus., Communications, Electronic Music, Music Theory & Arrang. 2 Yr. Prog./P.T. Studies. 12-12840 Bathgate Way, Richmond, B.C. Canada (604) 278-0232.

The Mix Bookshelf offers the best selections of books and tapes for the audio, video, and music industries from over 65 leading publishers. Write or phone for your free copy of our current catalog.

#### MIX BOOKSHELF

2608 Ninth Street  
 Berkeley, CA 94710

CALL TOLL FREE: (800) 233-9604  
 In California: (800) 641-3349

#### EDUCATIONAL VIDEOS

Two hour sound mixing/recording by top pro \$39, six hour sound mixing/recording \$139; two hour MIDI course \$39; Visa/MC/check. For brochure: RECORDING ASSOCIATION, 5821 SE POWELL, PORTLAND, OR 97206, (503) 777-4621.

## Maintenance Services & Repair

**New York Technical Support, Ltd.**  
 IS  
 SERVICE



"We are factory trained by SSL, Studer, Otari, MCI, Ampex, 3M, Neve, Trident, and Scully. Our work is guaranteed."

CALL  
**GREG HANKS**  
 914-238-4171

35 Hardscrabble Hill  
 Chappaque, NY 10514

## Music Products/Software

**SP-12, PROPHET 2000, LINN 9000**

**SAMPLED DRUM & PERCUSSION SOUND LIBRARY**

USED BY MICHAEL JACKSON &  
 GIORGIO MORODER

available on disk

SEND \$5 FOR EACH SPECIFIC CASSETTE DEMO TO

**studio digital samples**

18653 Ventura Blvd., Suite 560A  
 Tarzana, CA 91367

## EMULATOR II PROPHET 2000 MIRAGE

### DIGITAL HORIZON™ SAMPLES

#### "EXPERIENCE PERFECTION"

- COLLECTION #1: PREMIERE
  - #1 Piano #6 Anthology
  - #2 Bass #7 Composer's
  - #3 Master Strings #8 Tool Kit
  - #4 Brass #9 Drum Kit
  - #5 Orchestra #10 Percussion
  - Classics #10 Cosmos
- \$25.00 ea. Disk \$199.95 10 Disk Set
- CUSTOM SAMPLING FOR STUDIO AND FILM
- KORG DSS-1, AKAI S900, & ROLAND S-50 SOON!
- Sampling Sound Cassette: 125 PCM Mastered Sounds: \$19.95

### SONIC HORIZON™ SOUNDS

#### "PROGRAMMING MASTERY"

- DX-7, TX • DX-100, 27, 21 • CZ series Juno 1, 2 • Six Track • TR-707 patterns. RAM, ROM, Disk, Data Sheet formats.
  - Demo Cassettes Available: DX, CZ, Juno, Emu, Prophet, Mirage. \$5.00 ea. (post. incl.) specify.
  - Write or Call: Complete sound lists, info. (specify) Software catalog.
  - Shipping: U.S. & Can.: \$3.00 Foreign: \$8.00. Demo: \$8.00 (post. incl.)
  - Send Check or M.O. Call for COD
- Dealer Inquiries Welcome



**MIDIMOUSE™ Music**  
Box 272-XB  
Rhododendron, OR 97049  
(503) 622-5451

## ENSONIQ ESQ 1 - MIRAGE EQUIPPED STUDIOS

For the ESQ 1  
ESQ SET A  
•40 patches on data cassette  
and programming sheets .....\$19.95  
•4 demo program sheets.....\$2.00\*

For the MIRAGE  
CUSTOM DESIGNED DISKETTES  
•Demo cassette, sound list, disk  
design form.....\$5.00\*  
•Same package plus demo sound  
diskette .....\$7.50\*

\*credited toward purchase  
*Madway Software*  
P.O. Box 137  
Palestine, Illinois  
62451

## Recording Services

Hamilton Brosious Associates

### STUDIO EQUIPMENT APPRAISALS

If you need a professional appraisal of audio/video equipment for insurance purposes, estate settlements, loan collateral evaluation or any other purpose, you are invited to call us.

Nationwide Service

(203) 359-3506 IMC #987

## DOES THE MIXING JOB ON YOUR 24-TRACK RECORDING LEAVE SOMETHING TO BE DESIRED?

Poor EQ? Bad levels? Too much or too little delay, reverb, compression? Paradise Sound Recording offers a top notch mixing facility with an overwhelming selection of outboard effects and

### WE'LL MAKE IT RIGHT!

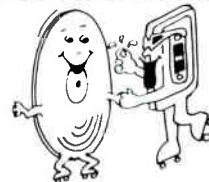
Send the 2" - 24 track master, a cassette copy of the original mix and your instructions for changes along with a check or money order for \$575 per song to:

**PARADISE SOUND RECORDING, Inc.**  
P.O. Box 63  
Index, WA 98256  
(206) 793-2614

**STUDIO 4 RECORDING**  
has full-blown **SYNCLAVIER**, **NEVE**, **STUDER** 24-trk, \$1,000/day includes: engineers, operators, outboard gear—everything. Clients include: Hooters, Sister Sledge, George Thorogood, Rick Chertoff, Schooly D. Call for information—in Philly—(215) 923-4443.

## Records & Tapes

## Diskmakers



**RECORD PRESSING  
CASSETTE DUPLICATION**  
SEND FOR OUR PRICE LIST  
**CALL TOLL FREE**  
**1-800-468-9353**  
925 N. 3rd St., Phila., PA 19123



## EASTERN STANDARD PRODUCTIONS

26 BAXTER ST., BUFFALO, N.Y. 14207

- **AUDIO CASSETTE DUPLICATION**  
High Quality Real Time
  - **VIDEO CASSETTE DUPLICATION**  
All Formats
  - **CUSTOM PRINTING & PACKAGING**  
Labels - Inserts - Shrink Wrap
- CALL COLLECT**  
For Free Brochure  
**(716) 876-1454**

## How to Place a Mix Classified

Please print or type in **CAPITAL LETTERS and lower case**. There are 8 lines to the inch and approximately 24 CAPITAL letters per line or 32 lower case letters. \$70 per inch — 1" minimum. Additional lines \$10 per line. **Bold type** \$10 per line. Black border or gray screen \$10 extra. Logos or display advertising up to 4" will be charged at \$85/inch. Multiple insertion rates available — Call for information. **Payment by check, money order or charge must accompany ad. DEADLINE is the 10th of the month, 1½ months prior to publication. Categories Available (Check one.)**

- ☐ Business Opportunities
- ☐ Employment Offered
- ☐ Employment Wanted
- ☐ Equipment for Sale
- ☐ Equipment Rentals
- ☐ Equipment Wanted
- ☐ Instruction
- ☐ Maintenance Services
- ☐ Record & Tape Supplies
- ☐ Recording Services
- ☐ Rehearsal Space
- ☐ Session Player Available
- ☐ Studios for Sale
- ☐ Miscellaneous

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone \_\_\_\_\_

I am paying by (Check one.): ☐ VISA ☐ MASTERCARD

Card #: \_\_\_\_\_ Expiration Date \_\_\_\_\_

Signature: \_\_\_\_\_

☐ Check or Money Order #: \_\_\_\_\_ Amount Enclosed: \$ \_\_\_\_\_

### Mail to:

Mix Classified, 2608 Ninth Street, Berkeley, CA 94710  
(415) 843-7901

Ad Copy: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**DISC MASTERING** — Cut from your tapes at low cost — Plating, Pressing, Labels & Jackets — LPs, EPs & 45s. Write for free information:

**THE CUTTING EDGE**  
Box 217 M  
Ferndale, NY 12734  
(914) 292-5965

#### REAL TIME

Best Quality Cassettes using Nakamichi decks only. Custom loaded Agfa or BASF Chrome. Label and insert printing, shrinkwrap, blank tapes.

**SUPERB QUALITY  
AT LOW PRICES**

Uni-Sette, Inc. 5125 Marconi Ave., Carmichael, CA 95608. (916) 485-9534.

**FACTORY DIRECT  
PRICES ON 3M TAPE**  
**We can save you money.**  
Over 60 lines of professional recording equipment.  
**STUDIOWORKS**  
(800) 438-5921

Super Low Prices on Agfa BASF, Ampex and Mag Media, Bulk Cassettes and Accessories. Real-time and High Speed Duplication. Call or write for prices and brochure. **TRAXX RECORDING PRODUCTS**, 24 Crest Way KC, New Fairfield, CT 06812 (203) 746-3561.

**CRYSTAL INC.**  
DUPLICATED CASSETTES  
AS LOW AS **43¢** PLUS SET UP

**FULL COLOR CASSETTE INSERTS**  
AS LOW AS **\$53.00** PER 1000 ORDER OF TEN

**FULL COLOR GLOSSY PRINTS**  
Suitable For Framing **23¢** EACH LOTS OF 1000

**HIGH ENERGY CASSETTES**  
AS LOW AS  
**C-62: 28¢ and C-92: 34¢**

**FULL COLOR POSTERS OR BROCHURES**  
AS LOW AS **\$195.00** PER 1000

**FULL COLOR ALBUMS**  
**58¢** EACH PLUS SET UP PER QUANTITY

**PHONE TOLL FREE:**  
1-800-826-8540  
TN: 615-843-0717  
8002 Middle Valley Road, Hixson, TN 37343

#### PROFESSIONAL RECORDING SUPPLIES

We are a major wholesale Distributor of Ampex, Agfa & 3M reel to reel mastering tape (1/4" to 2"). We also stock broadcast video tape, assorted reels and boxes, splicing/leader tape, and pre-packaged cassettes. We load bulk cassettes in custom lengths using a variety of tape brands. Please call or write for our FREE catalog.

#### Advance Recording Products

7190 Clairemont Mesa Blvd.,  
San Diego, CA 92111  
(619) 277-2540  
Inside CA: (800) 858-1061  
Outside CA: (800) 854-1061

#### VCR SALE

300 Sony Beta SLO 1400 stereo hi-fi. Industrial. Used, but in excellent condition. \$175 each. AVI, 1-800-858-3816.

### Studios For Sale

**24-TRACK RECORDING STUDIO**  
Excellent Manhattan location, well-established clientele. Sale or partnership w/options available. Send name and phone number to: P.O. Box 8130, FDR Station, NY, NY 10150.

Hamilton Brosious Associates

#### AUDIO/VIDEO STUDIOS FOR SALE

We have major recording facilities for sale in a number of locations. If you are serious about acquiring an audio or video business call or write for our latest list.

195 Willowbrook Ave.  
Stamford, CT 06902

(203) 359-3506 IMC #987

#### MANHATTAN STUDIO

First floor in SOHO, 2,000 sq. ft., 14 ft. ceiling, air conditioning. Control room and studio in spectacular condition \$425,000—(212) 925-7304.

Thinking of buying or selling a recording studio? We're business brokers specializing in that field. For sale: 24-trk, 3,100 sq. ft. recording studio, apartment and parking. Howard Gitlen Assoc., 9601 Wilshire,

GL25, Beverly Hills, CA 90210, (213) 858-6706. Approx. 40K of equip.

**AUDIO/VIDEO STUDIO FOR LEASE**  
NO equip. 1,750 sq. ft. office, three soundproof rooms, maintenance and conference areas. Secured \$1,200. Kelly (415) 695-9748.

### Miscellaneous

#### TRACK SHEETS BOX & REEL LABELS

- Cassette Labels & Inserts
- Drum Machine Sheets
- Alignment Plaques
- Plus many other items

**PRINTED WITH**

Your Studio Name  
Address & Phone

#### FREE CATALOG

of specialized forms for the recording & music industries

#### STUDIOFORMS Co

186 Glen Cove Avenue, Suite 201/M-18  
Glen Cove, NY 11542  
(516) 671-1047

#### MG 1214/1212

#### OWNERS—ATTENTION

**NEW RECORDING HANDBOOK**  
Helpful techniques for the engineer who needs more than just a manual. Only \$17.50 plus \$1.50 handling, send check or MO to: **NORTH SIDE RECORDS**, 3237 Brighton Rd., Pittsburgh, PA, 15212. Visa & MasterCard—Call (412) 734-2014.

# GET LISTED!

## In Mix Directories

Mix Directories are the most complete guides to facilities and services for the audio and video industries. When production professionals need equipment, studios, or other services, they consult *Mix* first. To receive a questionnaire for a FREE listing in any or all of the following Mix Directories, simply fill out and return the coupon below, or call the Directories Dept. at (415) 843-7901.

NOTE: Questionnaires for specific issues will be mailed five weeks prior to issue date.

- ☐ **MAY '87: STUDIOS OF THE NORTHEAST**  
(Deadline: February 12—extension)
- ☐ **JUNE '87: REMOTE RECORDING & SOUND REINFORCEMENT FACILITIES**  
(Deadline: March 5)
- ☐ **JULY '87: STUDIOS OF THE SOUTHWEST & RECORDING SCHOOLS AND PROGRAMS**  
(Deadline: April 6)
- ☐ **AUGUST '87: STUDIO DESIGNERS & SUPPLIERS**  
(Deadline: May 6)

NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_

STATE \_\_\_\_\_

ZIP \_\_\_\_\_

TELEPHONE \_\_\_\_\_

Mail to: **Mix Directories**  
2608 Ninth Street  
Berkeley, CA 94710

# NEXT IN MIX

## MARCH

- Digital Recording Supplement
- Southeast Studios Directory
- Equipping the Digital Studio
- Spotlight on Digital Recorders

## APRIL

- Audio for Video/N.A.B. Special Issue
- Directory: Video Production Facilities
- Synchronization Systems
- On-Location Miking

### AD CLOSING:

FEBRUARY 7

### MATERIALS DUE:

FEBRUARY 15

## MAY

- Studio Business Operations
- Northeast Studios Directory
- Programmable Signal Processors

### AD CLOSING:

MARCH 7

### MATERIALS DUE:

MARCH 15

**Only *Mix* has a BPA-audited circulation of over 39,000 copies each month!**

**Call (415) 843-7901 for space reservations and complete advertising information.**

# ADVERTISERS INDEX

## PAGE ADVERTISER

171	A & R Record & Tape Co.
145	Acoustic Sciences Corporation (ASC)
144	Advance Recording Products
20	Aircraft Music Library
41, 81	Akai/IMC
73	Alesis
63	Allen and Heath Brenell
174	Alpha Audio
171	American Tape Warehouse
157	AMP Services
187	Ampex Corporation
161	API Audio Products
94	Apogee Electronics
89	Applied Research and Technology (ART)
119	Audio Media Research (AMR)
104	Audio Technica US
153	Audioline
93	Kenneth A. Bacon Associates
102	Berklee College of Music
77	Beyer Dynamic
36	Biamp Systems
100	Blue Jay Recording
49	Bruel and Kjaer
61	Bryston
167	Burlington Audio/Video Tapes
101	Caig Laboratories
39	Carver Corporation
75	Carvin Corporation
80	CRL Audio
123	Clarity
95	Computer Music Systems
31	Crest Audio
133	Crown International
12	Digital Creations
175	Dimension
33	DOD Electronics
22, 23	Dolby Laboratories
71	Dorrough Electronics
176	DRC Rebuilders
29	Eastern Acoustic Works (EAW)
94	Electrospace
165	Evatone
47	Focusrite
44	Fostex Corporation
173	Four Designs Company
148	Full Compass Systems
135	Furman Sound
154	Future Disc Systems
71	Genelec
69	Gold Line Connector
37	Bernie Grundman Mastering
90, 91	Harrison Systems
111	Hill Audio
19	Ibanez
160	Institute of Audio Video Engineering
181	Interlochen Center for the Arts

## PAGE ADVERTISER

84	Kahler/APM
97	Kawai
67	Klark Teknik (DDA)
149	LaSalle Music Inc.
40, 134	Lexicon Inc.
161	Linear and Digital Systems
141	Littlelite
136	Los Angeles Recording Workshop
173	LT Sound
108	Mark of the Unicorn
176	Merrill Lynch Realty
43	Meyer Sound Labs
2, 3	Mitsubishi Pro Audio Group
129	Musically Intelligent Devices
99	NEOTEK Corporation
9	Rupert Neve Inc.
116, 117	New England Digital
57	Orban Associates
7, 140	Otari Corporation
27	Peavey Electronics
136	Pi Keyboards
165	Polyline Corporation
157	Pressing Plant
159	Professional Audio Services & Supply
147	Pyramid Audio
143	QCA Record Pressing
174	RCA Records
60	Renkus Heinz
129	Rhythm City Music
13	RolandCorp US
106, 107	Royal Recorders
52	Samson Music Products
87	Sanken Microphone Co.
127	Simon Systems
58, 59	Solid State Logic
40	Sound Investment Enterprises
188	Soundcraft Electronics
137	Soundcraftsmen
114	Soundtracs
123	Stoughton Printing
11	Studer Revox
141	Studio Consultants
103	Tannoy
17	TASCAM
65	Technical Audio Devices (TAD)
28	Techron Industrial Products
51	Telex Communications
138	Thoroughbred Music
14, 15	3M Corporation
121	Time Line
79	Turbosound
155	United Tape Company
25	UREI
139	Versadyne
167	Vertigo Recording Services
145	World Records
34, 35	Yamaha International





# THE LEGEND CONTINUES

When you're in the studio, tape that's good enough is not enough. Which is why for ten years Ampex has continued pushing the potential of recorded sound. Through a decade of increased fidelity and reliability, Grand Master® 456 remains an audio tape obsessed with performance. Which is why more top albums are recorded on Ampex tape than any other tape in the world. For Grand Master 456, the beat goes on.

**AMPEX**Ampex Corporation, Magnetic Tape Division, 401 Broadway, Redwood City, CA 94063, 415/367-3809Ampex Corporation • One of The Signal Companies

## AND THE BEAT GOES ON

Circle #121 on Reader Service Card

# Designed to give your studio an unfair advantage.



All top studios need an edge.

Like the revolutionary Saturn multitrack with "Total Remote" and the TS24 console.

The Saturn is the result of over three years of design innovation combining the latest in digital control and analog technology. Programmable "Total Remote" gives you precise control over all machine functions, making this the most flexible multitrack in existence today.

Sonic clarity, ease of operation and renowned Soundcraft EQ make the TS24 the perfect complement to the Saturn.

Saturn and TS24. Together they offer your studio the unfair advantage you've been looking for. Technology created for music.

## Soundcraft

STUDIO SERIES

Soundcraft USA JBL Professional, 8500 Balboa Boulevard, Northridge, CA 91329 (818) 893-4351.