

December 1989

Recording

ENGINEER/PRODUCER

The Applications Magazine for Audio Professionals

AN INTERTEC PUBLICATION

\$4.00

A11200-----PMEBA1931 XXXXX REQ
F10415890000000 29 06 1
DOUG POMEROY OWNER
POMEROY AUDIO
193 BAL TIC ST
BROOKLYN NY 11201

1 9 9 0

BLACK BOOK

Your Digital Insurance Agents.

GET A GREAT DEAL ON A DYAXIS WORKSTATION WHEN YOU CHOOSE STUDER REVOX C270 SERIES RECORDERS.

DIGITAL INSURANCE A C270 Series reel-to-reel with a hard disk option? Yes, Studer has just acquired Dyaxis, the most price competitive and capable digital audio workstation available. Now when you buy a Revox C270 (or a Studer A807) Series reel-to-reel, we'll give you a discount certificate worth up to \$2,500 on your future Dyaxis purchase. That's your hard disk option!

THE C270 SERIES This exciting new line of recorders provides you with all the traditional Studer Revox benefits—mechanical precision, electronic sophistication, supreme sound quality and superior support—adding up to state-of-the-art analog recording technology. The C270 is available in 2, 4, and 8-track versions with or without remote/autolocator.

BEST BUY Compare the "street" price and performance of any C270 Series machine with the competition, and you'll find there *is* no competition. The die-cast deck plate and head block, the precision mechanics and a host of powerful features tell you any C270 Series machine will last as long as you need a reel-to-reel in this emerging era of digital workstations. And in the digital future, you'll need analog recorders that will sound good—for a long time. That's why your last reel-to-reel should be a Studer Revox.

TIME CODE...OR NOT The C270 2-track version offers optional center track time code for effortless synchronization to picture or sound. The C274 4-track and C278 8-track are both equally adaptable to production or post. The optional remote/autolocator stores 18 start/stop addresses and provides full transport and channel remote control to fit into any professional studio environment.

LOGGING TOO For station logging applications, special super low speed versions of the C274 and C278 are available with built-in time/date code generator and reader with search capabilities, providing up to 25 hours of continuous audio on one reel of tape.

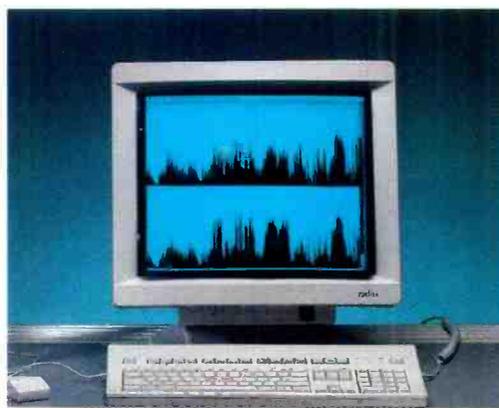
STUDER DYAXIS With over 200 Dyaxis systems delivered worldwide, Studer has become *the* leading supplier of Digital Audio Hard Disk Systems, and the *only* major reel-to-reel supplier currently delivering such digital workstations. Buy either, and you choose a leader. Studer Revox.

Call your Studer Revox Professional Products Dealer—your Digital Insurance Agent—or Studer Revox direct to receive all the details. And remember, your purchase of any C270 insures that your future will be digital—with Dyaxis.

STUDER REVOX

Studer Revox America, Inc.
1425 Elm Hill Pike • Nashville, TN 37210 • (615) 254-5651
New York (212) 255-4462 • Los Angeles (818) 780-4234
Studer Revox Canada Ltd., Toronto (416) 423-2831

Circle (1) on Rapid Facts Card



IT'S THE LITTLE THINGS ABOUT THE IL SERIES THAT YOU'LL APPRECIATE.

Take a close look at the Soundtracs IL Production console. An outstanding console that's achieving acclaim amongst commercial recording studios around the World. Designed to meet a production climate that's radically changing with engineering that matches efficiency with vision.

More important, though, listen to the way it sounds. This 32 bus console offers very low noise, minimal crosstalk and a degree of sonic transparency that sets new standards.

Combine these attributes with a sensitive yet effective equaliser section to create one of the sweetest sounds to be found anywhere, perfect for high quality track laying.

And while our crystal clear layout is free of gimmickry, we've included a number of unique features and sophisticated circuit designs which, together with Soundtracs Tracmix fader automation, provides versatility to set your creativity free.

Little things in themselves. But in the Soundtracs IL, add up to a rather special production console.



SOUNDTRACS PLC, 91 EWELL ROAD, SURBITON, SURREY
KT6 6AH ENGLAND. TELEPHONE: (01) 399 3392/8101.
FAX: (01) 399 6821. TELEX: 8951073 STRACS G

SPECIFICATIONS:

- 48 OR 36 CHANNELS □ 104 OR 80 INPUTS ON REMIX
- INTERCHANNEL CROSSTALK BETTER THAN -88dB @ 1kHz
- MIX NOISE 32 INPUT ROUTED BETTER THAN -82dB

EXCLUSIVE US DISTRIBUTOR:

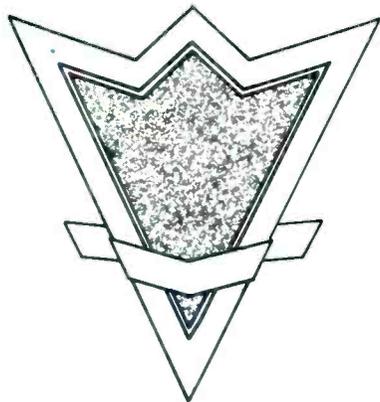
SAMSON[®]
Technologies Corp.

SAMSON TECHNOLOGIES CORPORATION, 485-19
SOUTH BROADWAY, HICKSVILLE, NY 11801, USA.
TELEPHONE: (516) 932 3810. FAX: (516) 932 3815.

Circle (88) on Rapid Facts Card

CONTENTS

The 1990 Black Book



Introduction

What the Black Book is and how to use it..... 14

Matching Your Needs to Technology

A guide to finding and buying equipment that will not be obsolete in six months. *By Ray Callahan*..... 16

Product Directory

A list of manufacturers according to equipment type 20

Manufacturers Directory

An alphabetical list of manufacturers' addresses and phone numbers 56

Fax Directory

An alphabetical list of manufacturers', dealers' and distributors' fax numbers 80

Dealer/Distributor Directory

A state-by-state list of regional dealers/distributors 89

1989 Article Index

1989 articles grouped by issue and subject 85

Trade Associations

Addresses, phone and fax numbers for groups representing the pro audio industry 87

1990 Trade Show Calendar

A quick look at when and where industry-sponsored events will be in the next year 87

On the Cover

Artwork by Alecia Wright.

Departments

Editorial	6
News	8
Studio Update	110
New Products	112
Classified	114
Advertisers' Index	120
20th Anniversary Ballot	121
Rapid Facts/Subscriber Cards	123



RECORDING ENGINEER/PRODUCER (ISSN 0034-1673) is published monthly for \$26 to qualified readers, \$30 to non-qualified readers per year by Intertec Publishing Corporation, 9221 Quivira Road, Overland Park, KS 66215. Second-class postage paid at Shawnee Mission, KS and additional mailing offices. POSTMASTER: Send address changes to Recording Engineer/Producer, P.O. Box 12960, Overland Park, KS 66212.

Help us help you.

If your company is *not* listed in this year's Black Book and you want a FREE listing in next year's issue, fill out this form and return it by July 1, 1990. (Please type or print.)

Company name _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Fax _____
 Your name _____
 Title _____

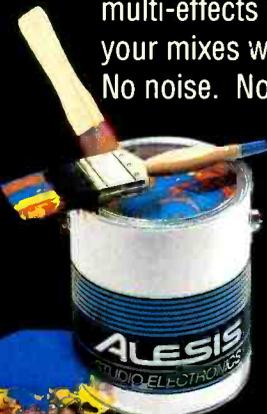
Mail this form to: Recording Engineer/Producer's Black Book, Pat Blanton, directory editor, P. O. Box 12901, Overland Park, KS 66212.

If Michelangelo had a QUADRAVERB, he might have mixed music instead of paint.



It's true. Music and painting are very similar. A stroke of red, a touch of chorus. A splash of blue, a wash of reverb. Either way, it's art. And every artform has its masterpieces. And its tools.

Introducing the Alesis QUADRAVERB. An all-new 16 bit digital, simultaneous multi-effects processor and dead-serious musical tool. With QUADRAVERB, your mixes will be mirror images of the sound in your head. No letdowns. No noise. No nonsense. No boundaries between art and creation.



Inside, QUADRAVERB is alive with colors. Chorus, flange, phase shift, pitch detune and delay... all in stereo, to give your music depth and space. For absolute tonal control there are 5 bands of parametric and 11 bands of graphic e.q. And, of course, there's the unmistakable clarity and drama of the award-winning Alesis digital reverb programs.

With full programmability, 100 memory slots, and 90 factory programs created by the best ears in the business, QUADRAVERB gives you total artistic freedom. Plus, in QuadMode™, four of these flawless 20kHz bandwidth effects occur simultaneously. Like crunching thousands of dollars worth of studio gear into one rack space.

With very little cash, and even less effort, you can use QUADRAVERB on your next mix... plug it into your instrument rig... perfect your sound.

See your Alesis dealer today and hear what state of the art really means.

Michelangelo would agree,
QUADRAVERB is a masterpiece.



ALESIS
STUDIO ELECTRONICS

LOS ANGELES:
Alesis Corporation • 3630 Holdrege
Avenue • Los Angeles, Ca. 90016

LONDON:
Alesis Corporation • 6, Letchworth
Business Center • Avenue One,
Letchworth, Hertfordshire SG62HR

Circle (4) on Rapid Facts Card

THE POSSIBILITIES

The Flex System from Rane: A Powerful New Approach to Modular Signal Processing



F

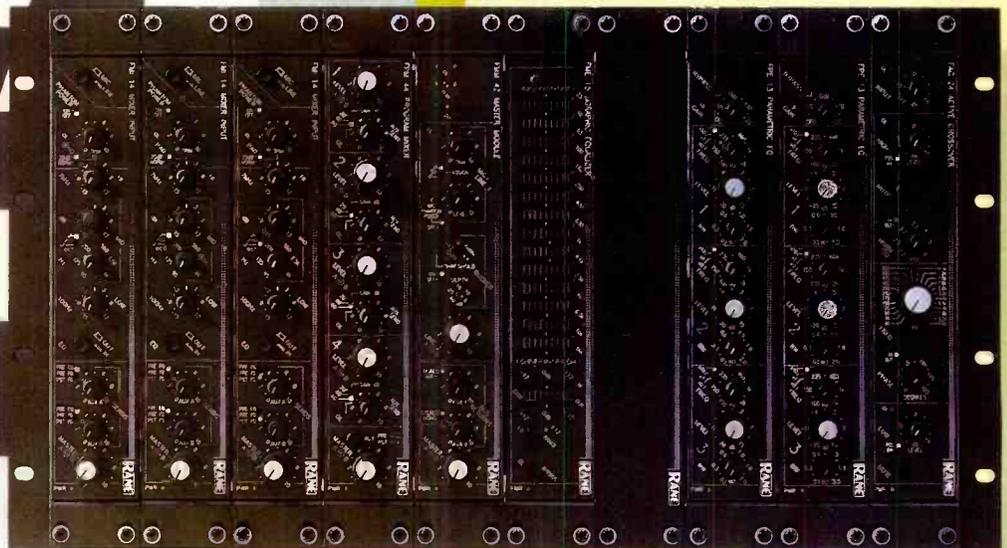
Flexibility, no matter how you spell it, means power. It's the power to meet varied needs. To meet budgets with optimum performance. To efficiently accommodate system growth. Long into the future.

Flexibility is the essence of Rane's new FLEX System. The first universally compatible, cost effective, modular approach to signal processing and routing. With no special requirements. And no dead ends.

Each Flex module is an HR (Half Rack) compatible, UL/CSA/VDE approved, self-contained processing unit. Each capable of being EIA rack-mounted either horizontally or vertically, with inexpensive, readily available hardware. Or simply set on a shelf, stand-alone fashion.

HIGH-POWERED COMPATIBILITY. Using standard 3-pin, 1/4" or barrier strip connectors, FLEX modules are directly compatible with professional audio gear. And since they are remote powered—via Rane's proposed power supply standard—troublesome ground loops, hum and agency approval problems are solved up front by design.

ENDLESS POSSIBLE COMBINATIONS FOR CUSTOM DESIGNS. The FLEX non-exclusive modular concept makes it inherently expandable



ARE STAGGERING!

and upgradeable. It boasts a large and growing number of functions and components to choose from. Mixers. Preamps. Splitters. Crossovers. Dynamic controllers. Equalizers. Amplifiers. Line drivers. And much more under development.

And thanks to Rane's efficient bus design, system wiring is greatly simplified in even complex mixing and splitting layouts.

COST EFFECTIVE CAPABILITIES. Modular flexibility. Uncompromising performance. All without a premium price. That's the FLEX System manifesto. There is no expensive main-frame to buy; you only pay for the functions you want, when you want them.

Say, for example, you only need a 3 channel mixer with one channel of crossover. The FLEX System delivers. And when your needs expand, just add more modules. No need to obsolete old equipment for a loss.

Whether you use two modules or twenty modules, the FLEX System remains cost effective. And supremely flexible. Year after year.

SUPERLATIVE PERFORMANCE, RANE RELIABILITY. The design and performance of each and every Flex module is, in a word, superlative. Every model carries top-grade studio specifications, utilizing the best components available. The result is unsurpassed performance and reliability.

Our HR compatible modules may be compact, but they're stuffed with more top-notch features than you would have thought possible. For example, the **FMI 14 Mixer Input module** measures only 1.75" x 10.5", yet it boasts a -128dB EIN mic stage, switchable phantom power, true 20dB pad, powerful 3-way EQ section, insert loop, two source-selectable Aux sends and balanced master channel outputs. A single DIN cable, supplied with each module, routes the Master and Aux buses from unit to unit for quick and clean hook-up.

+15/-20dB boost/cut, 2-octave down to 1/30th-octave bandwidth range for notch capability, and a full 10Hz-20kHz frequency sweep range for unprecedented flexibility.

The **FME 15 MicroGraphic Equalizer** brings Interpolating Constant-Q filter performance to the Flex line, pioneered by our full-sized GE 30

current balanced outputs, and you've got a powerful, flexible new crossover standard.

This is but a sampling of the innovative Flex Modules to be released this year. We encourage you to obtain separate, detailed data sheets on the many FLEX System modules. Then compare these with the best standard equipment available. You'll discover that FLEX offers the best of all worlds: compact, cost effective, flexible, uncompromising performance.



The **FMM 42 Master Module** not only provides Aux returns and mixing, but features extra mic and stereo line inputs with ducking capability for paging and other applications.

For even more mixing flexibility, the **FPM 44 Program Mixer** allows 4 separate mic or line inputs to be mixed to 4 output programs, with pre or post fade switch selection for the Aux sends. Both the direct balanced/unbalanced terminal strip and the DIN Flex bus inputs and outputs can be used simultaneously for easy expansion and integration into larger systems.

Carrying on a fine tradition of innovative equalizer technology, Rane sets yet more new standards with the Flex Series. The **FPE 13 Parametric Equalizer** provides 3 separate bands, each capable of

model which has set new industry standards. Minimized filter interaction, smooth combined response and fully balanced three-pin and terminal strip input/output are but a few of the features. Both the FME 15 and the FPE 13 also provide an exclusive Patch I/O jack which allows direct connection to an insert loop jack with a single 1/4" TRS patch cable.

The **FAC 24 Active Crossover** is the next generation to follow in the respected footsteps of our AC 22 and AC 23 designs. In addition to the proven 24dB/octave Linkwitz-Riley performance, the FAC 24 features a true 24-position frequency selector switch to provide plug-in card accuracy and repeatability with the convenience of a knob. Add to this a built-in CD Horn EQ section, electronic phase alignment, summing LF input and three-pin high-



FLEX MODULAR SIGNAL PROCESSORS series

RANE

1802-47th Ave. W.
Everett, WA 98204
(206) 355-6000

Political Realities

We're at the end of a year and a decade. Both have been pretty interesting. Our cottage industry doesn't seem so isolated anymore. Issues that would have been inter-industry spats, such as DAT, sampling and home studios, are regularly appearing in the mainstream media. Congressional committees are grappling with technical matters that affect us every day.

Of the issues that face us as we enter the 1990s, the most important one doesn't deal with technology. It deals with politics.

This industry must become politically savvy if it is to prosper. As individuals, we need to start writing letters to elected officials concerning issues that affect our business. As an industry, our professional societies need to start lobbying politicians concerning legislation or regulations that affect what goes on in the studio.

Savvy groups provide politicians with technical information, clippings from the trade and consumer press, and experts who can testify at hearings. Foolish groups declare that they are above politics and they don't need to get involved.

It is vitally important to monitor what goes on in government. If you think that the goings-on in the halls of government don't affect you, think again. Monetary policy affects the strength of the dollar and the price you pay for imported equipment. Tax policy affects how you run your business, which affects profitability.

Or take trade policy. The Bush Administration is negotiating with Japan to allow American rice imports. If negotiations were to break down, what could be banned and used as a negotiating tool? Japan's electronics exports, including some of the gear you buy.

Increasingly, specific technical issues are finding their way into legislative agendas and congressional hearing schedules. That is a new development, one we have ignored to our detriment.

In the past couple of years, we've seen legislation to make the CopyCode system standard in DAT machines, a Supreme Court decision concerning sound levels at

outdoor concerts, and consideration of a blank-tape levy. The RIAA has stated its intention to have the SCMS agreement with DAT manufacturers introduced into legislation.

What's been our stand on all of this? Nothing. We've been content to let other organizations set the agenda, lobby politicians and testify at congressional hearings.

Of particular disappointment has been the behavior of our industry's professional societies. Representatives of both the Audio Engineering Society and the Society of Professional Audio Recording Services have stated that because the societies are non-profit organizations, they cannot do any political lobbying.

Even if that's true, I find it hard to believe that any sort of activity would be unacceptable. What about publishing a newsletter updating people on political and legislative issues that affect us? It doesn't have to take a side; it just has to be informational. It's up to the readers if they want to write a letter on their own.

But letter-writing is of limited value. One big voice, consisting of thousands of individuals speaking through a trade organization, can be better than thousands of individuals speaking on their own.

We've dodged enough bullets. Legislative involvement in technical issues is going to continue. In the next few years, we could see legislation, congressional hearings or agency regulations concerning these issues: recordable CDs, their D/D recording capability and their effects on record company profits (as with DAT); sampling and whether the copyright law needs to be amended to provide some sort of protection; sound levels at outdoor concerts; sound levels within recording facilities; and a definition of professional recording equipment and whether commercial facilities need to be protected from proliferating home facilities.

Here's what we need to do. First, the AES and SPARS need to call their lawyers, who must figure out how legislators can be lobbied without jeopardizing these groups' non-profit status. If current organizational setups don't allow it, then separate lobbying groups must be set up.

Then, additional staff must be hired and located in the Washington, DC, area. These staff members must track legislation and regulations that are of interest to us, and membership must be regularly informed through a newsletter.

They must talk to legislators and their

staffs to help them understand what we do for a living. When necessary, they need to tell these people our views on pending legislation. They must help to locate experts who can travel to Washington and testify at congressional hearings when needed.

What can you do? Begin writing letters, starting with your elected representatives. Members of Congress do read their mail. Even if your representatives are not on committees that deal with technical issues, your input is better than none at all.

Three elected officials represent you in Congress: one representative and two senators. Here's how you can write them:

- House of Representatives: If your representative's name was John Smith, the address would be: Hon. John Smith, House of Representatives, Washington, DC 20515.

- Senate: Using the same example, the address would be: Hon. John Smith, United States Senate, Washington, DC 20510.

- Keep your letters to the point. Use a reasoned tone. Be as specific as possible. If you are writing about proposed legislation, obtain the bill number, or its official name, and use it.

- Include any support documentation you have, such as newspaper or magazine clippings.

- Also, you can write to members of specific committees and subcommittees that are dealing with legislation. To whom you write depends on where the bill is placed after it is introduced. That information is readily available from your representatives' local constituent offices, Bill Status (202-225-1772) or the public library.

And in the future, the information will be available from RE/P. We have a role as much as anyone else. You'll be seeing more coverage of legislative events as they affect our industry.

It's a new year and a new decade. Let's make the most of it, musically, technically and politically. Let's not look back in 1999 and wonder if our industry would be better off if we had only taken advantage of the challenges and opportunities before us.

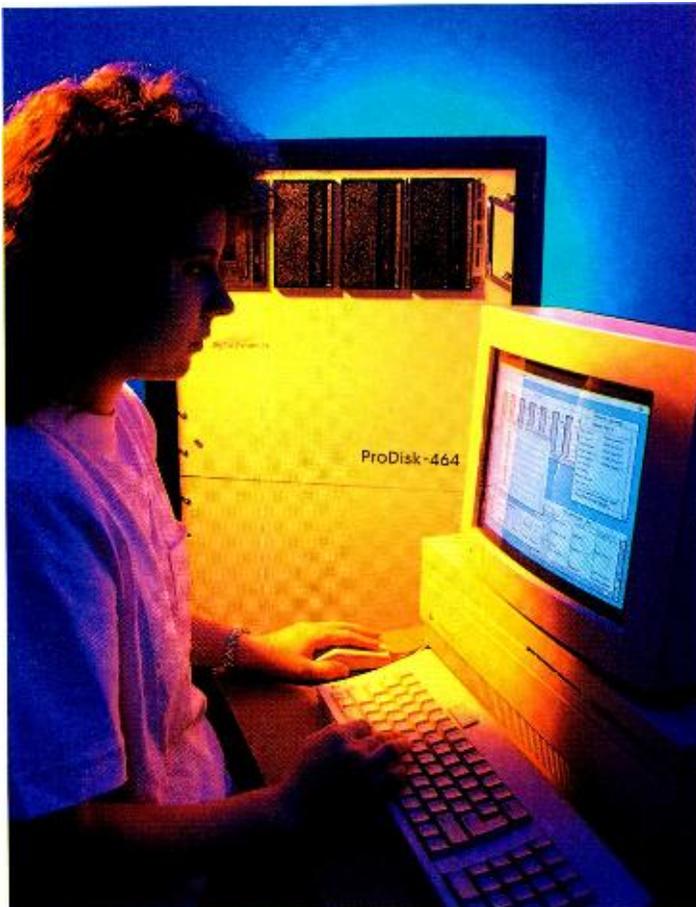
Dan Torchia
Editor

ProDisk-464

The Affordable

Digital Disk Audio Recording & Editing System

- Digital sound storage on fast and reliable Winchester disks
- Archive on compact, widely available 8mm tape cartridges
- Instantly locate and edit any portion of up to two hours of sound storage per track
- Plug compatible with standard multi-track tape machines
- Familiar console emulation presented on Apple Macintosh screens



- SMPTE time code and MIDI compatible
- Unsurpassed sound quality yielding 96dB dynamic range with inaudible noise level
- Modular, 4-64 field upgradeable tracks
- Full 16-bit recording
- On-board diagnostics for simple servicing

...at the Price of a Tape System!

The ProDisk-464 is a four to sixty-four track Digital Audio Recording and Editing System for Music Recording, Video/Film Post-Production, Television and Radio Broadcast. Priced below what you expect to pay for a multi-track digital tape recorder, the ProDisk-464 is a second generation random access disk-based system that will dramatically reduce your production costs.

True Long Term Value

By integrating proven micro-computer technology with fast, high capacity disk drives Digital Dynamics offers you a superior quality system at analog prices. The ProDisk-464 is a complete digital audio workstation with an open architecture that ensures a long and useful life. It's LSI and SCSI disk technologies produce an exceptionally reliable system that will be compatible with tomorrow's storage products. Start with a 4-track system and field upgrade in modular 4 track increments up to 64.

All specifications are subject to change without notice.

Apple is a registered trademark of Apple Computer Inc. Macintosh is a trademark of Apple Computer Inc.

Substantial Time Savings

Random-access eliminates the time traditionally spent in tape positioning. Electronic "reel rocking" and automatic Punch-In/Out allows retakes that are fast, precise and non destructive. Editing, including cut, paste, copy, insert, replace and alignment, is performed in a highly visual fashion on the controller screen. These operations now take seconds to perform instead of minutes. Individual tracks may be re-aligned in time, eliminating the requirements for multiple tape machines. The system can automatically generate and synchronize to SMPTE time code for lock-up with video and film equipment. No time is required to stripe audio tapes. Multiple takes and edit modifications can be auditioned and changed right up to the production deadline. No time is ever wasted because of a lost or damaged take.

Circle (8) on Rapid Facts Card

Easiest to Use

Macintosh controlled, a recording engineer will require little or no training in the use of the cue editor performing track slipping, crossfades and on-screen sound editing. Edit Decision Lists are automatically built up in real-time. All edits of any kind are non destructive. A library of sounds and effects can be quickly auditioned and placed at precise time-coded locations. Compatibility with other Macintosh applications provides a means of integration and exchange with MIDI packages, sound files and sequencer programs.

Write or call for the ProDisk-464 brochure and to arrange for a demonstration.



Digital Dynamics

Digital Dynamics Inc. ■ 270 East Pulaski Road, Greenlawn, NY 11740 USA ■ (516) 271-5600 ■ FAX (516) 271-5607

Circle #162 on Reader Service Card

NEWS

RE/P announces positions

RE/P has named two people to the editorial staff. Dan Torchia, formerly staff editor, has been promoted to editor. He was staff editor for two years, and before that was group managing editor for RE/P and seven other electronics magazines published by Intertec Publishing, RE/P's parent corporation.

Also, Mike Joseph has joined the staff as technical editor. He most recently was manager for pro audio marketing for Electro-Voice. His background includes experience as an engineer/producer and as a manager for a pro audio dealership.

Wanted: your vote

To celebrate RE/P's 20th anniversary, the magazine is conducting two special reader polls: one to determine the classic equipment of the last 20 years, and one to ascertain the engineers and producers who changed the way we work in the studio.

RE/P's Editorial Review Board, consisting of audio professionals in the manufacturing and recording communities, submitted nominations this past fall. The top 10 vote-getters were selected as finalists.

Readers can vote using the ballot on page 121. The poll is divided into two sections, one for equipment and the other for engineers and producers. The latter sec-

tion contains two sub-sections, one for engineers/producers and the other for producers.

All readers filling out their name and address on the ballot are eligible to win a DAT machine, which will be awarded in a prize drawing.

Ballots must be received by Feb. 1. The polls' results will be published in the May issue, a special 20th anniversary issue.

International Monitor Awards

The ITS-sponsored International Monitor Awards were presented to 78 directors, editors, lighting directors, cameramen, electronic graphics designers and audio engineers in the video industry. The following awards were given in the audio categories. In the category Audio for Video—Commercials: Best Audio Mixer, Tom Jucarone (East Side Film & Video), "Freedom" National Car Rental; Best Audio Designer, Tom Jucarone (East Side Film & Video), "Freedom" National Car Rental.

In the Audio for Video—Non-Broadcast category: Best Audio Mixer, Peter Cole, John Walker and Roy Pahlman (The Post Group), "Cyberforce"; Best Audio Designer, John Walker and Gregg Teal (The Post Group), "Cyberforce".

For Audio for Video—Musical Performance: Best Audio Mixer, Chris Harnet and Bruce Gray (Videasonics), "Glyndebourne

—La Traviata"; Best Audio Designer, Chris Harnet (Videasonics), "Glyndebourne—La Traviata."

For Audio for Video—Entertainment Specials: Best Audio Mixer, Frank Marrone and Paul Massey (Master's Workshop), Glory Enough For All—"The Discovery of Insulin"; Best Audio Designer, Ken Dahlinger, Steve Kirklys and John Walker (The Post Group), "Pee Wee's Christmas Special."

In the Audio for Video—Entertainment Series category: Best Audio Mixer, Robert Hein (The Equalizer/Universal Television) and Mel Zelniker (Sound One), The Equalizer—"Splinters"; Best Audio Designer, Frank Morrone, James Porteous, Peter Harper, Tim Archer, Gary DaPrato, Anthony J.R. Lancett, Alex Partridge and Yuri Gorbachow (Master's Workshop), Captain Power—"Summoning Thunder."

Syn-Aud-Con sponsors workshop

Synergetic Audio Concepts will sponsor a Concert Sound Reinforcement workshop on Jan. 16-18 at Memorial Auditorium, Chapman College, Orange, CA. This is the second sound reinforcement workshop sponsored by Syn-Aud-Con and includes the same staff as last year's. Don and Carolyn Davis will host the workshop; David Scheirman is the facilities coordinator. Will

EDITORIAL

Dan Torchia, *Editor*
Mike Joseph, *Technical Editor*
Pamela S. Fleener, *Associate Editor*
Jennifer Hinkle, *Editorial Assistant*
Tom Cook, *Senior Managing Editor*
Pat Blanton, *Directory Issues Editor*

ART

Alecia Wright, *Graphic Designer*

BUSINESS

Cameron Bishop, *Group Vice President*
Dennis Milan, *Publisher*
Evelyn Hornaday, *Promotions Manager*
Darren Sextro, *Marketing Coordinator*
Laurel Cash, *Executive Consultant*
Dee Unger, *Advertising Business Manager*
Sue Edwards, *Advertising Coordinator*

Sales offices: See Advertisers' Index.

ADMINISTRATION

R.J. Hancock, *President*
Chuck Rash, *Corporate Circulation Director*
Sandra Stewart, *Circulation Director*
Doug Wilding, *Circulation Manager*
Customer Service, 913-541-6628
Kevin Callahan, *Creative Director*

CONSULTING EDITORS

Jeff Burger, *Computers*
Paul D. Lehman, *Electronic Music*
John Monforte, *Technical Consultant*
David Scheirman, *Live Performance*

RECORDING ENGINEER/PRODUCER is edited to relate recording science to recording art to recording equipment, as these subjects, and their relationship to one another, may be of value and interest to those working in the field of commercially marketable recordings and live audio presentation. The editorial content includes: descriptions of sound recording techniques, uses of sound recording equipment, audio environment design, audio equipment maintenance, new products.

CORRESPONDENCE

Editorial, Advertising and Subscription:
9221 Quivira
Overland Park, KS 66215
913-888-4664
Telex: 42:4156 Intertec OLPK
Fax: 913-541-6697

SUBSCRIPTIONS

Qualified:
United States (Domestic Only).....\$26.00
Foreign \$50.00
Non-qualified:
United States (Domestic Only).....\$30.00
Foreign \$60.00

Optional airmail for non-qualified readers is also available for an additional \$5.00 per year. Foreign subscriptions are payable in U.S. funds only by bank check or money order. Adjustments necessitated by subscription termination at single copy rate.

Photocopy rights: Permission to photocopy for internal or personal use is granted by Intertec Publishing Corporation for libraries and others registered with Copyright Clearance Center (CCC), provided the base fee of \$2.00 per copy of article is paid directly to CCC, 21 Congress St., Salem, MA 01970. Special requests should be addressed to Cameron Bishop, group vice president.
ISSN 0034-1673 \$4.00 + \$0.00.

Member, Business Publications Audit of Circulation
Sustaining member of Acoustical Society of America
Member, International Communications Industries Association
Associate member of Society of Professional Audio Recording Services

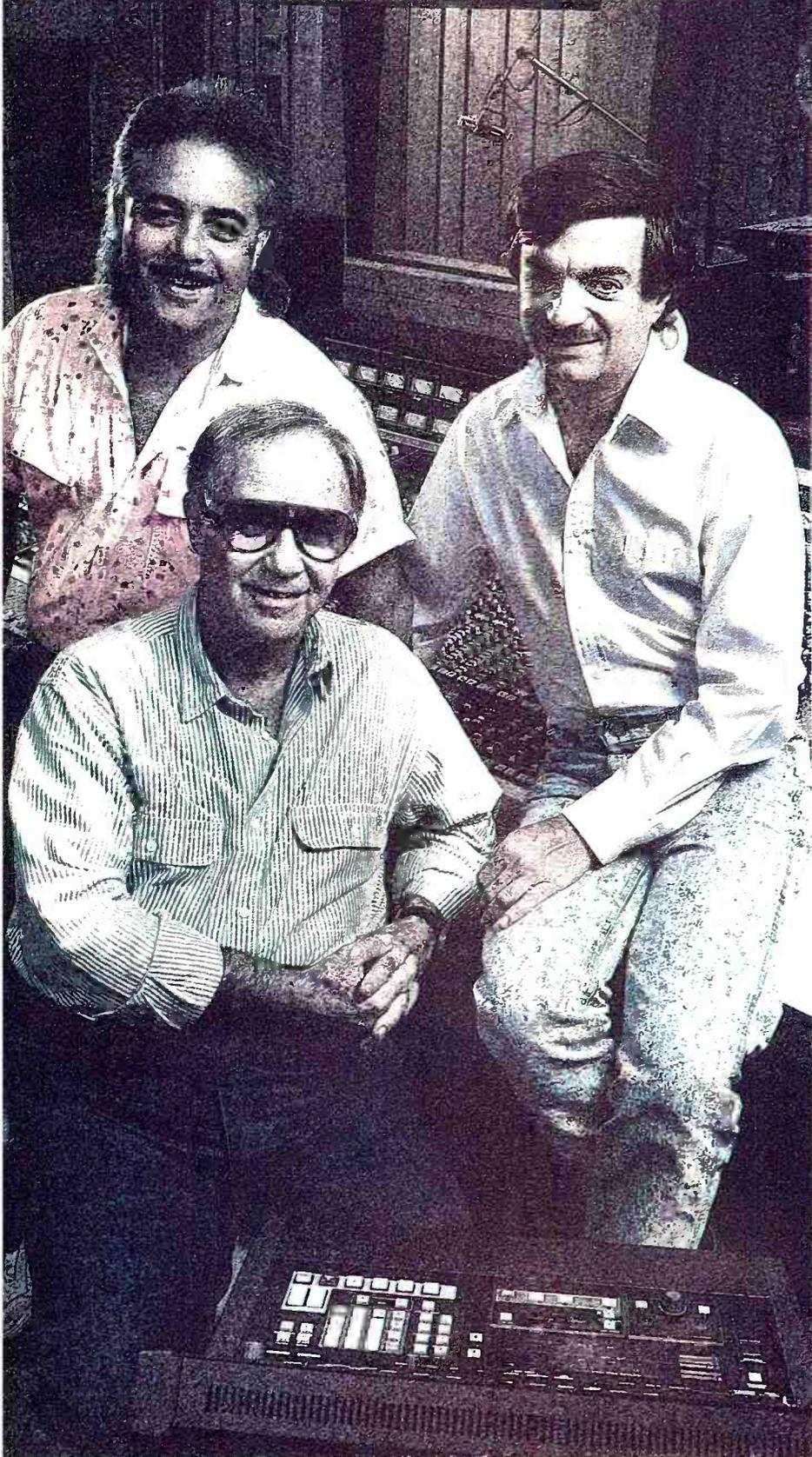


©1989 by Intertec Publishing.
All rights reserved.

W E C A R E

Did you know Power Station uses

AGFA



Power Station leads the way. It's inspired numerous studio designs. Countless hit records. And a generation of producer/engineers.

No wonder the New York scene is already buzzing about their new Studio D, a hybrid room that can mix music, audio-for-video, and audio-for-film. It's an innovative look at tomorrow's state-of-the-art.

Innovation. It led Power Station to Agfa bias-compatible PEM 469. Long before it became the year's most exciting new mastering tape. Long before anyone else. "The high-end holds together," says V.P./Studio Designer Tony Bongiovi. "It's transparent. It's musical. It's leading-edge."

It's a new vision for the 90's:

A decade of professionalism and excellence. A time when studios must try new formulas for success. An era when innovators will always play the lead.

AGFA magnetic tape—from research and development, through manufacturing, to delivery and service—we care!



Agfa Corp., 100 Challenger Road,
Ridgefield Park, NJ 07660 Telephone (201) 440-2500

Left to right: Barry Bongiovi, Studio Manager; Bob Walters, President; Tony Bongiovi, Vice President, Studio Designer.

AUDIO VIDEO PROFESSIONAL

www.therebondfirst.com

AGFA

Parry, the workshop chairman, and his staff (Roy Clair of Clair Brothers, Albert Lecesse of Audio Analysts, M.L. Prociase of Showco, and Mick Whelan of Electrotec) will present the workshop. For more information, contact Syn-Aud-Con, R.R. #1, Box 267, Norman, IN 47264; 812-995-8212; fax 812-995-2110.

AKG acquires dbx Professional Products

AKG Acoustics has completed the acquisition of the dbx Professional Products line from Carillon Technologies. In addition to manufacturing the 900 Series products, AKG plans to reintroduce the 941 and 942 Type II modules, which dbx discontinued last year. The 140X 1/2-rack Type II processors will be available in the second quarter of 1990.

David Roudebush will head sales and marketing for North and South America. Howard Mullinack will handle sales in Europe, Asia, Africa and Oceania. Both will continue to be responsible for Orban products in the same areas.

Obituary: Deane E. Jensen

Deane E. Jensen, 47, well-known for his efforts to improve the fidelity of sound in the recording, reinforcement and broadcast industries, died in his private audio engineering laboratory at Jensen Transformers, North Hollywood, the weekend of Oct. 21.

Jensen was the designer of several audio transformers; the inventor of a patented low-distortion input to an audio amplifier; and a pioneer in the CAD of transformers, filters and amplifiers. He developed the COMTRAN circuit analysis program and published many technical articles and tutorial lectures. He founded Jensen Transformers in 1972, and remained the president and CEO until his death.

The family requests that any contributions be sent to the Richard C. Heyser Memorial Scholarship Fund, in care of the Audio Engineering Society.

News notes

The **Cinema Audio Society** conducted a seminar at The Burbank Studio, Burbank, CA, on production and post-production aspects for the use of wireless microphones in motion picture and television production. One hundred industry professionals attended the session; the format was centered on a panel of experts



And the winner is...David Cragin of Sir Reel Studios, Van Nuys, CA. He won an ART Proverb 200, which was given away in conjunction with RE/P's Ad of the Year contest. His entry was picked from all entries received during the contest.



The Michelangelo ad for the Alesis Quadraverb won RE/P's Ad of the Year Contest. The first annual reader poll asked readers to vote for the top ad that appeared in the October 1988 through July 1989 issues.

answering questions asked by the moderator and audience.

A new Portland, OR-based audio duplicating service, **Super Duper**, features 52 Nakamichi MR-2B real-time cassette decks with real-world E.Q.; and Otari MTR-12 and MX5050, and Nakamichi MR-1 master analog machines. Super Duper is located at 3235 S.E. 39th St., Portland, OR 97202; 503-239-6070.

Bencsik Associates of Ocala, FL, won the Rep of the Year FY'89 title for the **Bose Pro Products** division. A plaque was presented to the president to commemorate the occasion.

The **Aphex System's** Aural Exciter circuitry is to be incorporated into the Yamaha "Over Drive with Exciter" foot pedal effects device and SPX-1000 processor, as well as the Proton Corporation's VT-331 stereo monitor/receiver.

Essential Marketing is **Beyerdynamic's** recently named representative in the Midwest, covering Kansas, Nebraska, Iowa and southern Illinois.

Studio Support Services is a referral, representation, consultation, studio time brokerage and production coordination

service based in New York. The company will refer and represent studios, musicians, engineers, producers, maintenance technicians and supply studios. For more information, contact Studio Support Services, 15 Sintsink Drive W., Port Washington, NY 11050; 516-767-3295.

Macpherson Loudspeakers has moved to a larger facility at 3351 Remy Drive, Lansing, MI, 48906; 517-321-0700; fax 517-321-6385.

A/V Technology International of Newton Centre, MA, has been appointed exclusive distributor of **B&B Systems'** domestic and overseas products. A/V previously was responsible for international sales only.

Tannoy North America became TGI North America when Tannoy, Goodman's and Mordaunt-Short formed TGI plc in the United Kingdom. TGI North America will continue to distribute Tannoy products in North America and other TGI companies. Recently acquired companies by TGI are Audix, Creek and EPOS.

Studer Revox America has added Audio Intervisual Design, Los Angeles, and Pro Media, El Sobrante, CA, to its dealer network.



Dolby SR. The sound investment for analog multitracks.

When everyone else was making noise about digital, we quietly developed Dolby SR. But it's no secret: Dolby SR makes analog multitrack recording a cost-effective alternative to digital.

Improves the preferred sound of analog

At both 15 and 30 ips, Dolby SR dramatically increases headroom, and virtually eliminates tape hiss and modulation noise. Dynamic range is improved by more than 25 dB over unassisted analog, preserving all the warmth and purity of the original sound.

Increases the return on your investment

Dolby SR upgrades your multitrack at a fraction of digital's cost. Add our Model XP SR (configured for up to 24 channels), or update an existing Dolby mainframe with plug-in SR modules. If you are in the market for a new multitrack, Otari and Studer offer models with Dolby SR built-in.

Simple to use

Set-up is quick and easy with Dolby SR. A unique

Auto Compare feature lets you instantly verify frequency response and playback calibration.

And editing is as convenient as ever, with no need for special equipment.

Worldwide acceptance

Tapes recorded with Dolby SR can go anywhere, anytime. In fact, with more than 25,000 channels in over 30 countries, analog with Dolby SR is a firmly-established format you can't afford to ignore.

Put it to the test

Call your Dolby dealer to arrange for a demo at your facility. Hear for yourself why Dolby SR is

the sound investment for analog multitracks in today's competitive marketplace.



100 Potrero Avenue, San Francisco, CA 94103-4813. Phone 415-558-0200. Telex 34409. FAX 415-853-1373. 346 Clapham Road, London SW9 9AP. Phone 01-720-1111. Telex 919109. FAX 01-720-4118. Dolby and the Double-D symbol are trademarks of Dolby Laboratories Licensing Corp. © Dolby Laboratories Inc., 1989. 589/8676

Circle (8) on Rapid Facts Card

www.americanradiohistory.com

Martin Audio Video Corporation is now a wholly owned subsidiary of Video Services Corporation. Martin's rental operation has been merged into VRI Scharff, the rental division of Video Services. Bruce Martin will continue to serve as president, Michael Bogen as vice president of sales.

Audio Kinetics has appointed Singularity Enterprises, New York, as a factory-authorized technical support and installation representative for its desk automation, synchronization and machine control products.

JRF Magnetic Sciences, authorized by Otari to install TC-50 Center Track Time Code Retrofit kits on Sony and Studer machines, now is doing the same for Ampex machines.

JBL Professional 4425 and 4435 studio monitors, JBL/UREI 6290 power amplifiers and a Soundcraft 6000 console were used for Robert Redford's Sundance Institute's fourth annual Film Composer's Laboratory. Eight composers, chosen through an extensive search, had the opportunity to compose, experiment and learn during the Laboratory.

Amek/TAC has appointed Bedford Audio Marketing, Atlanta, as its southeastern representative.

New England Digital has been appointed to Apple Computer's VAR Advisory Council. According to NED, the appointment marks the first time that Apple has selected any audio company to participate on the council.

Also, New England Digital has introduced NEDcare, a post-sale customer support program, which guarantees that NED will respond to any service problem within one contractual day, depending on the location of the customer's facility.

People

J.L. Cooper Electronics has named **Chuck Thompson** as national sales manager and marketing manager, and **Anita Harris** as associate sales coordinator. **Bob Bentrup** has been promoted to vice president of sales, marketing and operations.

Proshow USA has named **Mike Miller** and **Rob Hughbanks** to its staff.

Thomas Volpicella has been promoted to regional sales manager, Northeast re-

gion, for Fuji Photo Film USA's magnetic product division professional products.

Steve Cunningham has been named vice president of sales and marketing of Hybrid Arts.

Steve Kadar has joined Apogee Sound as chief engineer.

Phil Vachon has been appointed chief audio engineer in charge of recording studio rentals at VRI Scharff Rentals.

Jim Kurowski has joined Studer Revox America as director of technical operations at the Nashville headquarters.

Dave Yancey has been appointed sales manager for Spatial Sound.

Digital F/X has appointed **Peter D. Glassberg** its northeast regional manager.

Joe O'Connor has been promoted to customer service manager, tape duplicators, at Gauss.

Paul V. Hugo has been appointed national sales manager of Gauss Loudspeakers.

Chas Rowden has joined AMS Industries to manage its London sales office.

Sony Professional Audio has named **Robert Ott** to the newly created position of national business manager of microphone products.

Danny Mundhenk has been promoted to eastern region sales manager of Solid State Logic.

Agfa has appointed **David G. McMahan** technical sales representative for the central region. **Thomas K. Evans** has been named marketing assistant.

Robin Millar of the Power Plant and **Chris Hollebhone** of Sony Broadcast and Communications were elected to the APRS Board at the annual general meeting.

Danny Mundhenk was promoted to Eastern region sales manager of Solid State Logic.

Joe O'Conner has been promoted to customer service manager at Gauss. **Paul V. Hugo** was appointed national sales manager.



STATEMENT OF OWNERSHIP

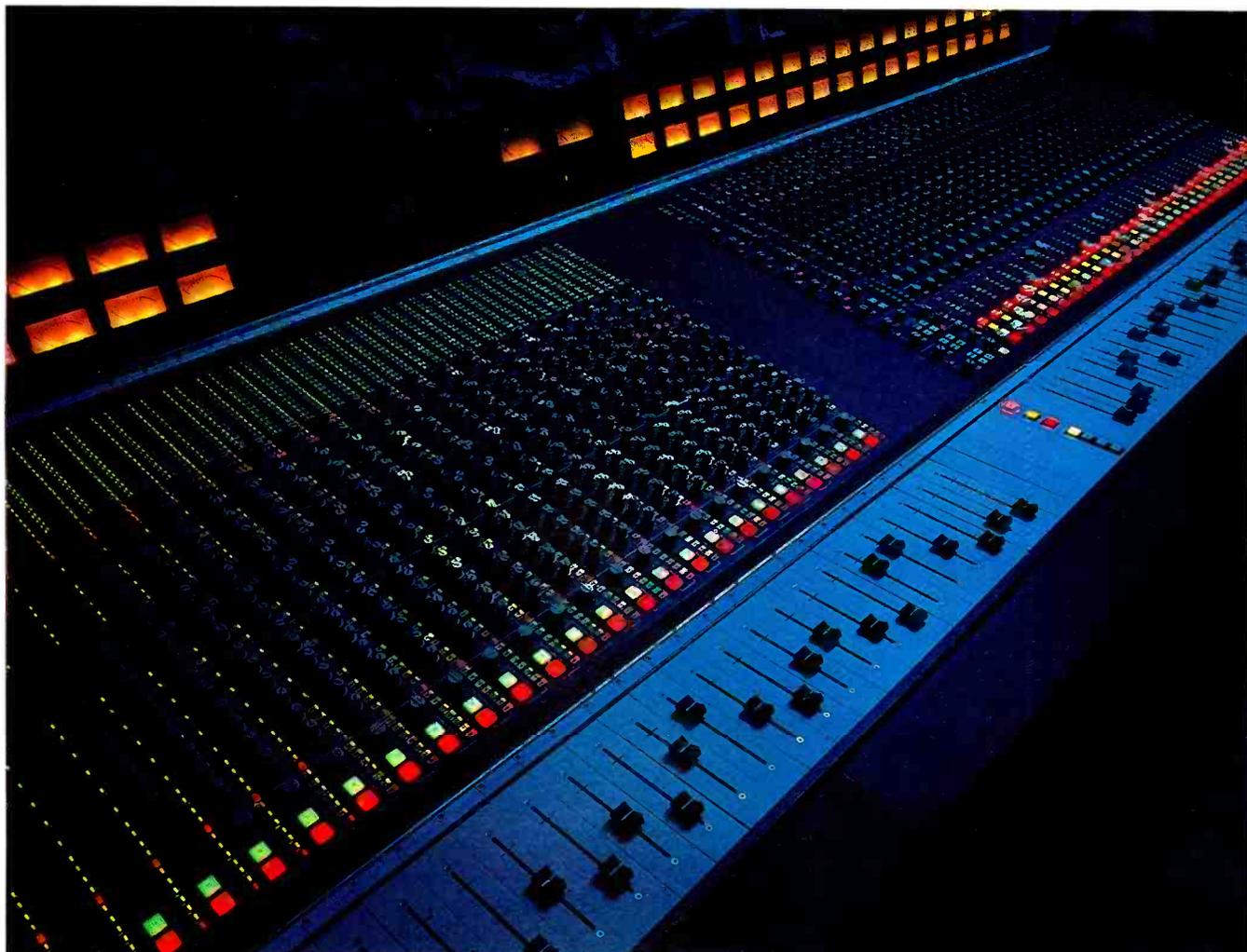
Statement of Ownership, Management and Circulation (Act of August 12, 1970; Section 3685, Title 39, United States Code).

1. Title of publication: Recording Engineer/Producer I.A. 341-673.
2. Date of filing: Sept. 28, 1989.
3. Frequency of issue: Monthly.
- 3A. Number of issues published annually: 12.
- 3B. Annual subscription price: \$26 & FREE TO QUALIFIED.
4. Location of known office of publication (street, city, county, state, zip code): 9221 Quivira Road, Overland Park, Johnson County, Kansas 66215.
5. Location of the headquarters or general business offices of the publishers (not printers): 9221 Quivira Road, Overland Park, Johnson County, Kansas 66215.
6. Names and addresses of publisher, editor, and managing editor. Publisher: Dennis Milan, 9221 Quivira Road, Overland Park, Kansas 66215. Editor: Dan Torchia, 9221 Quivira Road, Overland Park, Kansas 66215. Managing Editor: Tom Cook, 9221 Quivira Road, Overland Park, Kansas 66215.
7. Owner (If owned by a corporation, its name and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual must be given. If the publication is published by a nonprofit organization, its name and address must be stated.) Intertec Group, Inc., 599 Lexington Ave., 36th Floor, New York, NY 10022.
8. Known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities (if there are none, so state): None.
9. Paragraphs 7 and 8 include, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, also the statements in the two paragraphs show the affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner. Names and addresses of individuals who are stockholders of a corporation which itself is a stockholder or holder of bonds, mortgages or other securities of paragraphs 7 and 8 when the interests of such individuals are equivalent to 1 percent or more of the total amount of the stock or securities of the publishing corporation.
10. This item must be completed for all publications except those that do not carry advertising other than the publisher's own and are named in sections 132.231, 132.232 and 132.233, postal manual (Sections 4355a, 4354b, and 4356 of Title 39, United States Code).

	Average No. Copies Each Issue During Preceding 12 Months	Single Issue Nearest To Filing Date
A. Total No. Copies Printed (Net Press Run)	27,700	27,200
B. Paid and/or Requested Circulation		
1. Sales through dealers and carriers, street vendors and counter sales	—	—
2. Mail subscriptions	2,746	2,606
C. Total Paid and/or Requested Circulation	2,746	2,606
D. Free Distribution (including samples) by mail, carrier delivery or other means	21,312	21,155
E. Total Distribution (Sum of C and D)	24,058	23,761
F. Office use, left over, unaccounted, spoiled after printing	3,642	3,439
G. Total (Sum of E and F should equal net press run shown in A)	27,700	27,200

I certify that the statements made by me above are correct. (Signature of editor, publisher, business manager, or owner.)

Sandra Stewart,
Circulation Manager



Command Performance

The 3200. Your wish was our command. Introducing an analog console that dramatically refines performance while radically improving operational control and flexibility. Its design centers around the classic split configuration and successfully brings Soundcraft to a new milestone in console design.

The 3200, with full status illumination, offers up to 100 fader-controlled inputs and 20 auxiliary sends. With fully balanced 32 buss routing, global multitrack A/B switching and a noise gate on every channel, it delivers remarkable creative control. And, thanks to innovative electronics and advanced circuit design, the finest in sonic performance as well.

The 3200. It awaits your command.

Soundcraft



Soundcraft USA/JBL Professional
8500 Balboa Boulevard, Northridge, CA 91329

H A Harman International Company

www.americanradiohistory.com

The 1990 Black Book

Section	Page
Matching Your Needs to Technology	16
Product Directory	20
Manufacturers Directory	56
Fax Directory	80
1989 Article Index	85
Trade Associations	87
Trade Show Calendar	87
Dealer/Distributor Directory	88

RE/P's Black Book has been designed to be *the* audio industry's reference manual for the beginning of the next decade. Due to positive reader, advertiser and manufacturer responses and a growing industry, the 1990 Black Book offers much more information than past years.

This resource is divided into several sections: Product Directory, Manufacturers' Address/Phone Directory, Manufacturers' Fax Directory, Dealer/Distributor Directory, 1989 Article Index, Trade Associations and the 1990 Trade Show Calendar.

The Product Directory lists manufacturers alphabetically according to the types of equipment they make. You will find that some of the companies listed have their

names printed in blue. These are the advertisers in this issue, and you can get detailed information quickly by referring to their ads. The Rapid Facts Cards in this Black Book are valid for a full year to help you get in touch with those advertisers.

To find the addresses, phone numbers and fax numbers of manufacturers who make a certain product, refer to the manufacturer directories.

The Dealer/Distributor Directory provides a state-by-state list of regional dealers and distributors. Each listing includes an address, phone number, region served and products represented.

The 1989 Article Index lists all 1989 feature and column articles, grouped by issue and subject.

Addresses, phone numbers and fax numbers of various industry groups are listed in the Trade Association Directory; the Trade Show Calendar provides an up-to-date look at when and where the major trade shows will be in 1990.

All information in this Black Book was compiled by the RE/P staff. We mailed questionnaires to pro audio manufacturers and dealers/distributors. All companies that returned their questionnaires are listed. RE/P and Intertec Publishing are not responsible for any unreturned questionnaires or inaccurate information provided by respondents. Your company can be included in the 1991 Black Book by completing and returning the forms on pages 2 and 54 by July 1, 1990.

UPGRADE TO ANALOG.



Sony Communications Products Company, 1600 Quince Avenue, Fowlerville, Michigan, MI 48700. © 1990 Sony Corporation of America. Sony is a registered trademark of Sony.

INTRODUCING SONY'S ALL NEW APR-24 MULTITRACK RECORDER.

Analog recording has a new state of the art. Sony's APR-24, Multitrack Recorder.

As you'd expect, the APR-24 delivers extraordinary sonic quality. Because it's Sony-engineered from top to bottom. But it also offers some things you might not expect. Like a built-in, multi-featured

synchronization system which accepts video reference, LTC and VITC signals. Which makes it perfectly suited for post production.

There's also a newly designed, remarkably fast transport built on a

rock solid 4-inch casting. Long life amorphous heads. And micro-processor-assisted alignment. All standard on every machine.

So if you're getting ready to upgrade your facility, upgrade with the APR-24. Contact your Sony Professional Audio representative, or call Sony at 800-635-SONY.

SONY®

PROFESSIONAL AUDIO

www.americanradiohistory.com

Matching Your Needs to Technology

By Ray Callahan

Tired of buying equipment and feeling that it's obsolete six months later? Follow these steps to make sure you're making the best decisions.

You don't need to be in the pro audio industry for long to realize that keeping up with new technologies and products can be tricky. There is an increasing flow of new products/technologies data finding its way into the hands of studio own-

Ray Callahan is a senior instructor for the Sony Pro Audio training group in Fort Lauderdale, FL.



Trade shows are good forums to view new equipment and to determine whether your needs match a product's capabilities.

ers and engineers who know what resources are at their disposal.

Information concerning features, functions, alternative options and the availability of new tools is a hot commodity in any industry. But because of the rapid advances in technology, finding and assimilating accurate information about the avalanche of new products can be a difficult task, especially if you live outside of a major production market.

This "outback" country (as some manufacturers representatives call it) can seem informationally barren when it comes to new developments and releases. And the information flow to small studios is virtually non-existent.

In the past, one solution was simply to spend a great deal of money with a given manufacturer or dealer. This dealer/manufacturer would then keep your facility high on its list for new and interesting product developments. But it also ties you in with one manufacturer, which may not be ideal. That leads to this dilemma: How do studio owners and engineer/producers receive accurate, up-to-date information



on new products and technologies?

Is this in production or a prototype?

If you're willing to spend some time, there are several ways to keep ahead of things. With so many wild marketing claims in this industry, end-users need to distinguish between viable and prototype products. Making the right decision on whether to buy a newly developed product/technology or waiting until it has proved effective in the field can make the difference between success and failure in the years that follow.

Most professional audio equipment manufacturers schedule their product introductions to coincide with the various trade shows. This can be a clue in discerning a prototype from a unit in production. It's amazing how many new prototypes are brought out of the laboratory for trade show demonstration.

If you attend any of the trade shows, there is a reasonable chance that all "new" products being introduced are actually prototypes. When it will be an actual production model can be anyone's guess.

If you are interested in a particular new product, here are some tips you can use on the show floor that will help you determine the viability of the new product. (They're also effective when you're at a pro audio dealer.)

1. Check for serial numbers on the equipment, and ask for the serial number sequence. If the new product doesn't have a serial number, you can bet it's a prototype. Ask at what number the serial numbers begin. If you are looking at number 1051, but the sequence started at 1050, this will tell you that the company hasn't sold many of these units. You may be at a greater risk of getting a piece of equipment that still has some bugs.

Purchasing Product: A Checklist

- Check the serial number; ask for the serial number sequence.
- Check the software revision number (if applicable).
- Ask for a user list.
- Inspect the workmanship.
- Ask for an on-site or in-studio demo.
- Refer to literature from outside sources, such as trade magazines or technical papers.
- Talk to friends and associates about the product.
- Rent before you purchase.

If you are about to purchase a new device, knowing the serial number sequence will tell you a bit more about the production history of the product. You can also tell, by inference, a little about the viability and acceptance of the product. If, after a reasonable number of attempts, the serial number info is mysteriously unavailable, this is a sure sign the manufacturer is trying to hide something—buyer beware!

2. If the product is software-based, check the software revision number. No software is perfect on its first release, but a good initial test of a piece of software is to note its revision sequence. Generally, software that is initially well-developed requires fewer updates. Ask the developer about the revision sequence, note where the product of your interest falls, and compare this to how long the product has been commercially available.

3. Ask for a user list. If there are a significant number of units in the field, the company should be able to supply the information. Also, ask the company to separate the buyers from the beta sites. Being a beta tester for a new product can be a valuable and rewarding experience, *but only if you are an official participant.*

4. Inspect the workmanship of the device. Although most design engineers are quite proficient at their functional design work, some leave a great deal to be desired in the quality of their assembly work. Look closely at the internal wire harnesses and printed circuit boards to ensure that the beauty of the product is not just skin deep. A trademark of good manufacturing is attention to detail.

5. Ask for an on-site or in-studio demonstration. Make sure that you and the manufacturer's rep allow enough uninterrupted time to carefully assess that the

product meets your current *and* long-range requirements. For more complicated devices, you should arrange to have the equipment for more than one day.

6. Refer to product literature that appears in trade magazines and technical papers prepared by professional groups. However, published reviews have their limitations. In order to get reviews published while the product is still new, the reviewer may not have spent much time with the equipment. Reviews are fine as a general guide, but you should not let them replace your own first-hand evaluation.

7. Word-of-mouth is another source of information. Talk to your friends and associates at other studios. Ask questions at local AES meetings. Ask SPARS to refer you to someone who might have had some experience with a particular product or company.

8. If possible, try renting before you purchase. Most rental companies stock equipment that is in demand and that has proved useful by a variety of users. Even if you decide not to rent, the rental company may be a good source of feedback. For example, it can give you some information about the maintenance history of a product.

Manufacturer education

How manufacturers should educate the industry has stirred much discussion concerning feasibility and effect. Manufacturers have a responsibility for product training, both for technical services and operational skills. This type of interaction is advantageous to the end-user and the manufacturer. Both levels of training promote greater understanding of the product. This knowledge can be taken to the field and used in many ways. A greater understanding of the product allows field service to be handled locally, or in many cases by telephone troubleshooting.

It is refreshing to see that some manufacturers are setting up permanent training sites. This approach has benefits for the user and manufacturer. By providing a dedicated training location, the company can be assured that its customers get competent, thorough training. This gives the customer confidence in the product and the company. Consequently, the company can sell a sophisticated device without fear of getting a bad rap for a product that is being improperly used in the studio.

Most manufacturers offer some form of training. Usually, it consists of a product development manager or field service engineer visiting the studio to give a brief description/demonstration of the gear. This type of training is beneficial, but in most cases fails to give the user complete comprehension.

There are also some recording schools that are establishing themselves as official training sites for specific products. This can be an excellent and creative way to add validity to such schools and to minimize the cost and complexity of setting up an independent training studio.

New training methods

With the introduction of electronic mail services a few years ago, the idea of a technical "bulletin board" that is accessible with a PC comes to mind. It is becoming more common for companies to establish a user group on these systems. More of these services, linking manufacturers and users, is an idea that is needed now. Time is money in any industry, and a system such as this could allow a quick and easy flow of basic information.

Two other areas of information transfer are currently in development. One is the use of interactive programs that offer general information and/or training. One such program uses a Hypercard stack to answer questions about the features of a specific device. Another area is the use of video training and/or sales programming. Wouldn't it be great if you could go to your local dealer and borrow or rent a video that has a knowledgeable spokesperson giving a comprehensive demonstration of a product's features?

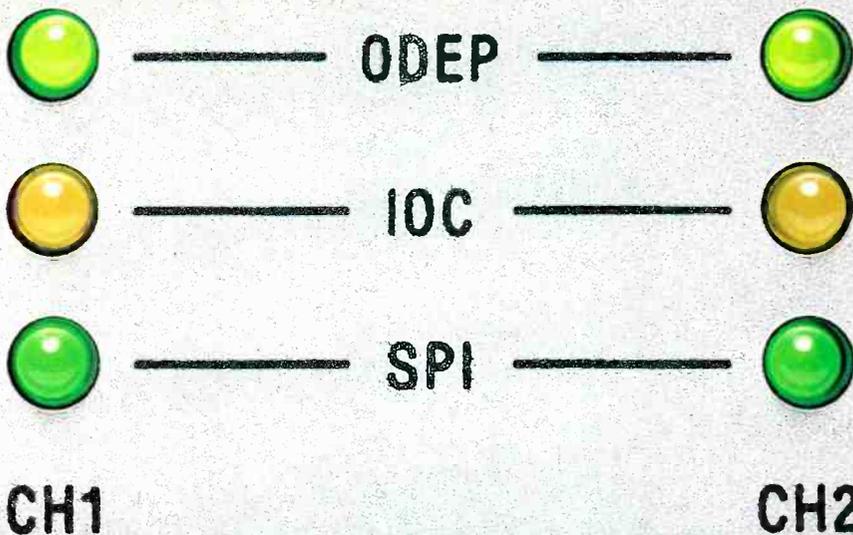
Calling the company

For studio owners and engineers, having a technically knowledgeable person call a member of the company's technical staff may shed some additional light on the product in question. With a few well-planned questions, it shouldn't take long to tell whether the product, technical staff and company are genuine.

The pro audio industry has many complex devices, requiring intense sessions with product experts. One of the keys to staying abreast of needed information is developing a wide network consisting of valuable phone numbers and reliable contacts. Also, manufacturer-sponsored training is becoming one of the valuable resources that engineers should rely on for accurate information on new products.

Every business must make investments in its future to survive the long term. In our industry, investing the time and effort to research the validity of new products and technologies is necessary to maintain a competitive edge.

The road to more product knowledge is paved with a great deal of homework. Ask intelligent, probing questions. Having the right information will enhance your ability to make the right buying decisions.



Status Symbols.

Now, get Crown's exclusive features
in an all-new commercial amplifier: Com-Tech.™

The patented IOC® and ODEP™ status displays you see here are just two of the exclusive Crown features now available in Com-Tech—the first series of Crown amps designed *solely* for commercial contractors.

With Com-Tech, Crown has combined everything you've asked for—high reliability, low distortion, small size and high power—with something you might not expect from the leader in amplifier technology. Economy.

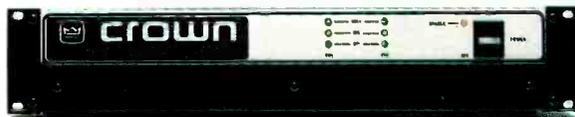
We did it with more efficient design. And a long list of patented features that the competition can't begin to match.

Like Crown's exclusive grounded-bridge and

Multi-Mode® (AB + B) circuitry for massive power output with very low distortion. Our IOC indicator that tells you if distortion levels equal or exceed 0.05%. Our ODEP circuitry that actually *prevents* overload and overheating damage. And now, for the first time, a unique built-in multi-impedance shift design that allows constant 70-volt output *without* the use of expensive "step-up transformers" or "bridging" the amplifier.

Only Crown gives you all this plus plug-in electronics for future expandability and our exclusive 3-Year Extendable 6-Year No-Fault* Full Warranty.

Find out more about the all-new Com-Tech Series. Call us today. And see for yourself just how affordable Crown "luxury" can be.

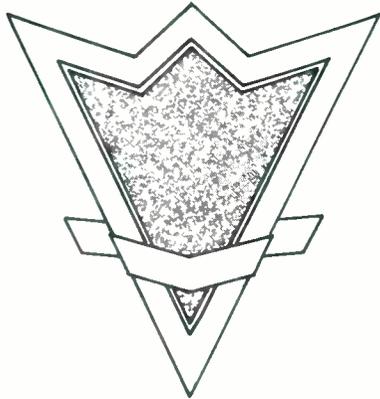


Circle (10) on Rapid Facts Card



1718 W. Mishawaka Road, Elkhart, IN 46517
219/294-8000

*Some restrictions may apply. Consult your dealer for warranty, or circle reader service card.



Product Directory

A list of manufacturers according to equipment type.

Advertisers in the issue are listed in blue.

See Adv. Page

ACOUSTIC DESIGN AND CONSTRUCTION

Acoustic Systems
 Acoustics Design Group
 Acoustilog Inc.
 ASC-Tubetraps
 Aura Sonic Ltd.
 David Carroll Electronics
 Centro Corp.
 Cyber-Kinetek Systems, Inc.
 E.A.R.S., Inc.
 Galaxy Design Group
 GHL Audio Engineering
 J.L. Sound Systems Ltd.
 The Joiner Rose Group
 Kawai America Corp.
 Lakeside Associates, Inc.
 Larson/Davis Architects
 Mirromere Audio
 Modular Wood Systems Inc.
 New York Technical Support, Ltd.
 Qusted Monitoring Systems
 Gary Raymond Sound Systems
 RLS
 RPG Diffusor Systems, Inc.
 Seriously Sound
 Skyelabs Inc.
 State of The Art Electronik
 Synergetic Services, Inc.
 Technical Service Specialists Inc.
 Westlake Audio

ACOUSTIC TREATMENT MATERIALS

Alpha Audio 107
 ASC-Tubetraps

See Adv. Page

Azonic, Inc. 75
 Cartunes
 Cyber-Kinetek Systems, Inc.
 E.A.R.S., Inc.
 FM Tubecraft
 InConcert
 Island Cases
 Markertek Video Supply
 RPG Diffusor Systems, Inc.
 Technical Service Specialists Inc.
 Trend Textiles Inc.

AMPLIFIERS

AB International Electronics
 Acoustech Corp.
 ADA Signal Processors, Inc.
 ADM Technology Inc.
 Aerco
 Altec Lansing Corp.
 Amplified Music Products Corp.
 Anchor Audio, Inc.
 Arsonic Tonstudio Electronik US
 ARX Systems
 Ashly Audio, Inc.
 AST Sound
 ATI-Audio Technologies, Inc. 93
 ATM Audio
 Audio Centron
 Audio Design Associates
 Australian Monitor (Pty) Ltd.
 Benchmark Media Systems, Inc.
 The Bertech Organization
 BGW Systems Inc.
 Biamp Systems
 Boulder Amplifiers, Inc.
 Broadcast Audio Corp.
 Bryston 90
 BSS Audio

See Adv. Page



Carver Corp. 71
 Cello Ltd.
 Court Acoustics Systems
 Crest Audio



Crown International Inc. 19
 DB Systems



Electro-Voice, Inc. 21
 Fat Box
 FM Acoustics Ltd.
 Frazier
 Full Compass Systems
 Furman Sound, Inc.
 Gallien-Krueger, Inc.
 Gentner Electronics Corp.
 Grass Valley Group
 John Hardy Co. 77
 Harrison Information Technology
 H & E Micro-Trak Corp.
 HEDCO
 Hot House Professional Audio 32A-32B
 ILP Mfg.
 InConcert
 Industrial Research Products

N/DYM® is not just another pretty face.

Aerosmith's Toby Francis . . .

Def Leppard's Robert Scovill . . .

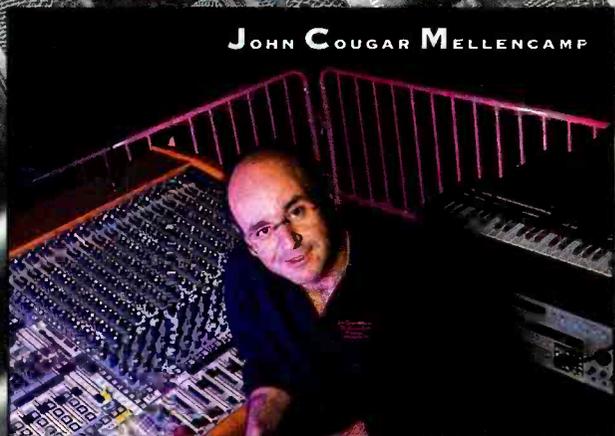
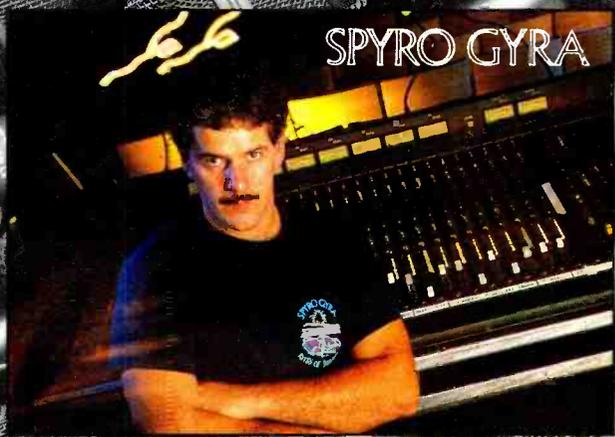
Spyro Gyra's Neil Stadtmiller . . .

John Cougar Mellencamp's
Ed Wynne . . .

Throughout their recent concert tours, these professional sound engineers used Electro-Voice N/DYM® microphones in a variety of instrumental and vocal applications, with results that surpassed even their own expectations.

Now, it's your turn. Experience the power and clarity that N/DYM will deliver to your sound.

And get ready for a professional mic-over.



Electro-Voice, Inc., 600 Cecil Street, Buchanan, MI 49107 (616) 695-6831.

In Canada: P.O. Box 520, Gananoque, ON K7G2V1 (613) 382-2141.

See Adv. Page

Industrial Strength Industries
Innovative Electronic Designs, Inc.



JBL Professional BC
 Jensen Transformers, Inc.
 Korg USA Inc.
 Lake People
 Leitch Video of America Inc.
 Lenco, Inc.
 Mark IV Audio Canada Inc.
 Master Blaster America
 Mayhew & Co.
 McCurdy Radio Industries Ltd.
 Meyer Sound Labs, Inc.
 The Mitek Group
 Nady Systems, Inc.
 Georg Neumann GmbH
 Northam Electronics Inc.
 Numark Electronics
 Opamp Labs, Inc.
 Ortofon Inc.
 Panasonic Communications & Systems
 Co.
 Paso Sound Products Inc.
 Peavey Audio Media Research
 Peavey Electronics Corp. 35
 Precision Audio Inc.
 ProTech Audio Corp.

QSC Audio Products, Inc.



Quad Eight Electronics, Inc. 64A-64B,106
 Qusted Monitoring Systems
 Ram Broadcast Systems Inc.
 Ramsa/Panasonic 27



Rane Corp. 4-5
 Ross Systems Div. of IMC
 RTS Systems
 Sansui KDS Technologies
 SCS/Sound Code Systems
 S.E.M. Co.
 Sescom, Inc.
 Sontec Electronics
 Soundcraftsmen
 Spectra Sonics/Spectra Sound
 Stewart Electronics
 Studiomaster Inc.
 Symetrix Inc.
 Target Technology
 TASCAM, Teac Professional Div. 62,63
 Technics
 Technon
 TOA Electronics, Inc.
 UREI

Velodyne Acoustics
 Video Accessory Corp.
 Ward-Beck Systems Ltd.
 Wheatstone Broadcast Group
 Yamaha Corp. of America Pro
 Audio Div. 22,23

CABLE AND CONNECTORS

ADC Telecommunications
 ATM Audio
 Audio-Technica US, Inc.
 Aura Sonic Ltd.
 Belden Wire & Cable
 Beyer Dynamic Inc.
 Bi-Tronics Inc.
 Black Audio Devices
 Boulder Amplifiers, Inc.
 Bryant Electric Westinghouse Electric
 Corp.
 California Switch & Signal
 Canare Cable Inc.
 David Carroll Electronics
 Cello Ltd.
 Connectronics Corp.
 Conquest Sound, Inc.
 DB Systems
 FM Acoustics Ltd.
 Formula Audio, Inc. 105
 Furman Sound, Inc.
 HAVE, Inc.
 InConcert
 ITT Cannon Components Div.

If you thought you'd never hear anything better than the SPX90, it's only because you haven't yet heard the new SPX900 Professional Multi-Effect Processor.

It's got more features, more functions, and more effects. It's got an awe-inspiring sound, and an amazingly friendly price. Just name it, and the SPX900 Professional Multi-Effect



RCX1 optional full-function remote.

Processor does it better. In fact, exceptionally better than anything that most likely impressed you before.

At the heart of the matter is Yamaha's new second generation DSP processing chip. A powerful little guy that gives the SPX900 fuller, lush, smoother reverbs. Simultaneous effect programs. And 20 kHz bandwidth. Not to mention more MIDI

Its most spectacular effect is



See Adv. Page

Kimber Kable
 Markertek Video Supply
 Micro-Point Inc.
 Midimix
 Mogami Product Div. Marshall Electronics, Inc. 114
 Monster Cable Products Inc.
 The Music People, Inc.
 Georg Neumann GmbH
 Neutrik USA, Inc.
 Peavey Electronics Corp. 35
 Pro Co Sound
 ProSystems
 Re-An Products Sano International
 Sano International
 Signet
 Spectra Sonics/Spectra Sound
 Studiomaster Inc.
 Switchcraft, Inc.
 Westlake Audio
 Whirlwind, Inc.
 Wireworks Corp.
 Yellowtec GmbH

COMPACT DISC PLAYERS

Audio Intervisual Design
 Denon America
 Gefen Systems
 Gotham Audio Corp.
 H & E Micro-Trak Corp.

Media Touch Systems
 Numark Electronics
 Optical Media International
 Ortofon Inc.
 Panasonic Communications & Systems Co.
 Paso Sound Products Inc.
 Ramsa/Panasonic 27
 Ramware Designs Corp.
 Roland Corp. US
 Sansui KDS Technologies
 Sony Communications Products Co. Professional Audio Div. 15,69
 Soundcraftsmen

STUDER REVOX

Studer Revox America, Inc. IFC
 TASCAM, Teac Professional Div. 62,63
 Technics

COMPUTER HARDWARE AND PERIPHERALS

Adams-Smith
 Aerco
 Ariel Corp.
 Audio Intervisual Design
 Auricle Control Systems
 Canetics, Inc.
 COLOSSUS: By The Numbers

Commodore Business Machines
 Computer Music Supply
 J.L. Cooper Electronics
 Current Music Technology
 Digidesign, Inc.
 E.A.R.S., Inc.
 Electronic Specialists, Inc.
 Groupe Andre Perry Software
 Head Acoustics North America
 Hybrid Arts, Inc.
 Imagine Music Group
 Innovative Electronic Designs, Inc.
 Interval Music Systems
 Julian Systems
 Lenco, Inc.
 Leonardo Software
 Mellotron Digital Corp.
 Midimix
 Opcode Systems, Inc.
 Optronics Technology
 Panasonic Communications & Systems Co.
 Passport Designs Inc.
 Pulizzi Engineering Inc.
 Recortec Inc.
 Roland Corp. US

soundmaster

Soundmaster USA Inc. 103
 Southworth Music Systems, Inc.
 Techron

control and a new reverb algorithm that lets you design your own three-dimensional space. All controllable from its own optional dedicated remote.

Meanwhile its companion, the SPX1000, has digital inputs and outputs for direct digital access to professional quality processing.

The SPX900 and SPX1000 Professional Multi-Effects Processors. Now performing

special effects at a Yamaha Professional Audio dealer near you.

Yamaha Corporation of America, Professional Audio Division, P.O. Box 6600, Buena Park, CA 90622-6022. In Canada, Yamaha Canada Music Ltd., 135 Milner Avenue, Scarborough, Ontario M1S3R1.

YAMAHA
 Professional Audio Division

outperforming its predecessors.



Circle (12) on Rapid Facts Card

See Adv. Page

Touch Technologies Inc.
 Transtector Systems
 Turtle Beach Softworks
 Yamaha Corp. of America Pro
 Audio Div. 22,23
 Yellowtec GmbH
 Zoom Corp.

**COMPUTER SOFTWARE,
 BUSINESS**

Altec Lansing Corp.
 Bose Corp. 53
 COLOSSUS: By The Numbers
 Computer Music Supply
 Current Music Technology
 Electron Processing, Inc.
 Full Compass Systems
 Groupe Andre Perry Software
 HED Productions
 Imagine Music Group
 Integral Systems
 Loran Cassettes & Audio Products
 Micro-Point Inc.
 Musician's Organizer Mega Disk
 Organizers
 Optifile A/V Technologies
 Optronics Technology
 Prime Solutions
 Pristine Systems
 Scientific Design Software
 Tatum Labs, Inc.
 Yellowtec GmbH

**COMPUTER SOFTWARE,
 MIDI**

Aesthetic Engineering
 Auricle Control Systems
 Bacchus Software Systems
 Blank Software
 Coda Music Software
 Computer Music Supply
 J.L. Cooper Electronics
 Current Music Technology
 Digidesign, Inc.
 Digital Music Corp.
 Dr. T's Music Software
 East Coast MIDI Bulletin Board
 Eye & I Productions
 HED Productions
 Hybrid Arts, Inc.
 Imagine Music Group
 Instruments Lyre Inc.
 Intelligent Music
 Interval Music Systems
 Keyboard Technologies Inc.
 Korg USA Inc.
 Magnetic Music
 Mark of the Unicorn
 Mellotron Digital Corp.
 MIDImouse Music
 Midisoft Corp.
 Musician's Organizer Mega Disk
 Organizers
 Musicode
 Opcode Systems, Inc.
 Optronics Technology
 Passport Designs Inc.

See Adv. Page

Phi Technologies, Inc.
 Power Mountain Software Systems
 Primera Software
 Quiet Lion
 Richmond Sound Design Ltd.
 Roland Corp. US
 Sound Quest Inc.
 Soundtracs PLC 1
 Southworth Music Systems, Inc.
 Steinberg/Jones
 Stramp USA
 Sweetwater Sound
 Turtle Beach Softworks
 Words & Deeds

**COMPUTER SOFTWARE,
 STUDIO APPLICATIONS**

Aesthetic Engineering
 Amek/TAC US Operations
 Audio Intervisual Design
 Auricle Control Systems
 Coda Music Software
 Computer Music Supply
 J.L. Cooper Electronics
 Current Music Technology
 Digidesign, Inc.
 Dr. T's Music Software
 East Coast MIDI Bulletin Board
 Eye & I Productions
 Fostex Corp. of America
 Gefen Systems
 Groupe Andre Perry Software
 Head Acoustics North America
 Hybrid Arts, Inc.
 Imagine Music Group
 Integral Systems
 Interval Music Systems
 Julian Systems
 Leonardo Software
 Marshall Electronic
 Media Touch Systems
 MicroAudio Inc.
 Musician's Organizer Mega Disk
 Organizers
 Opcode Systems, Inc.
 Optical Media International
 Optifile A/V Technologies
 Passport Designs Inc.
 Power Mountain Software Systems
 Primera Software
 Pristine Systems
 Roger Rhodes Music, Ltd.
 Scantek, Inc.

soundmaster

Soundmaster USA Inc. 103
 Southworth Music Systems, Inc.
 Steinberg/Jones
 Techron
 Words & Deeds

**CONSOLES, AUTOMATION
 SYSTEMS**

ADM Technology Inc.

See Adv. Page

Amek/TAC US Operations
 AMS Industries Inc
 Astra Services
 Audio Animation 47
 Audio Intervisual Design
 Audio Kinetics Ltd.
 CMX Corp.
 Computer Music Supply
 J.L. Cooper Electronics
 DDA



D&R USA 81
 Euphonix, Inc.
 Fostex Corp. of America
 GML, Inc. 45
 Harrison by GLW Enterprises
 Head Acoustics North America
 Intelix 111
 Media Touch Systems
 Georg Neumann GmbH



Neve 29
 Novation International
 Optifile A/V Technologies
 Orion Research
 Otari Corp. 33



Quad Eight Electronics, Inc. 64A-64B,106
 Ram Broadcast Systems Inc.
 Richmond Sound Design Ltd.
 Saje
 Sellmark Electronic Services Ltd.
 Solid State Logic 25
 Sonosax S.A.
 Sony Communications Products Co.
 Professional Audio Div. 15,69

Soundcraft

Soundcraft 13
 Soundtracs PLC 1
 Steinberg/Jones
 Stramp USA
 Studio Master Systems
 Studiomaster Inc.
 Yamaha Corp. of America Pro
 Audio Div. 22,23
 Yellowtec GmbH

CONSOLES, DIGITAL

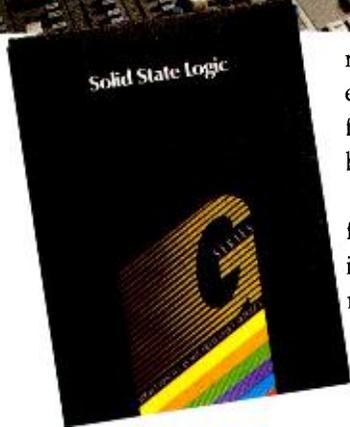
AMS Industries Inc
 Analog Digital Synergy Inc.
 Audio Animation 47
 Audio Intervisual Design
 Gotham Audio Corp.

“No one will ever buy a console with a television in it”

Visitor to AES, 1977

It is hard to believe that a modest VDU could attract much attention. Today, even effects processors use visual displays. Why have they become so necessary?

Quite simply, the greater the number of functions in a system, the more flexibility there must be in showing its status. In the recording studio the central piece of creative hardware is the console. To unlock its full potential, Solid State Logic gave engineers digital control of its facilities. The VDU was a side effect of this plan.



In the intervening years our designs were enhanced, incorporating the suggestions of the many leading studios who had adopted our system. Ultimately, the G Series Master Studio System evolved.

G Series offers the fastest execution of complex commands by storing the entire operating program in 2Mbytes of on-board RAM. Its removable Data Cartridges preserve mobility of data, without the capacity limitations of floppy disks. Each cartridge holds 20Mbytes of removable RAM—the equivalent of 80 floppy disks.

Because G Series software represents over ten years of evolution in some of the busiest recording studios in the world, it incorporates an unparalleled degree of user experience. Advanced facilities like Selective Rollback and Group Set make mixing faster. Rapid comparison can be made between mixes. Large or complex mixes can be handled effortlessly on or off-line.

Throughout, SSL has preserved compatibility with earlier systems, creating a functional standard for the industry. By providing a realistic upgrade path, the investment of studio owners has also been protected. Most importantly, G Series remains at the forefront of audio production technology.

Solid State Logic MASTER STUDIO SYSTEMS

Begbroke, Oxford, England OX5 1RU (0865) 842300

London (01) 706 4948 • Paris (1) 34 60 46 66 • Milan (2) 612 17 20 • New York (212) 315 1111 • Los Angeles (213) 463 4444

• Toronto (416) 363 0101 • Tokyo (03) 320 1101

U.S. Toll Free Number 800 343 0101
www.americanradiohistory.com

See Adv. Page

Richmond Sound Design Ltd.
Solid State Logic 25
 Sonosax S.A.
Soundtracs PLC 1
Trident Audio USA 73
 WaveFrame Corp.
Yamaha Corp. of America Pro Audio Div. 22,23

CONSOLES, RECORDING AND PRODUCTION

ADM Technology Inc.
Akai/IMC 17



Alesis Studio Electronics 3
 Amek/TAC US Operations
 AMS Industries Inc
 API-Audio Products Inc.
 Astra Services



ATI-Audio Technologies, Inc. 93
Audio Animation 47

Audio Developments, Ltd.
 Audio Intervisual Design
 Audio Logic
 Audio-Technica US, Inc.
 Auditronics Inc.
 Biamp Systems
 Broadcast Audio Corp.
 Cello Ltd.
 Coherent Communications Inc.
 Dax Audio Group, Inc.
 DDA
 DOD Electronics Corp.



D&R USA 81

Euphonix, Inc.
 F.A.C.E. Network
 Focusrite c/o Sonic Image Ltd.
 Fostex Corp. of America
 Galaxy Audio
 Grass Valley Group
 Harrison by GLW Enterprises
 H & E Micro-Trak Corp.
 Howe Technologies Corp.
Intelix 111
 McCurdy Radio Industries Ltd.
 Neotek Corp.
 Georg Neumann GmbH



Neve 29
 Novation International
 Opamp Labs, Inc.

See Adv. Page

Orion Research
Otari Corp. 33
 Pacific Recorders & Eng. Corp.
 Peavey Audio Media Research
 Professional Sound Corp.



Quad Eight Electronics, Inc. 64A-64B,106
 Quantum Audio Labs
 Ram Broadcast Systems Inc.
Ramsa/Panasonic 27
 Richmond Sound Design Ltd.
 Saje
 SECK
Solid State Logic 25
 Sonosax S.A.
Sony Communications Products Co. Professional Audio Div. 15,69

Soundcraft

Soundcraft 13
Soundtracs PLC 1
 Spectra Sonics/Spectra Sound

STUDER REVOX

Studer Revox America, Inc. IFC
 Studiomaster Inc.
TASCAM, Teac Professional Div. 62,63
Trident Audio USA 73
 Voice Over L.A., Inc.
 Ward-Beck Systems Ltd.
 Wheatstone Broadcast Group
Yamaha Corp. of America Pro Audio Div. 22,23

CONSOLES, SOUND REINFORCEMENT



Alesis Studio Electronics 3
 Altec Lansing Corp.
 Amek/TAC US Operations
 Astra Services
 ATM Audio
 Audio Centron
 Audio Intervisual Design
 Audio Logic
 Biamp Systems
 Crest Audio
 Dax Audio Group, Inc.
 DDA
 Delicate Productions
 DOD Electronics Corp.
 Dorrrough Electronics

See Adv. Page



D&R USA 81



ElectroVoice, Inc. 21
 F.A.C.E. Network
 Galaxy Audio
 Harrison by GLW Enterprises
 H & E Micro-Trak Corp.
 Hi-Tech Audio Systems Inc.
Intelix 111



Klark-Teknik 51

Mark IV Audio Canada Inc.
 Novation International
 Numark Electronics
Peavey Electronics Corp. 35
 Perma Power Electronics Inc.
 Precision Audio Inc.



Quad Eight Electronics, Inc. 64A-64B,106
 Ram Broadcast Systems Inc.
Ramsa/Panasonic 27
 Richmond Sound Design Ltd.
 Ross Systems Div. of IMC
 Saje
 SECK
 Sonosax S.A.

Soundcraft

Soundcraft 13
Soundtracs PLC 1
 Southern Thunder Sound Inc.
 Spectra Sonics/Spectra Sound

STUDER REVOX

Studer Revox America, Inc. IFC
 Studiomaster Inc.
TASCAM, Teac Professional Div. 62,63
 TOA Electronics, Inc.
Trident Audio USA 73
 Voice Over L.A., Inc.
 Ward-Beck Systems Ltd.
 Wheatstone Broadcast Group
Yamaha Corp. of America Pro Audio Div. 22,23

See Adv. Page

CROSSOVERS AND FREQUENCY DIVIDERS

- AB International Electronics
- Acoustech Corp.
- Adamson Acoustic Design Corp.
- Altec Lansing Corp.
- Amek/TAC US Operations
- Ashly Audio, Inc.
- AST Sound
- ATC Loudspeaker Technology, Ltd.
- Audio Intervisual Design
- Audio Logic
- Aura Sonic Ltd.
- Biamp Systems
- BSS Audio
- Cello Ltd.
- Court Acoustics Systems
- DB Systems
- DDA
- DOD Electronics Corp.



Electro-Voice, Inc. 21



- Emilar Corp.
- FM Acoustics Ltd.
- Furman Sound, Inc.
- Harrison Information Technology
- InConcert
- Industrial Research Products
- Industrial Strength Industries



JBL Professional BC



- Klark-Teknik 51
- Madisound Speaker Components
- Mark IV Audio Canada Inc.
- The Mitek Group
- Numark Electronics
- Peavey Electronics Corp. 35
- Professional Audio Systems 114,96A-96D
- QSC Audio Products, Inc.



Radian Audio Engineering Inc. 79
Ramsa/Panasonic 27



Rane Corp. 4-5

See Adv. Page

- Ross Systems Div. of IMC
- S.E.M. Co.
- Sescom, Inc.
- Spectra Sonics/Spectra Sound
- State of The Art Electronik
- Studiomaster Inc.
- TOA Electronics, Inc.
- Trax Audio & Music
- UREI
- Westlake Audio
- White Instruments Div. C Van R Inc. 99
- Yamaha Corp. of America Pro Audio Div. 22,23

DELAYS, ANALOG AND DIGITAL

- ADA Signal Processors, Inc.
- Akai/IMC 17



- Alesis Studio Electronics 3
- AMS Industries Inc



- ART-Applied Research & Technology, Inc. 43
- Audio Animation 47
- Audio/Digital Inc.
- Audio Logic
- Aura Sonic Ltd.
- DigiTech
- DOD Electronics Corp.



- D&R USA 81
- Eventide, Inc.
- Industrial Research Products
- Industrial Strength Industries



- Klark-Teknik 51
- Lexicon Inc.
- Mark IV Audio Canada Inc.
- Marshall Electronic
- McCurdy Radio Industries Ltd.
- Numark Electronics
- Peavey Audio Media Research
- Peavey Electronics Corp. 35
- Publison S.A.
- Ramsa/Panasonic 27
- Rocktron Corp.
- Roland Corp. US
- S.E.M. Co.
- Sescom, Inc.
- Sound Concepts Inc.
- Spectra Sonics/Spectra Sound

See Adv. Page

- Studiomaster Inc.
- T.C. Electronic America
- TOA Electronics, Inc.
- Virtual Designs Ltd.
- Yamaha Corp. of America Pro Audio Div. 22,23

DIGITAL AUDIO WORKSTATIONS

- AMS Industries Inc
- Ariel Corp.
- Audio Animation 47
- Canetics, Inc.
- CMS Digital, Inc.
- CompuSonics Corp.
- Computer Music Supply
- Digidesign, Inc.
- Digital Audio Research
- Digital Dynamics, Inc. 7
- Duplitrronics, Inc.
- For-A Corp. of America
- Head Acoustics North America
- Hybrid Arts, Inc.
- JVC Professional Products Co.
- Lester Audio Labs
- Lexicon Inc.
- Marshall Electronic
- New England Digital Corp.
- Pacific Digital
- Publison S.A.
- Real World Research
- Solid State Logic 25



- Soundmaster USA Inc. 103
- Southworth Music Systems, Inc.
- Steinberg Digital Audio
- Steinberg/Jones
- Studer Editech
- Symetrix Inc.
- Turtle Beach Softworks
- WaveFrame Corp.
- Yamaha Corp. of America Pro Audio Div. 22,23

DISC-MASTERING SYSTEMS

- D&G Mastering
- Future Disc Systems
- Gotham Audio Corp.
- Georg Neumann GmbH
- Optical Disc Corp.
- Optical Disc Mastering
- Optical Media International
- Solid State Logic 25
- Sontec Electronics
- Sony Communications Products Co. Professional Audio Div. 15,69
- Technetronics Inc.
- WaveFrame Corp.

DRUM MACHINES

- Akai/IMC 17

THE POWER PACKAGE



THE NEW SIGMA

SOUND
STUDIOS
OF NEW YORK

New Ownership/Management

A world-class studio committed to audio excellence.

Studio B features New York's first Neve VR-60 with Flying Faders™

Automation and Mitsubishi 32-track and 2-track Digital Recorders.

Contact: Gary Robbins (212) 582-5055

 **Neve**
Siemens Company

Exclusive North American Distributor of

 **MITSUBISHI**
DIGITAL PRO AUDIO

CT: (203) 744-6280 NY: (212) 956-6464 TN: (614) 329-9584 CA: (213) 461-6383 • TORONTO: (416) 365-3363

Circle (15) on Rapid Facts Card
www.americanradiohistory.com

See Adv. Page



- Alesis Studio Electronics 3
- E-Mu Systems Inc.
- Industrial Strength Industries
- Interval Music Systems
- Kawai America Corp.
- Panasonic Communications & Systems Co.
- Roland Corp. US
- Simmons Electronics (USA) Inc.

EDITING SYSTEMS

- Adams-Smith
- Alpha Audio 107
- Amek/TAC US Operations
- AMS Industries Inc
- Amtel Systems, Inc.
- Ariel Corp.
- Audio Kinetics Ltd.
- Cipher Digital, Inc.
- CMX Corp.
- CompuSonics Corp.
- Editall
- For-A Corp. of America
- Fostex Corp. of America
- HAVE, Inc.
- Hybrid Arts, Inc.
- Julian Systems
- Lexicon Inc.
- Musician's Organizer Mega Disk Organizers
- Paltex Editing Systems
- Panasonic Communications & Systems Co.
- Publison S.A.
- Ramware Designs Corp.
- Real World Research
- Skotel Corp.
- Solid State Logic 25
- Sony Communications Products Co. Professional Audio Div. 15,69



- Soundmaster USA Inc. 103
- Soundtracs PLC 1
- Southworth Music Systems, Inc.
- Steinberg/Jones
- Strategic Sound, Inc.

STUDER REVOX

- Studer Revox America, Inc. IFC
- Turtle Beach Softworks
- VRI Scharff Rentals
- WaveFrame Corp.
- Xedit Corp.

See Adv. Page

EDUCATIONAL COURSES AND PROGRAMS

- Astra Services
- Audio-VideoGraphics
- AudioTechniques, Inc.
- Berklee College of Music
- Bruel & Kjaer Instruments 97
- Coda Music Software
- Dr. T's Music Software
- First Light Video Publishing
- Five Towns College
- Full Sail Center for the Recording Arts
- Imagine Music Group
- J.S. LoBianco Enterprises
- New Ear Productions
- The Recording Workshop
- Sony Communications Products Co. Professional Audio Div. 15,69
- Studio C Music Library
- Transtector Systems
- UCLA Extension Recording Engineering Program
- University of Sound Arts

EQUALIZERS

AB International Electronics



- Alesis Studio Electronics 3
- Altec Lansing Corp.
- Amek/TAC US Operations
- API-Audio Products Inc.
- Apogee Sound, Inc.
- Arsonic Tonstudio Elektronik US



- ART-Applied Research & Technology, Inc. 43
- ARX Systems
- Ashly Audio, Inc.
- AST Sound



- ATI-Audio Technologies, Inc. 93
- ATM Audio
- Audio Animation 47

Audio Control Industrial..

- Audio Control Industrial 100
- Audio Logic
- Audiorent
- Auditronics Inc.
- Aura Sonic Ltd.
- Benchmark Media Systems, Inc.
- Biamp Systems
- Cello Ltd.

See Adv. Page

- Court Acoustics Systems
- Dax Audio Group, Inc.
- DB Systems
- dbx Inc.
- DigiTech
- DOD Electronics Corp.



D&R USA 81



Electro-Voice
a MARK IV company

- Electro-Voice, Inc. 21
- Focusrite c/o Sonic Image Ltd.
- Furman Sound, Inc.
- GML, Inc. 45
- Gotham Audio Corp.
- Harrison by GLW Enterprises
- Industrial Research Products
- Industrial Strength Industries



JBL Professional BC



- Klark-Teknik 51
- Mark IV Audio Canada Inc.
- Marshall Electronic
- Meyer Sound Labs, Inc.
- MicroAudio Inc.
- Mineroff Electronics Inc.
- Georg Neumann GmbH
- Numark Electronics
- Opamp Labs, Inc.
- Orban, A Div. of AKG Acoustics, Inc.
- Oxmoor Corp.
- Paso Sound Products Inc.
- Peavey Audio Media Research
- Peavey Electronics Corp. 35



- Quad Eight Electronics, Inc. 64A-64B,106
- Ram Broadcast Systems Inc.



- Rane Corp. 4-5
- Rocktron Corp.
- Roland Corp. US
- Ross Systems Div. of IMC
- Scantek, Inc.
- Schmid Telecommunication
- S.E.M. Co.
- Solid State Logic 25

Focus On Excellence



Introducing the MR-1 Discrete Head Professional Cassette Deck—
From Nakamichi—the company that created the cassette revolution!

The MR-1—a *professional* deck with front and rear
balanced inputs, unbalanced inputs, balanced and unbalanced outputs,
linear-scale peak-reading meters, independent
Tape and EQ selection, Dolby-B and -C NR, provision for external NR,
remote control, EIA rack mount and more!

The MR-1—with an Asymmetrical Dual-Capstan Direct-Drive Transport with
less than 0.027% flutter, an exclusive pressure-pad lifter that eliminates
scrape flutter and modulation noise, and a Motor-Driven-Cam operating
system that ensures gentle tape handling, automatic slack takeup,
and long-term reliability.

The MR-1—with the legendary Nakamichi Discrete 3-Head recording system
for 20—20,000 Hz \pm 3 dB response, absolute azimuth accuracy,
and incredible headroom.

The MR-1 Discrete Head Professional Cassette Deck—
From Nakamichi—the company whose profession is recording!



Nakamichi U.S.A. Corporation 19701 South Vermont Ave., Torrance, CA 90502 (213) 538-8150

*Dolby NR manufactured under license from Dolby Laboratories Licensing Corporation.

The word "DOLBY" is a trademark of Dolby Laboratories Licensing Corporation.

Circle (16) on Rapid Facts Card

	See Adv. Page
Sontec Electronics	
Soundcraftsmen	
Spectra Sonics/Spectra Sound	
Stanton Magnetics Inc.	
Summit Audio Inc.	
Symetrix Inc.	
T.C. Electronic America	
Technics	
TOA Electronics, Inc.	
UREI	
Valley International	39
Virtual Designs Ltd.	
Ward-Beck Systems Ltd.	
Wheatstone Broadcast Group	
White Instruments Div. C Van R	
Inc.	99
Yamaha Corp. of America Pro	
Audio Div.	22,23

EQUIPMENT CASES

Anvil Cases (Unit of Zero Halliburton)	
ATM Audio	
Aura Sonic Ltd.	
Calzone Case Co.	
Dago Cases	
DeCuir Corp.	
Four Designs Co.	
H & E Micro-Trak Corp.	
Island Cases	
Jan-Al Cases	
Mirromere Audio	
The Mitek Group	
Numark Electronics	
Peavey Electronics Corp.	35
Penn Fabrication NJ Inc.	
Penn Fabrication USA Inc.	
Star Case Mfg. Co., Inc.	
Thermodyne International	
Top Notch Audio (TNA Case Co.)	
U.S.A. Audio	

EQUIPMENT RENTAL AND LEASING

Akashic Records Group	
Apex Machine Co.	
Astra Services	
Audio Analysts USA Inc.	
Audio Engineering Associates	
Audio Rents, Inc.	
Audio Sound Productions	
Audiorent	
Aura Sonic Ltd.	
Century Financial Services Group, Ltd.	
CMS Digital, Inc.	
Delicate Productions	
Digital Brothers	
Digital Dispatch, Inc.	
E.A.R.S., Inc.	
Eventide, Inc.	
Full Compass Systems	
HAVE, Inc.	
Hi-Tech Audio Systems Inc.	
J.L. Sound Systems Ltd.	
Latin Recording Brokerage HQ1	
Consultation Agency	
MAC Cassettes	
Mirromere Audio	

	See Adv. Page
Posthorn Recordings	
Gary Raymond Sound Systems	
Remote Recording Services	
Scantek, Inc.	
Seriously Sound	
Simmons Electronics (USA) Inc.	
Southern Thunder Sound Inc.	
Spectra Sonics/Spectra Sound	
Steinway & Sons	
A Total Effect	
Underground Sound	
University of Sound Arts	
VRI Scharff Rentals	
Zeus Light & Sound Co.	

FADERS

Audio Kinetics Ltd.	
---------------------	--



D&R USA	81
GML, Inc.	45
H & E Micro-Trak Corp.	
Georg Neumann GmbH	
Otari Corp.	33
Penny & Giles	
Richmond Sound Design Ltd.	
Sellmark Electronic Services Ltd.	
Spectra Sonics/Spectra Sound	
Ward-Beck Systems Ltd.	

FILTERS, REPLACEMENT

Apogee Electronics Corp.	
--------------------------	--



D&R USA	81
	
Quad Eight Electronics, Inc.	64A-64B,106
Spectra Sonics/Spectra Sound	

HEADPHONE MIXING SYSTEMS



Alesis Studio Electronics	3
---------------------------	---



ATI-Audio Technologies, Inc.	93
AudioTechniques, Inc.	
Beyer Dynamic Inc.	

	See Adv. Page
Full Compass Systems	
Furman Sound, Inc.	
Gentner Electronics Corp.	
H & E Micro-Trak Corp.	
Industrial Strength Industries	
Intelix	111
Lake People	
Peavey Audio Media Research	
ProTech Audio Corp.	



Rane Corp.	4-5
Signet	
Simon Systems Engineering, Inc.	
TASCAM, Teac Professional Div.	62,63
Telex Communications, Inc.	
VRI Scharff Rentals	
Ward-Beck Systems Ltd.	
Westlake Audio	
Yamaha Corp. of America Pro	
Audio Div.	22,23

HEADPHONES AND HEADSETS

AKG Acoustics Inc.	
Audio-Technica US, Inc.	
Audix Corp.	
Beyer Dynamic Inc.	
Clear-Com Intercom Systems	
Countryman Associates Inc.	93
Fostex Corp. of America	
Gold Line/Loft	
H & E Micro-Trak Corp.	
Head Acoustics North America	
HM Electronics, Inc.	
Nakamichi America Corp.	31
Numark Electronics	
Roland Corp. US	
RTS Systems	
Sennheiser Electronic Corp.	
Shure Brothers Inc.	
Sony Communications Products Co.	
Professional Audio Div.	15,69
Stanton Magnetics Inc.	
Technical Projects Inc.	
Telex Communications, Inc.	
TOA Electronics, Inc.	
VRI Scharff Rentals	
Yamaha Corp. of America Pro	
Audio Div.	22,23

INTERCOM SYSTEMS

Atlas/Soundolier	
Auditronics Inc.	
Clear-Com Intercom Systems	
Diless Ltd.	
Full Compass Systems	
H & E Micro-Trak Corp.	
HM Electronics, Inc.	
McCurdy Radio Industries Ltd.	
Paso Sound Products Inc.	
Precision Audio Inc.	
Professional Sound Corp.	
ProTech Audio Corp.	



*Stereo
Hi Current MOSFET
Control Room Amplifier*

S400



Stereo Hi Current MOSFET Control Room Amplifier

Designed to fill the gap between high power commercial amplifiers and high fidelity audiophile units, the **S400** is the first amplifier brought to market expressly for studio control room applications. The perfect match for the latest generation of advanced high quality near-field monitors, the **S400's** two rack space, convection cooled, high current MOSFET design allows for under console use with no fan noise. The fully discrete high speed front end, class "A" voltage gain stage and constant current bias network, along with its enormous power supply capability and complete lack of global feedback, allow the **S400** to provide the imaging, depth of field and dynamic transients too often missed in today's control rooms. Carefully chosen silver mica and polyester capacitors, along with metal oxide resistors, further enhance the unit's ability to resolve fine detail and spatial information while keeping noise to a minimum. The power supply incorporates a transformer designed specifically for this unit, utilizing multiple parallel secondaries to achieve low source impedance. This provides an extraordinary damping factor for cone motion control and gives the transformer excellent long term supply capability, allowing for faster recovery from low frequency transients to recharge the filter capacitors. Providing the short term power source, the twin 10,000 microfarad capacitors, custom built for low equivalent series resistance, are capable of delivering energy equal to units twice their rating. Their low ESR allows for faster discharge with a proportional increase in low frequency transient capability. Six 100 watt MOSFET output devices per channel provide a very safe operating area in delivering the over-sized power supply's reserves to even the most reactive of loudspeakers at impedances down to two ohms.

All of the components in the amplifier circuit, including the MOSFET's, are hand-soldered directly to the circuit boards. Avoiding the use of sockets for the output devices eliminates the problems of oxidation and poor contact that can ultimately occur. The circuit boards themselves are two ounce copper over an FR-4 glass epoxy substrate, hot-air leveled for protection against oxidation. The ground plane on the component side provides shielding from noise producing signals. Output connectors are 3/4" spaced high current gold plated five way binding posts. Tip ring sleeve quarter inch inputs are easily run balanced or unbalanced and allow for easy bridged-mono operation with an optional custom fabricated Teflon composite Kimber Kable adapter set. In the mono mode, the **S400** becomes a lightning fast powerhouse capable of driving larger monitors; while in normal stereo, its transparent top end, sharply defined midrange and tight extended bottom are unequalled in expanding the limits of smaller speakers.

Absolute polarity	Non inverting
Input sensitivity	.80 volts RMS
Input impedance balanced/unbalanced	3.65K ohms/51K ohms
Output impedance	.003 ohms, 1KHz
Damping factor	2600, 1KHz
DC offset	Less than 100 mV
Signal to noise	105 dB
Total Harmonic Distortion	.01%
Frequency response (3dB points)	5Hz - 292KHz
Rise time (10% to 90% transition)	2 microseconds
Slew rate	60 volts per microsecond
Maximum peak current capability	45 amperes per channel
Power output per channel (not including 3 dB dynamic headroom)	
stereo 8 ohm	100 watts RMS
stereo 4 ohm	200 watts RMS
mono 8 ohm	400 watts RMS



*Mono
Hi Current MOSFET
Control Room Amplifier*

M500



Mono Hi Current MOSFET Control Room Amplifier

As an alternative to its stereo sibling, the **M500** mono block has been designed to offer the ultimate in smooth extended bandwidth for the most advanced audiophile monitoring possible. Utilizing the same twelve 100 watt MOSFET output devices and high current power supply, a different approach to the front end design has yielded a slightly warmer, less aggressive presentation with an enhanced and truly astounding deep bass response. Also, in our attempt to emulate the "tube" sound, a significantly higher output impedance has been used to provide a damping factor that does not vary with frequency. In traditional designs the lower damping factor typically exhibited at the frequency extremes is remedied in a tube amplifier's circuit by the necessity of using an output transformer...with its unfortunate contribution of sonic impurities. In the **M500** we have applied the benefits of this concept without the drawbacks, providing very strict cone motion control at all frequencies. Since the **M500** is not a bridged version of the **S400**, but a dedicated parallel mono unit, it does not supply quite the output of an **S400** bridged, but is, however, quite happy at impedances down to one ohm. In stereo pairs the **M500** will bring out the best from the finest monitors, while single units are the perfect choice when mono subwoofers are added in the near-field environment.

Absolute polarity	Non-inverting
Input sensitivity	.95 volts RMS
Input impedance balanced/unbalanced	3.65K ohms/51K ohms
Output impedance	.060 ohms, 20Hz-20KHz
Damping factor	135, 20Hz-20KHz
DC offset	Less than 100 mV
Signal to noise	105dB
Total Harmonic Distortion	.1%
Frequency response (3dB points)	5Hz-160KHz
Rise time (10% to 90% transition)	900 nanoseconds
Slew rate	60 volts per microsecond
Maximum peak current capability	80 amperes
Power output (not including 3dB dynamic headroom)	
8 ohm	150 watts RMS
4 ohm	275 watts RMS
2 ohm	450 watts RMS

Both the **S400** and **M500** are 3.5 inches high, 18.9 inches wide, 13.4 inches deep and have a shipping weight of 32 lbs. Each carries a 3 year warranty.



275 Martin Avenue Highland, N.Y. 12528

TEL 914-691-6077 FAX 914-691-6822

In an age of disk and digital, why buy analog?

We know there are some applications where our 32-channel digital machine, the DTR-900, is the only answer. But if your business is such that you can do anything you want to do in the analog domain, and at the same time do less damage to your budget, then our brand new analog 24-channel MTR-100A may be the perfect machine for you.

When you consider that the MTR-100 will literally *change forever* the way engineers interface with audio machines, and



The MTR-100's auto-alignment saves you hours of time by eliminating constant tweaking and re-tweaking between sessions.

that this new way will save you hours spent in non-productive time, the analog choice begins to make even more sense. You see, the MTR-100 features full Auto-Alignment that allows total re-calibration of the record and reproduce electronics. This means you can compensate for different tapes in a *fraction* of the time that it previously took, and your studio is not bogged down with constant tweaking and re-tweaking between sessions.

And if you think digital machines have a corner on high performance transports, think again! The MTR-100's new transport incorporates reel motors that approach one horsepower—you'll get fast wind speeds of up to 474 inches per second! Of course, the

transport is pinchrollerless to give you the legendary tape handling ballistics of our MTR-90.

What's more, with its optional EC-103 chase synchronizer, the MTR-100 maintains frame-lock in forward and reverse from 0.2X to 2.5X play speed, and will typically park with zero frame error.

Then, there's the sound. New cylindrical-contour heads built by Otari especially for the MTR-100 result in remarkably low crosstalk and outstanding low-frequency performance. Pre-amps are located directly beneath the heads to further improve frequency response, and HX-Pro* is built-in for enhanced high frequency headroom. (An optional internal noise reduction package houses Dolby* SR/A.) Add all these features to gapless, seamless, punch-in, punch-out, which is also built-in, and your

MTR-100's sonic performance will rival, or beat any digital machine in the world.

So there you have it. With these powerful benefits available in analog, does it make sense to go digital? Sure, for some applications. But analyze your needs carefully before you buy. For many applications, a hot

analog tape machine like the MTR-100 is the right choice.

And because we can see both sides of the question, put us to work. We have information that can help you make the right decision. Call Otari at (415) 341-5900 for the "Technology You Can Trust".



Reel motors that approach one horsepower are driven by pulse width modulation amplifiers to tape speeds up to 474 ips.

OTARI®



Trademark Dolby Laboratories Licensing Corporation

See Adv. Page

Ram Broadcast Systems Inc.
ROH Div. of Anchor Audio Inc.
RTS Systems
Swintek Enterprises
Technical Projects Inc.
Telex Communications, Inc.
TOA Electronics, Inc.
Vega, A Mark IV Co.
VRI Scharff Rentals
Ward-Beck Systems Ltd.

LIBRARIES, MUSIC PRODUCTION

Aircraft Music Library
Associated Production Music
Bertus Productions The Studio
CMS Digital, Inc.
DeWolfe Music Library, Inc.
Dimension Music & Sound Effects
Eye & I Productions
FirstCom/Music House
Imagine Music Group
Music Box Productions
Musician's Organizer Mega Disk Organizers
Network Music, Inc.
Omnimusic
Optical Media International
Promusic Inc.
Bill Rase Productions, Inc.
Solid Sound, Inc.
SoperSound Music Library
Sound Ideas
Studio C Music Library
TRF Production Music Libraries
27th Dimension Inc.
Valentino, Inc.
Voice Over L.A., Inc.

LIBRARIES, SAMPLED SOUNDS

Akai/IMC 17
Bertus Productions The Studio
Casio, Inc.
Dorsey Productions, Inc.
Earworks
E-Mu Systems Inc.
Ensoniq Corp.
Eye & I Productions
Imagine Music Group
Kawai America Corp.
Musician's Organizer Mega Disk Organizers
Optical Media International
Prosonus 77
Bill Rase Productions, Inc.
Roland Corp. US
Simmons Electronics (USA) Inc.
Solid Sound, Inc.
Sound Ideas
Sweetwater Sound
27th Dimension Inc.

See Adv. Page

LIBRARIES, SOUND EFFECTS

Associated Production Music
Bertus Productions The Studio
Casio, Inc.
COLOSSUS: By The Numbers
DB Systems
DeWolfe Music Library, Inc.
Dimension Music & Sound Effects
Dorsey Productions, Inc.
E-Mu Systems Inc.
Ensoniq Corp.
FirstCom/Music House
Gefen Systems



Hollywood Edge 109
Imagine Music Group
Majestic Duplicating Service
Musician's Organizer Mega Disk Organizers
Network Music, Inc.
Omnimusic
Optical Media International
Ramware Designs Corp.
Bill Rase Productions, Inc.
The Rubber Dubbers
Solid Sound, Inc.
SoperSound Music Library
Sound Ideas
TRF Production Music Libraries
27th Dimension Inc.
Valentino, Inc.
Voice Over L.A., Inc.

LIGHTING EQUIPMENT

Aerco
Littlite/CAE Inc.
LTM Corp. of America
Peavey Electronics Corp. 35
Penn Fabrication NJ Inc.
Penn Fabrication USA Inc.
Southern Thunder Sound Inc.
Spectrum Design & Development
Sunn Pro Sound
Zeus Light & Sound Co.

LIMITERS/COMPRESSORS



Alesis Studio Electronics 3
Amek/TAC US Operations
APHEX SYSTEMS
Aphex Systems Ltd. 49
ARX Systems
Ashly Audio, Inc.

See Adv. Page



ATI-Audio Technologies, Inc. 93
Audio Developments, Ltd.
Audio Logic
Auditronics Inc.
Aura Sonic Ltd.
Biamp Systems
BSS Audio
Circuit Research Labs, Inc.
dbx Inc.
Delta Electronics Inc.
DOD Electronics Corp.
Dorrough Electronics



D&R USA 81



Electro-Voice®
a MARK IV company

Electro-Voice, Inc. 21
Eventide, Inc.
Focusrite c/o Sonic Image Ltd.
Furman Sound, Inc.
Gentner Electronics Corp.
GML, Inc. 45
Gold Line/Loft
Gotham Audio Corp.
Industrial Research Products
Inovonics Inc.



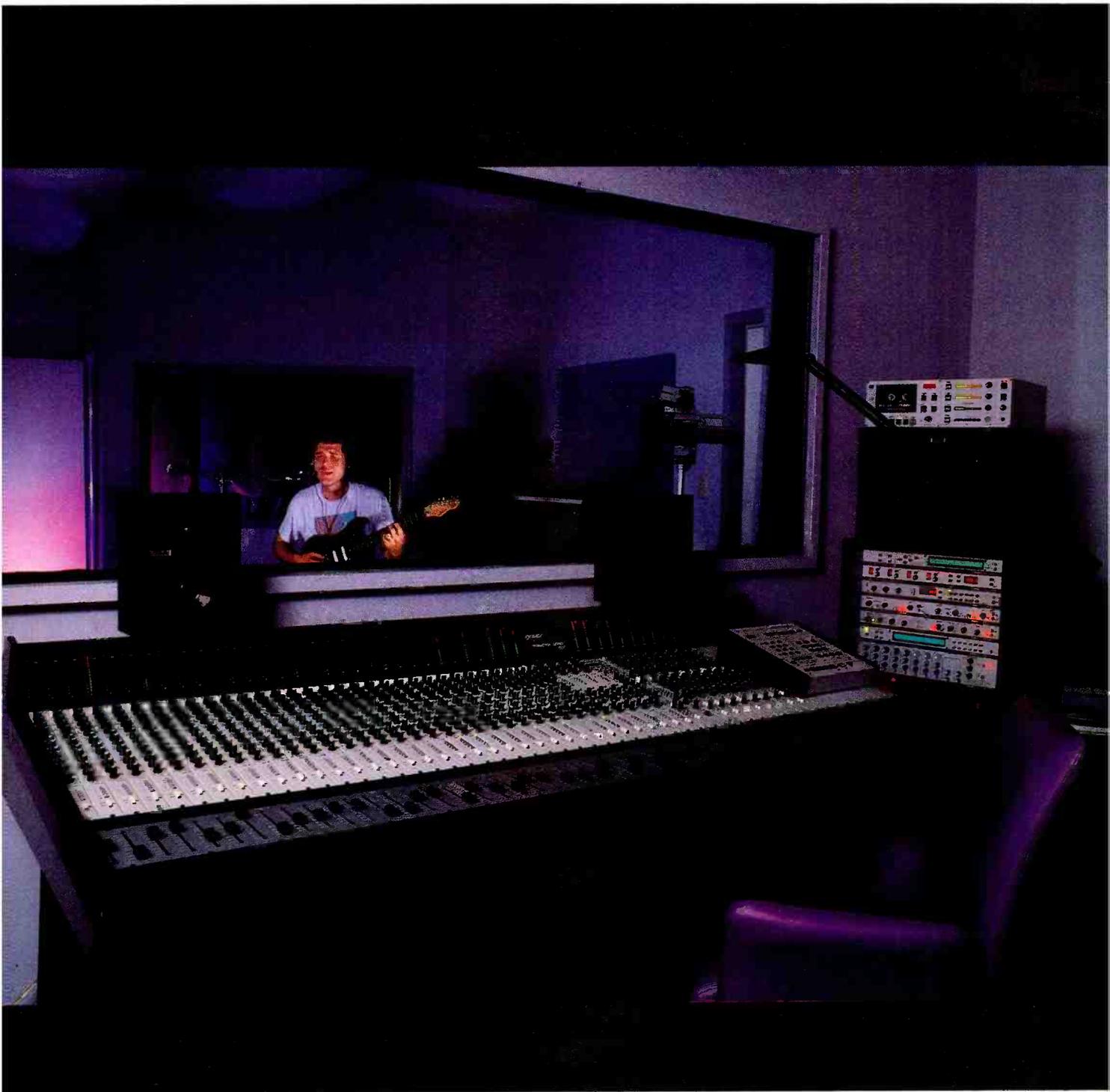
JBL Professional BC



Klark-Teknik 51
Lake People
Mark IV Audio Canada Inc.
Georg Neumann GmbH
Peavey Audio Media Research
ProTech Audio Corp.
Publison S.A.
QSC Audio Products, Inc.



Quad Eight Electronics, Inc. 64A-64B,106
Quest Marketing



r e a d y • s i t • g o

The modern recording environment requires a diverse array of equipment to accomplish a wide-range of challenging tasks--from commercial record production to video post-production. With a complete line of highest-quality professional recording gear, Peavey's Audio Media Research division is uniquely qualified to meet your needs as a recording engineer/producer/enthusiast. We've got the tools of your trade... We're *ready*. Just *sit* and *go*...

Circle (18) on Rapid Facts Card

www.americanradiohistory.com

PEAVEY®

AUDIO MEDIA
RESEARCH™



A DIVISION OF PEAVEY ELECTRONICS
711 A Street / Meridian, MS 39302-2898
(601) 483-5372 / Telex 504115 / Fax (601) 484-4278

See Adv. Page



- Rane Corp. 4-5
- Rocktron Corp.
- Roland Corp. US
- RSP Technologies
- S.E.M. Co.
- Shure Brothers Inc.
- Solid State Logic 25
- Sontec Electronics
- Spectra Sonics/Spectra Sound
- Studiomaster Inc.
- Summit Audio Inc.
- Symetrix Inc.
- UREI
- Valley International 39
- Ward-Beck Systems Ltd.
- Wheatstone Broadcast Group
- Yamaha Corp. of America Pro Audio Div. 22,23

LOUDSPEAKERS, COMPONENT

- Acoustech Corp.
- ADA Signal Processors, Inc.
- Altec Lansing Corp.
- AST Sound
- ATC Loudspeaker Technology, Ltd.
- Atlas/Soundolier
- Auratone Corp.
- Bose Corp. 53
- Boston Acoustics, Inc.
- Celestion Industries, Inc.
- Cerwin-Vega Inc.
- Community Light & Sound, Inc. 95
- Court Acoustics Systems
- Design Acoustics
- Design Direct Sound, Inc



- Emilar Corp.
- Fane Acoustics
- Fostex Corp. of America
- Frazier



- Gauss A Mark IV Co. 91
- H & E Micro-Trak Corp.



- JBL Professional BC
- J.L. Sound Systems Ltd.
- Madisound Speaker Components
- Mark IV Audio Canada Inc.
- The Mitek Group
- The Music People, Inc.

See Adv. Page

- Neutrik USA, Inc.
- Numark Electronics
- Paso Sound Products Inc.
- Peavey Electronics Corp. 35
- Penn Fabrication USA Inc.
- Polydax Speaker Corp.
- Professional Audio Systems 114,96A-96D
- ProSystems



- Radian Audio Engineering Inc. 79
- Rainbow Sound & Lighting Rainbow Recording Studios Inc.
- Gary Raymond Sound Systems
- Red Acoustics (USA) Ltd.
- Renkus-Heinz, Inc.
- Ross Systems Div. of IMC
- Sano International
- SpeakerCraft



- TAD-Technical Audic Devices IBC



- Tannoy-T.G.I. North America Inc. 59
- Technics
- TOA Electronics, Inc.
- Trend Textiles Inc.
- Turbosound
- Velodyne Acoustics

LOUDSPEAKERS, SOUND REINFORCEMENT

- Adamson Acoustic Design Corp.
- Altec Lansing Corp.
- Amplified Music Products Corp.
- Apogee Sound, Inc.
- ARX Systems
- AST Sound
- ATC Loudspeaker Technology, Ltd.
- Atlas/Soundolier
- ATM Audio
- Audio Centron
- Auratone Corp.
- Australian Monitor (Pty) Ltd.
- Bose Corp. 53
- Celestion Industries, Inc.
- Cerwin-Vega Inc.
- Community Light & Sound, Inc. 95
- Court Acoustics Systems
- Cyber-Kinetek Systems, Inc.
- Dalbec Audiolab
- DeCuir Corp.
- Delicate Productions
- Design Direct Sound, Inc
- Drum Workshop
- Eastern Acoustic Works

See Adv. Page



- Electro-Voice, Inc. 21



- Emilar Corp.
- Fane Acoustics
- Formula Audio, Inc. 105
- Fostex Corp. of America
- Frazier
- Galaxy Audio



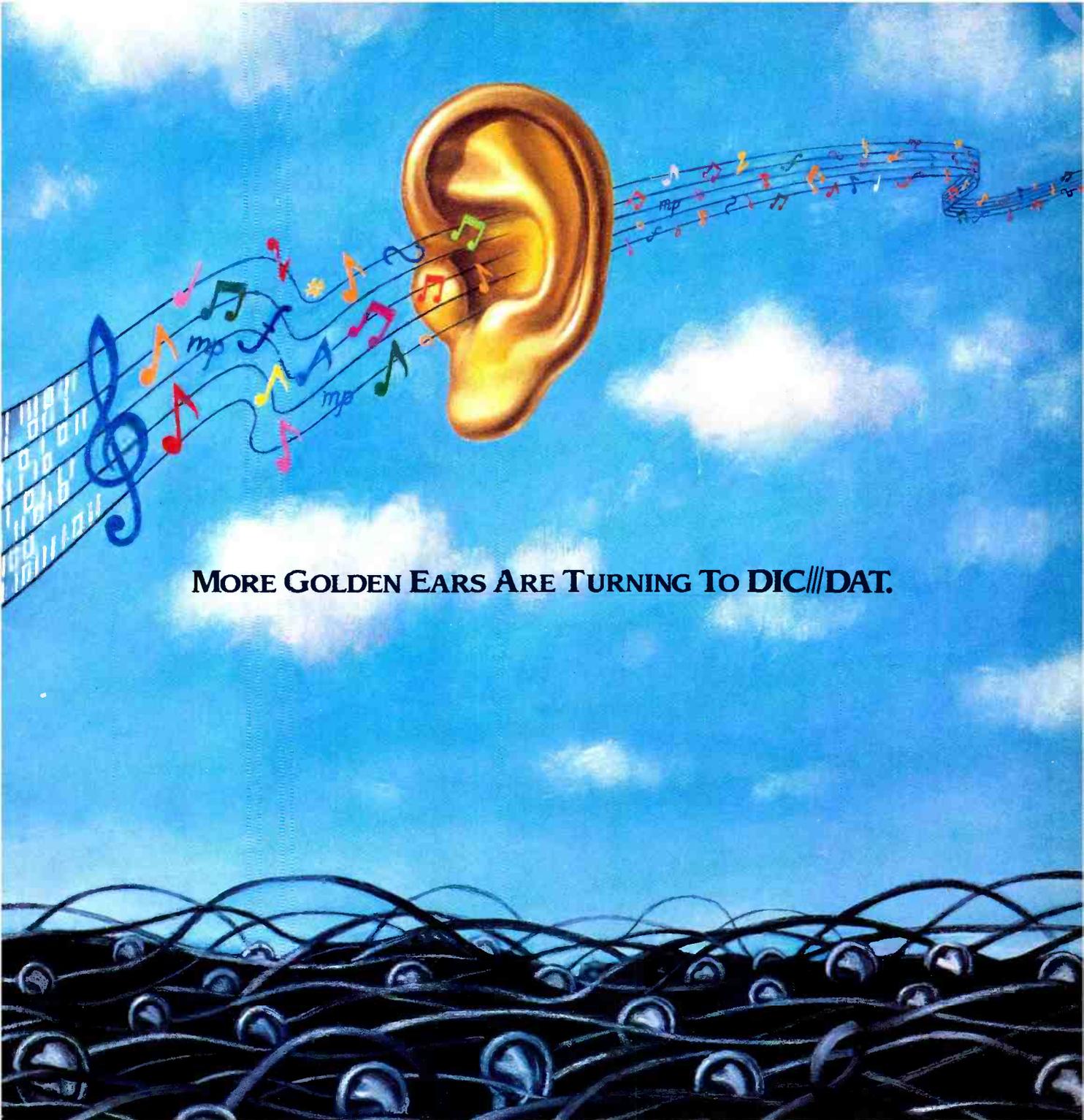
- Gauss A Mark IV Co. 91
- H & E Micro-Trak Corp.
- Intersonics, Inc.



- JBL Professional BC
- J.L. Sound Systems Ltd.
- Joe's Sound & Salami Co.
- Klipsch & Associates, Inc.
- Macpherson Loudspeakers
- Mark IV Audio Canada Inc.
- Martin America
- Master Blaster America
- Meyer Sound Labs, Inc.
- MicroAudio Inc.
- OAP
- Mirromere Audio
- The Mitek Group
- Musik Produktiv
- Numark Electronics
- OWI Inc.
- Paso Sound Products Inc.
- Peavey Electronics Corp. 35
- Perma Power Electronics Inc.
- Precision Audio Inc.
- ProSystems



- Radian Audio Engineering Inc. 79
- Rainbow Sound & Lighting Rainbow Recording Studios Inc.
- Ramsa/Panasonic 27
- Gary Raymond Sound Systems
- Red Acoustics (USA) Ltd.
- Renkus-Heinz, Inc.
- Ross Systems Div. of IMC
- Sonic Systems Inc.
- Soundscape
- Southern Thunder Sound Inc.
- Spectra Sonics/Spectra Sound
- Sunn Pro Sound



MORE GOLDEN EARS ARE TURNING TO DIC//DAT.

Every day, more and more ears of experience are turning to the *Nth* Degree performance of DIC//DAT, the definitive digital audio tape.

As DAT emerges as the ultimate audio medium, DIC Digital is earning distinction as the metal particle tape expert. Simply because no one brings more commitment or expertise to the exciting new world of DAT software.

Original source manufacturer. Sixty-year specialist in the ultra-high density coating and dispersion technology that makes it all possible.

The result is easy to hear: Crystal-sharp digital sound.

Uncompromising master-to-master quality. And unsurpassed resistance to high-tensile stress, even at the high search and duplication speeds of today's hardware.

DIC//DAT. Rising to fulfill new higher audio expectations. Taking music to the *Nth* Degree.

Call toll-free for a brochure with technical specs

and the Official DIC//DAT Dealer nearest you:
1-800-DAT-I-DIC



DIC//DAT™

TAKING MUSIC TO THE *Nth* DEGREE.



© DIC DIGITAL SUPPLY CORPORATION 1989

Circle (19) on Rapid Facts Card
www.americanradiohistory.com

See Adv. Page



TAD-Technical Audio Devices IBC



Tannoy-T.G.I. North America Inc. 59

- TOA Electronics, Inc.
- Top Notch Audio (TNA Case Co.)
- Trax Audio & Music
- Turbosound
- U.S.A. Audio
- Woodworx Audio Enclosures
- Yamaha Corp. of America Pro Audio Div. 22,23

LOUDSPEAKERS, STUDIO MONITORING

- Acoustech Corp.
- Altec Lansing Corp.
- Anchor Audio, Inc.
- ATC Loudspeaker Technology, Ltd.
- Audix Corp.
- Auratone Corp.
- Bose Corp. 53
- Celestion Industries, Inc.
- Cello Ltd.
- Clear-Com Intercom Systems
- Court Acoustics Systems
- Design Direct Sound, Inc
- E.A.R.S., Inc.



Electro-Voice, Inc. 21



- Emilar Corp.
- Fane Acoustics
- Formula Audio, Inc. 105
- Fostex Corp. of America
- Four Designs Co.
- Frazier
- Galaxy Audio



Gauss A Mark IV Co. 91

- Gotham Audio Corp.
- H & E Micro-Trak Corp.
- Intersonics, Inc.

See Adv. Page



JBL Professional BC

- J.L. Sound Systems Ltd.
- Joe's Sound & Salami Co.



Klark-Teknik 51

- Lakeside Associates, Inc.
- Mark IV Audio Canada Inc.
- Master Blaster America
- Meyer Sound Labs, Inc.
- Mirromere Audio
- Numark Electronics
- Paso Sound Products Inc.
- Peavey Audio Media Research
- Precision Audio Inc.
- Professional Audio Systems 114,96A-96D
- ProSystems
- Quest Marketing
- Quested Monitoring Systems



Radian Audio Engineering Inc. 79

- Rainbow Sound & Lighting Rainbow Recording Studios Inc.
- Ramsa/Panasonic 27
- Gary Raymond Sound Systems
- Red Acoustics (USA) Ltd.
- Soundscape
- Spectra Sonics/Spectra Sound
- State of The Art Electronik



Studer Revox America, Inc. IFC

- Studio Equipment Distribution Ltd.
- Sunn Pro Sound



TAD-Technical Audio Devices IBC

- Technics
- TOA Electronics, Inc.
- Trax Audio & Music
- UREI
- VRI Scharff Rentals
- Westlake Audio
- Yamaha Corp. of America Pro Audio Div. 22,23

MAINTENANCE, TEST AND MEASURING EQUIPMENT

- ACO Pacific Inc.
- Acoustilog Inc.

See Adv. Page

ADX Systems 106

- Amber Electro Design Inc.
- ASC-Tubetraps
- Astra Services



ATI-Audio Technologies, Inc. 93

Audio Control Industrial..

Audio Control Industrial 100

- Audio Development AB
- Audio Precision, Inc.
- Audio Sound Productions
- Black Audio Devices
- Bruel & Kjaer Instruments 97
- BSS Audio
- Caig Labs, Inc.
- Canetics, Inc.
- Concept Design Electronics & Mfg., Inc.
- Dalbec Audiolab
- DB Systems
- Delta Electronics Inc.
- DOD Electronics Corp.
- Dorrough Electronics
- Electron Processing, Inc.
- Four Designs Co.
- Gold Line/Loft
- IQS Inc.
- Ivie A Mark IV Co.
- Jasoni Electronics
- Jensen Tools Inc.
- JRF Magnetic Sciences Inc.



Klark-Teknik 51

- J.S. LoBianco Enterprises
- Magnetic Reference Lab 98
- Mark IV Audio Canada Inc.
- McCurdy Radio Industries Ltd.
- Micro-Point Inc.
- Musonix 99
- Network Technologies Inc.
- Neutrik USA, Inc.
- Optical Disc Mastering
- Portland Instrument-SCV
- Prosonus 77
- Quantum Audio Labs
- RCA Test Tapes
- Research Technology International
- ROH Div. of Anchor Audio Inc.
- Scantek, Inc.
- Schmid Telecommunication
- Sencore Inc.
- Seriously Sound
- Shape Systems Design
- Simpson Electric
- Sound Technology, Inc.
- Sprague Magnetics, Inc. 105
- Standard Tape Lab, Inc.
- Studio Master Systems
- Technical Service Specialists Inc.

Processing in the **DCE** stereo **Digital Compressor/Expander** is performed entirely within the digital domain, thus avoiding conversion degradation and ensuring transparent processing of digital recordings.

The **DCE's** compressor section offers special processing characteristics ranging from mild compression or **AGC** action all the way to *no-artifact* "**zero attack time**" peak limiting. The unit's independent expander may provide complementary noise reduction or special processing effects.

Simple, intuitive control of the **DCE's** processing power is achieved by use of only 3 push buttons and one rotary knob. The unit's high-visibility LCD provides confirmation of all operating modes and parameter settings. Several factory presets are available for a quick start, and all dynamics settings may be stored for later retrieval in one of **99 user preset locations**. All parameter settings and presets may be modified, stored, or recalled in real time without "glitching" or other undesirable audible artifacts occurring.

While the **DCE** offers enhanced control over traditional processing parameters such as attack time, release time, threshold (via the **SETPOINT** adjustment) and gain, it also possesses the unique ability to vary the percentage of processed and unprocessed signal at its output (via the unit's **MIX** control). This feature allows you to further refine the desired processing to impart more or less aggressive implementation.

In addition to the straightforward front panel controls, the **DCE** may be remotely controlled by RS-422, RS-232, or MIDI format controllers.

The **DCE** readily accepts input from SDIF-2, SDIF-3, and PD digital format devices, as well as others. An optional analog interface is also available.

Thanks to the **DCE**, you are no longer required to degrade the quality of your digital program by converting to analog simply to perform compression or expansion. Now, you are truly capable of taking your sound to the highest quality level.

TAKE YOUR SOUND TO THE HIGHEST QUALITY LEVEL WITH THE VALLEY DIGITAL COMPRESSOR/EXPANDER!



VALLEY
INTERNATIONAL, INC.

P.O. Box 40306 • 2817 Erica Place
Nashville, Tennessee 37204
(615)383-4737 • FAX(615)269-5441

EXPORT: Global Representatives Inc.

(201)492-8140 • FAX (201)492-2566 • Canada: Erikson, Quebec (514)738-3000 • Vancouver (604)438-9212 • Toronto (416)764-6350

www.americanradiohistory.com

See Adv. Page

Tek Media Supply Co.
Tektronix Television Div.
Tentel Corp.
TLM Electronics Inc.
Transtector Systems
Turbosound
Whirlwind, Inc.
White Instruments Div. C Van R
Inc. 99

METERING DEVICES

ACO Pacific Inc.
Apogee Electronics Corp.



ATI-Audio Technologies, Inc. 93

Audio Control Industrial..

Audio Control Industrial 100
B&B Systems Inc.
Benchmark Media Systems, Inc.
Dorrough Electronics



D&R USA 81

Electronic Systems Labs, Inc.
Furman Sound, Inc.
Gotham Audio Corp.
Harrison by GLW Enterprises
Inovonics Inc.
McCurdy Radio Industries Ltd.
Posthorn Recordings
Scantek, Inc.
Selco/Sifam
Sencore Inc.
Sescom, Inc.
Simpson Electric
Symetrix Inc.
Ward-Beck Systems Ltd.

**MICROPHONE BOOMS,
STANDS AND
ACCESSORIES**

Accurate Sound Corp.
ACO Pacific Inc.
AKG Acoustics Inc.
AMS Industries Inc
Astatic/CTI
Atlas/Soundolier
Audio-Technica US, Inc.
Beyer Dynamic Inc.
Black Audio Devices
Countryman Associates Inc. 93
C-T Audio Marketing Inc.
Delicate Productions
Fostex Corp. of America
Four Designs Co.
Gotham Audio Corp.

See Adv. Page

H & E Micro-Trak Corp.
LTM Corp. of America
Micron Audio Products, Ltd.
The Music People, Inc.
Georg Neumann GmbH
Numark Electronics
Paso Sound Products Inc.
Peavey Electronics Corp. 35
Penn Fabrication NJ Inc.
Popper Stoppers
Posthorn Recordings
Precision Audio Inc.
Professional Sound Corp.
Ramsa/Panasonic 27
Ross Systems Div. of IMC
Schoeps GmbH
Sennheiser Electronic Corp.
Shure Brothers Inc.
Spectra Sonics/Spectra Sound
Telex Communications, Inc.
Ultimate Support
VRI Scharff Rentals
Whirlwind, Inc.

MICROPHONE MIXERS

ACO Pacific Inc.
Aerco
Allen & Heath
Altec Lansing Corp.
Ashly Audio, Inc.



ATI-Audio Technologies, Inc. 93

ATM Audio
Audio Developments, Ltd.
Biamp Systems
Delicate Productions



D&R USA 81



Electro-Voice, Inc. 21

Fostex Corp. of America
Furman Sound, Inc.
Galaxy Audio
H & E Micro-Trak Corp.
Head Acoustics North America
Industrial Research Products
Innovative Electronic Designs, Inc.



JBL Professional BC
Josephson Engineering
Mark IV Audio Canada Inc.
Numark Electronics
Peavey Electronics Corp. 35

See Adv. Page

Precision Audio Inc.
Precision Design
Professional Sound Corp.
ProTech Audio Corp.
QSC Audio Products, Inc.
Ramsa/Panasonic 27



Rane Corp. 4-5
S.E.M. Co.
Sennheiser Electronic Corp.
Sescom, Inc.
Shure Brothers Inc.
Sontec Electronics
Sony Communications Products Co.
Professional Audio Div. 15,69
Spectra Sonics/Spectra Sound
Stewart Electronics
TASCAM, Teac Professional Div. 62,63
VRI Scharff Rentals
Ward-Beck Systems Ltd.
Yamaha Corp. of America Pro
Audio Div. 22,23

**MICROPHONES,
PRE-AMPLIFIERS**

ACO Pacific Inc.
Aerco
API-Audio Products Inc.
Astatic/CTI



ATI-Audio Technologies, Inc. 93

Audio Engineering Associates
Auditratics Inc.
Audix Corp.
Benchmark Media Systems, Inc.
The Bertech Organization
Beyer Dynamic Inc.
Cello Ltd.
Circuit Research Labs, Inc.
Delicate Productions



D&R USA 81

DW Labs, Inc.



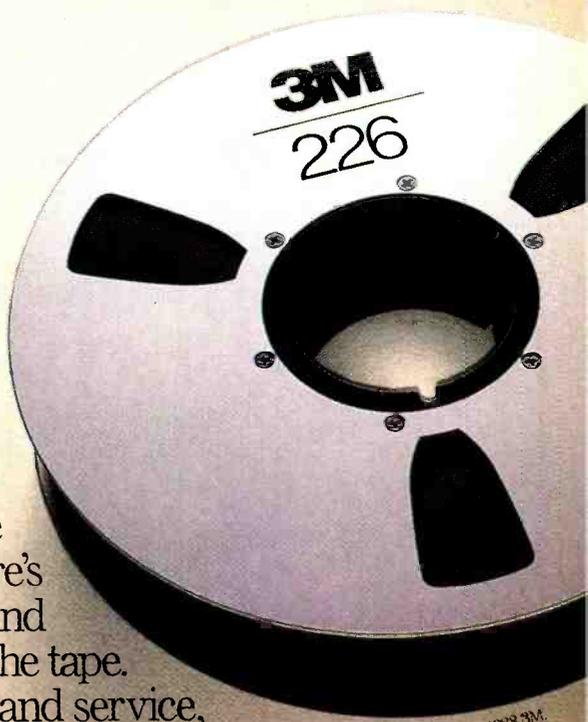
Electro-Voice, Inc. 21

Fat Box
Focusrite c/o Sonic Image Ltd.
GML, Inc. 45
H & E Micro-Trak Corp.
Innovative Electronic Designs, Inc.
IQS Inc.
Jensen Transformers, Inc.
Josephson Engineering

It's a lot easier to be done than to be satisfied.



You've been there — locked in the battle between perfection and reality. There's always one more thing you'd like to try. And the last thing you need to worry about is the tape. So choose ours. Because, in our products and service, 3M is committed to one goal: **We won't be satisfied until you are.**



©1988 3M

3M

Circle (13) on Rapid Facts Card

www.americanradiohistory.com

See Adv. Page

Mineroff Electronics Inc.
 Mirromere Audio
 Georg Neumann GmbH
 Opamp Labs, Inc.
 Paso Sound Products Inc.
Peavey Electronics Corp. 35
 Posthorn Recordings
 Precision Audio Inc.
 ProTech Audio Corp.



Quad Eight Electronics, Inc. 64A-64B,106



Rane Corp. 4-5
 RTS Systems
 Scantek, Inc.
 Schoeps GmbH
 S.E.M. Co.
 Sescom, Inc.
 Shure Brothers Inc.
 Sontec Electronics
 Stewart Electronics
 Studio Technologies, Inc.
 Summit Audio Inc.
 Symetrix Inc.
 VRI Scharff Rentals
**Yamaha Corp. of America Pro
 Audio Div.** 22,23

MICROPHONES, STUDIO AND PA

Accurate Sound Corp.
 ACO Pacific Inc.
 AKG Acoustics Inc.
 Altec Lansing Corp.
 AMS Industries Inc
 Ariel Corp.
 Astatic/CTI
 ATM Audio
 Audio-Technica US, Inc.
 Audix Corp.
 Audra International
 Avedis Zildjian Co.
 Beyer Dynamic Inc.
Bruel & Kjaer Instruments 97
 COLOSSUS: By The Numbers
Countryman Associates Inc. 93



Crown International Inc. 19



Electro-Voice, Inc. 21
 Fostex Corp. of America
 Gold Line/Loft
 Gotham Audio Corp.

See Adv. Page

H & E Micro-Trak Corp.
 Head Acoustics North America
 HM Electronics, Inc.
 Josephson Engineering
 Mark IV Audio Canada Inc.
 Micron Audio Products, Ltd.
 Milab
 Mineroff Electronics Inc.
 Georg Neumann GmbH
 Numark Electronics
 Panasonic Communications & Systems
 Co.
 Paso Sound Products Inc.
 Peavey Audio Media Research
Peavey Electronics Corp. 35
 Posthorn Recordings
 Precision Audio Inc.
Ramsa/Panasonic 27
 Ross Systems Div. of IMC
 Sanken Microphone Co. Ltd. c/o Pan
 Communications, Inc.
 Schoeps GmbH
 Sennheiser Electronic Corp.
 Shure Brothers Inc.
**Sony Communications Products Co.
 Professional Audio Div.** 15,69
 Spectra Sonics/Spectra Sound
 Studiomaster Inc.
TASCAM, Teac Professional Div. 62,63
 Telex Communications, Inc.
 TOA Electronics, Inc.
 VRI Scharff Rentals
**Yamaha Corp. of America Pro
 Audio Div.** 22,23

MICROPHONES, WIRELESS AND RF

AKG Acoustics Inc.
 Audio-Technica US, Inc.
 Audix Corp.
 Beyer Dynamic Inc.
 Coherent Communications Inc.
 COLOSSUS: By The Numbers
Countryman Associates Inc. 93
 Delicate Productions



Electro-Voice, Inc. 21
 Electron Processing, Inc.
 H & E Micro-Trak Corp.
 HM Electronics, Inc.
 Imagine Music Group
 Lectrosnics Inc.
 Mark IV Audio Canada Inc.
 Micron Audio Products, Ltd.
 Mineroff Electronics Inc.
 Nady Systems, Inc.
 Numark Electronics
 Paso Sound Products Inc.
Peavey Electronics Corp. 35
 Posthorn Recordings
 Samson Technologies Corp.
 Sanken Microphone Co. Ltd. c/o Pan
 Communications, Inc.
 Sennheiser Electronic Corp.
 Shure Brothers Inc.

See Adv. Page

**Sony Communications Products Co.
 Professional Audio Div.** 15,69
 Spectra Sonics/Spectra Sound
 Swintek Enterprises
 Telex Communications, Inc.
 TOA Electronics, Inc.
 Vega, A Mark IV Co.
 VRI Scharff Rentals
 Williams Sound Corp.

MIDI HARDWARE

ADA Signal Processors, Inc.
 Adams-Smith
Akai/IMC 17



Alesis Studio Electronics 3
 Allen & Heath



Aphex Systems Ltd. 49
 Apogee Electronics Corp.
 Audio M
 Casio, Inc.
 Computer Music Supply
 Conquest Sound, Inc.
 J.L. Cooper Electronics
 Digital Music Corp.
 DigiTech
 Dr. T's Music Software
 East Coast MIDI Bulletin Board
 E-Mu Systems Inc.
 Forte Music, Inc.
 Fostex Corp. of America
 Hybrid Arts, Inc.
 Imagine Music Group
 Kawai America Corp.
 Lexicon Inc.
 Mellotron Digital Corp.
 Midimix
 New England Digital Corp.
 Oberheim-ECC
 Opcode Systems, Inc.
 Optronics Technology
 Passport Designs Inc.
 Peavey Audio Media Research
Peavey Electronics Corp. 35
 Power Mountain Software Systems
 Rocktron Corp.
 Roland Corp. US
Soundtracs PLC 1
 Southworth Music Systems, Inc.
 Spatial Sound Inc.
 Steinberg/Jones
 Stramp USA
 Studiomaster Inc.
 360 Systems
**Yamaha Corp. of America Pro
 Audio Div.** 22,23
 Zoom Corp.

A LEGENDARY NEW CLASS OF SUPER-EFFECTORS



APPLIED RESEARCH & TECHNOLOGY INC.

the SGE-STUDIO SUPER-EFFECTOR-A stunning new effector/dynamics processor that does 9 effects at once with a built-in limiter, compressor, expander, noise gate, envelope filter, pitch transposer (2 octaves), all the effects of the Multiverb II, amazing distortion and overdrive, and bandwidth to 20kHz! Full real-time Performance Midi®! • **The MULTIVERB-EXT**-The new sampler/super-effector with Performance Midi®, 2 full seconds of delay, pitch transposer, 200 memories, digital sampling, all the effects of the Multiverb II and ultra wide bandwidth! • **The MULTIVERB II**-The year's hottest signal processor just got better! Performance Midi®, increased capability, full programmability, pitch transposing (2 octaves) ultra-wide bandwidth. • **The DELAY SYSTEM VII**-brand new programmable sampler/studio digital delay that may be the finest sounding delay unit ever built! Totally accurate harmonic reproduction. 20kHz bandwidth! • **The DELAY SYSTEM V**-The same amazing delay circuitry and audio specs as the VII at an even more competitive price! • **The HIGH DEFINITION EQUALIZERS**-A new generation of circuitry provides incredible filter accuracy. There is minimum phase shift and no center point drift regardless of fader settings! XLR, TRS, term. strip connectors, failsafe hard wire bypass, Freq. response: 2Hz-165kHz, Signal/Noise Ratio (R.E. +20dBm) -115dB, THD <.005%

port Distributors:
 THE NETHERLANDS/Audioscript B.V./Soest/02155-2044/FINLAND/MS-Audiotron/Helsinki/90-5664644/SWEDEN/Muskantor & Co./Molndal/031-878080/FRANCE/High Fidelity Services SA/Paris/(1)
 85.00.40/CANADA/Yorkville Sound LTD./Scarborough/416-751-8481/ITALY/FRATELLI CRASIO/PAVIA/0385 48 029/WEST GERMANY/PME Audio/BAD FRIEDRICHSHALL/07136-6029/
 SWITZERLAND/Musikengros F. E. Utter/Sissach/061-983757/HONG KONG/Audio Consultants L.T.D./Kowloon/3-7125251/JAPAN/Nihon Electro Harmonix/Tokyo (03)232-7601/THAILAND/Beh Ngiep
 ng Musical Instruments/Bangkok/222-5281/INDONESIA/PT Kirana Yudha Teknik/Jakarta/3806222/SINGAPORE/Lingtec PTE. LTD./7471951/SPAIN/Aplicaciones Electronicas Quasar SA/Madrid/
 61300/TURKEY/Kadri Cadmk. Istanbul/(1) 1661672/DENMARK/M.I. Musik/Kobenhavn/1-854800/U.K./Harmon U.K./Slough/075376911/NEW ZEALAND/Maser Digitek/Auckland/444-3583/4/
 RAEL/JAZZ ROCK/Tel Aviv/03-4-9941/ARGENTINA/Lagos Sarmiento/Buenos Aires/40-6455/NORWAY/AUDIOTRON/OSLO/2 35 20 96/TAIWAN/Sea Power Co./TAIPEI/023143113/
 REECE/ZOZEF/PIRAEUS/0141 2151

Circle (21) on Rapid Facts Card

APPLIED RESEARCH & TECHNOLOGY INC., 215 Tremont Street, Rochester, New York 14608, (716) 436-2720, TELEX: 4949793 ARTROC, FAX (716) 436-3942

See Adv. Page

See Adv. Page

See Adv. Page

MISCELLANEOUS EQUIPMENT AND SERVICES

Aapex Inc.
Advance Recording Products
Aire Born Recording
API-Audio Products Inc.
A-R Editions, Inc.
A&R Record & Tape Mfg. Co.
Astra Services

Audio Control Industrial.

Audio Control Industrial 100
Audio M
Audio Resources
Audio Sound Productions
Audio Visual Assistance
AudioTechniques, Inc.
Benjamin International, Inc.
Black Audio Devices
Brainstorm Electronics, Inc.
Caig Labs, Inc.
Cartunes
Century Financial Services Group, Ltd.



CASSETTE DUPLICATION

Clarity Cassette Duplication 109
Concept Design Electronics & Mfg., Inc.
Conquest Sound, Inc.
J.L. Cooper Electronics
Countryman Associates Inc. 93
Court Acoustics Systems
CST Mfg. & Sales Inc.
The Cutting Edge Disc Mastering
Dago Cases
DB Plus Digital Services
Delicate Productions
Digital Brothers
Dr. T's Music Software
E.A.R.S., Inc.
East Coast MIDI Bulletin Board
Electronic Specialists, Inc.
ENAK Microphone Repair
The Enterprise
First Light Video Publishing
Flood Zone Studios
Four Designs Co.
FSR Inc.
General Devices Co., Inc.
Gentner Electronics Corp.
Hamilton House Entertainment Group
HAVE, Inc.
HED Productions
Heino Ilsemann
Verpackungsmaschinin
Vertriebs-GmbH
Industrial Strength Industries
Integral Systems
Intelix 111
Jensen Transformers, Inc.
Josephson Engineering
JRF Magnetic Sciences Inc.

Juice Goose c/o Whitenton Industries Inc.
KMD Labs
Lambchops North
Lambchops Studios
Littlite/CAE Inc.
J.S. LoBianco Enterprises
Mag-Tags, Inc.
Middle Atlantic Products
Mirromere Audio
Musician's Organizer Mega Disk Organizers
Narrative Productions
Neutrik USA, Inc.
New York Technical Support, Ltd.
Newsreel Service
Opamp Labs, Inc.
Pacific Recorders & Eng. Corp.
Paktec Automation
Platic Reel Corp. of America
Pro Co Sound
Quadim Corp.
Rock City Sound
R P L, Inc.
RPS Communications
Sencore Inc.
Seriously Sound
Sescom, Inc.
Signet
Solid Sound, Inc.
Sprague Magnetics, Inc. 105
Star Case Mfg. Co., Inc.
Steinberg/Jones
Stewart Electronics
Strategic Sound, Inc.
Sync Sound
Talent Associates, Inc.
Tek Media Supply Co.
TLM Electronics Inc.
A Total Effect
Traxx Recording Products
Ultimate Support
University of Sound Arts
Steve Vans Productions
Vettronix Inc.
Video Design Pro
VRI Scharff Rentals
Wireworks Corp.
Zuma Mesa Music

NOISE GATES/EXPANDERS



Alesis Studio Electronics 3



Aphex Systems Ltd. 49

ARX Systems
Ashly Audio, Inc.



ATI-Audio Technologies, Inc. 93
ATM Audio
Audio Animation 47
Audio Developments; Ltd.
Audio Logic
Audiorent
Aura Sonic Ltd.
Biamp Systems
BSS Audio
C-T Audio Marketing Inc.
dbx Inc.



MIXING CONSOLES

D&R USA 81
Drawer Distribution Ltd. Charlotte St.
Business Centre
Focusrite c/o Sonic Image Ltd.
Furman Sound, Inc.
Gold Line/Loft



Klark-Teknik 51
Lake People
Marshall Electronic
Peavey Audio Media Research
Peavey Electronics Corp. 35
ProTech Audio Corp.



Quad Eight Electronics, Inc. 64A-64B,106
Quest Marketing



Rane Corp. 4-5
Rocktron Corp.
RSP Technologies
Solid State Logic 25
Studiomaster Inc.
Symetrix Inc.
Trident Audio USA 73
Valley International 39
VRI Scharff Rentals
Ward-Beck Systems Ltd.
Yamaha Corp. of America Pro
Audio Div. 22,23

NOISE REDUCTION SYSTEMS

Altec Lansing Corp.
ANT Telecommunications Inc.

APPRECIABILITY

GML CLIENTS SPEAK FOR THEMSELVES

RESPONSIVE

"It just works. The system is virtually transparent to the user. No complicated displays...No time consuming keystrokes."

TOM McCORMACK, THE BURBANK STUDIOS, CA

DEPENDABLE

"Reliability is a major concern in day to day operation. The GML system has been nearly flawless."

TETSU TAKAHASHI, SEDIC STUDIOS, TOKYO

PRECISION

"Fader and Mute accuracy so precise, my confidence in the system to reproduce every detail is unquestioned."

BRUCE SWEDIEN, MIXER, CA

COMPATIBILITY

"GML's ability to convert SSL and Necam mix disks allows us to maintain compatibility, assuring room to room flexibility for our clients."

STEVEN BRAMBERG, ATLANTIC STUDIOS, NYC

ENGINEER ENGINEERED

"For the mixer, the operation is effortless and intuitive. When complex problems do need to be addressed, the Editor provides an easy to use off-line function for any eventuality."

MICK GUZAUSKI, MIXER, CA

PALETTE-ABILITY

"It provokes an environment that enhances the creative process..."

CHICK COREA, ARTIST, PRODUCER, CA

ORTHOGENETIC

"GML's system architecture assures that our investment will remain on the cutting edge of technology for years to come."

STEPHEN FLOOD, MASTERROCK STUDIOS, LONDON



GEORGE MASSENBURG LABS

THE AUTOMATION STANDARD

7821 BURNET AVENUE, VAN NUYS, CALIFORNIA 91405, FAX 818-781-3828, TELEPHONE 818-781-1022

Circle (22) on Rapid Facts Card

www.americanradiohistory.com

See Adv. Page
 Arsonic Tonstudio Electronik US
Bryston 90
 Circuit Research Labs, Inc.
 dbx Inc.
Dolby Labs 11



D&R USA 81
 Drawer Distribution Ltd. Charlotte St.
 Business Centre
 Gotham Audio Corp.
 Opamp Labs, Inc.
 Packburn Electronics Inc.
 Peavey Audio Media Research
 Penn Fabrication NJ Inc.
 Quest Marketing
 Ram Broadcast Systems Inc.
 Rocktron Corp.
 RSP Technologies
 Symetrix Inc.
 VRI Scharff Rentals

PATCHBAY AND JACK PANELS

ADC Telecommunications



Audio Accessories, Inc. 103
 Audio Engineering Associates
 Auditronics Inc.
 Aura Sonic Ltd.
 BSS Audio
 California Switch & Signal
 Canare Cable Inc.
 David Carroll Electronics
 Connectronics Corp.
 Conquest Sound, Inc.



D&R USA 81
 Fostex Corp. of America
 Furman Sound, Inc.
 Gentner Electronics Corp.
 Ghielmetti Switzerland
 H & E Micro-Trak Corp.
 Markertek Video Supply
 Mogami Product Div. Marshall
 Electronics, Inc.
 Mosses & Mitchell
 Neutrik USA, Inc.
 Pacific Recorders & Eng. Corp.
 The Patchbay Designation Co.
 Peavey Audio Media Research
 Penny & Giles
 Pro Co Sound
 Ram Broadcast Systems Inc.
 Switchcraft, Inc.
 Symetrix Inc.
 TOA Electronics, Inc.

See Adv. Page
 Ward-Beck Systems Ltd.
 Whirlwind, Inc.
 Wireworks Corp.
**Yamaha Corp. of America Pro
 Audio Div.** 22,23
 Zeus Light & Sound Co.

PHONOGRAPH CARTRIDGES AND ACCESSORIES



ATI-Audio Technologies, Inc. 93
 Audio-Technica US, Inc.
 Cello Ltd.
 DB Systems
 H & E Micro-Trak Corp.
 Ortofon Inc.
 Shure Brothers Inc.
 Signet
 Sontec Electronics
 Stanton Magnetics Inc.

PHONOGRAPH TURNTABLES

Broadcast Electronics, Inc.
 Gotham Audio Corp.
 H & E Micro-Trak Corp.
 Numark Electronics
 Ortofon Inc.
 Technics

PITCH SHIFTERS

ADA Signal Processors, Inc.



**ART-Applied Research &
 Technology, Inc.** 43
 Eventide, Inc.
 Lexicon Inc.
 Publison S.A.
 Rocktron Corp.
**Yamaha Corp. of America Pro
 Audio Div.** 22,23
 Zoom Corp.

POWER CONDITIONING/STANDBY POWER SYSTEMS

ACO Pacific Inc.
 Aerco
 Electronic Specialists, Inc.
 Furman Sound, Inc.
 Juice Goose c/o Whitenton Industries
 Inc.
 Kalglo Electronic Co. Inc.
 Pulizzi Engineering Inc.
 Sola, A Unit of General Signal

See Adv. Page
 Spectra Sonics/Spectra Sound

RACKS AND STANDS

AST Sound
 Atlas/Soundolier
 Audio Centron
 Aura Sonic Ltd.
 Black Audio Devices
 Conquest Sound, Inc.
 DeCuir Corp.
 FM Tubecraft
 Four Designs Co.
 General Devices Co., Inc.
 H & E Micro-Trak Corp.
 Jan-Al Cases
 Joe's Sound & Salami Co.
 Mirromere Audio
 The Mitek Group
 The Music People, Inc.
 Numark Electronics
 Omnimount Systems
 Peavey Audio Media Research
Peavey Electronics Corp. 35
 Penn Fabrication NJ Inc.
 Ram Broadcast Systems Inc.
 Research Technology International
 Ross Systems Div. of IMC
 Stantron
 Storeel Corp.
 Studiomaster Inc.
 Tek Media Supply Co.
 Thermodyne International
 Top Notch Audio (TNA Case Co.)
 Ultimate Support
 U.S.A. Audio
 Winsted Corp.

RECORD/CD MANUFACTURING

American Helix
Audio Animation 47



Clarity Cassette Duplication 109
 COLOSSUS: By The Numbers
 Creative Sound Corp.
 Denon America
 D&G Mastering
Disc Makers 110
 Europadisk, Ltd.
 Eva-Tone Inc.
 JVC Professional Products Co.
 Mobile Fidelity Sound Lab
 Northeastern Digital Recording
 Optical Disc Mastering

RECORDERS, HARD DISK

Alpha Audio 107
 AMS Industries Inc
Bruel & Kjaer Instruments 97
 COLOSSUS: By The Numbers
 CompuSonics Corp.
 Digidesign, Inc.

Even A Master Can Use A Little Inspiration From The MUSE

The MUSE. A fully digital transfer console specifically designed for **excellence** in compact disc mastering and tape preparation.

The MUSE offers **true inspiration** through profound advancements in processing power, functionality and precision. Unprecedented speed and ease-of-use unleash your artistic expression.

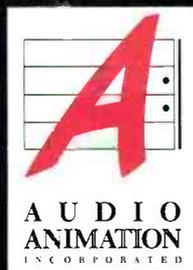
The MUSE provides the ultimate in flexibility and creative freedom by channeling its powerful capabilities to you through a remarkably intuitive interface. The control panel, designed with the guidance of top mastering experts, makes all relevant information instantly available through a high resolution color screen and 10 displays of up to 80 characters each. Create EQ and DRC curves with great finesse via the color screen . . . or with conventional controls.

The MUSE makes it simple for you to be a perfectionist with 24 to 56-bit extremely accurate real-time processing. Surpass the most demanding expectations of your clients **and** yourself using **the MUSE's** highly sophisticated software and **thousands** of control settings. Configure the processing modules, route signals, edit automation, adjust time code, design ultra-precise EQ and DRC curves, monitor any point on the signal path with headphones, line or VU meter . . . and much more.

And **the MUSE** will maximize your productivity with an automation scheme that allows over 80 minutes of updating control functions at 100 times per second. An entire CD may be mastered automatically . . . even while **the MUSE** is unattended! Store and recall every setting simply and swiftly with a disk-based system.

The MUSE achieves a new standard in sonic quality. Clear, uncolored sound is the superb result of **the MUSE's** proprietary architecture and algorithms, unparalleled processing speed, FIR filtering techniques and zero phase distortion. **All processing takes place totally within the digital domain** to give you the utmost in sound performance.

Choose a mastering console that brings out the genius in you. **The MUSE**



Bringing you
the future
of sound

Audio Anmat on Inc.
210 W. Magnolia Ave.
Knoxville, TN 37917
Tel.: (615) 544-0458
FAX: (615) 637-3423

	See Adv. Page
Digital Audio Research	
Digital Dynamics, Inc.	7
Gotham Audio Corp.	
Hybrid Arts, Inc.	
Lexicon Inc.	
New England Digital Corp.	
Real World Research	
Solid State Logic	25

soundmaster

Soundmaster USA Inc.	103
Steinberg Digital Audio	
Steinberg/Jones	
Symetrix Inc.	
Turtle Beach Softworks	
WaveFrame Corp.	

RECORDING HEADS, REPLACEMENT, SALES AND SERVICE

Auteri Associates, Inc.	
Int'l. Electro-Magnetics, Inc.	
JRF Magnetic Sciences Inc.	
Mirromere Audio	
Norton Associates Inc.	
Otari Corp.	33
Saki Magnetics, Inc.	101
Sony Communications Products Co.	
Professional Audio Div.	15,69
Strategic Sound, Inc.	

RECORDING TAPE, AUDIO



Agfa Corp.	9
Ampex Recording Media Corp.	55
Audio Cassette Center	
Audio-VideoGraphics	
Audiorent	
Aura Sonic Ltd.	
BASF Corp. Information Systems	
Burlington Audio/Video Tapes, Inc.	
Capitol Magnetic Products	
Creative Sound Corp.	



DIC Digital	37
Embassy Cassette Inc.	
Fidelipac Corp.	
Full Compass Systems	
Greencorp USA Inc.	
International Tapetronics 3M	
Broadcasting & Related Products Div.	
Lion Recording Services, Inc.	
Loran Cassettes & Audio Products	
Mann Endless Cassette Industries	
Panasonic Communications & Systems Co.	

	See Adv. Page
Precision Audio Inc.	
Ramsa/Panasonic	27
Sansui KDS Technologies	
Sony Communications Products Co.	
Professional Audio Div.	15,69
Sony Magnetic Products Co. Professional Tape Div.	
Sprague Magnetics, Inc.	105
Studio Magnetics Co., Inc.	
Sunkyong Magnetic/America, Inc.	
Swire Magnetics Co. Professional Products Div.	
TASCAM, Teac Professional Div.	62,63
TDK Electronics Corp.	
3M Professional Audio/Video & Specialty Products Div.	41
Voice Over L.A., Inc.	
VRI Scharff Rentals	

RECORDING TAPE, VIDEO



Agfa Corp.	9
Ampex Recording Media Corp.	55
Aura Sonic Ltd.	
BASF Corp. Information Systems	
Burlington Audio/Video Tapes, Inc.	
Creative Sound Corp.	



DIC Digital	37
Embassy Cassette Inc.	
Panasonic Communications & Systems Co.	
Precision Audio Inc.	
Sony Communications Products Co.	
Professional Audio Div.	15,69
Sony Magnetic Products Co. Professional Tape Div.	
Swire Magnetics Co. Professional Products Div.	
TDK Electronics Corp.	
3M Professional Audio/Video & Specialty Products Div.	41
VRI Scharff Rentals	

REVERB DEVICES

Akai/IMC	17
----------------	----



Alesis Studio Electronics	3
AMS Industries Inc	

See Adv. Page



ART-Applied Research & Technology, Inc.	43
Aura Sonic Ltd.	
Brick Audio	
DigiTech	



D&R USA	81
Drum Workshop	
Eventide, Inc.	
Gold Line/Loft	
Gotham Audio Corp.	
Industrial Strength Industries	



Klark-Teknik	51
Lexicon Inc.	
Marshall Electronic	
Peavey Audio Media Research	
Peavey Electronics Corp.	35
Roland Corp. US	
Sony Communications Products Co.	
Professional Audio Div.	15,69
Studiomaster Inc.	
Yamaha Corp. of America Pro Audio Div.	22,23

ROUTING SWITCHERS, AUDIO

Akai/IMC	17
----------------	----



ATI-Audio Technologies, Inc.	93
DW Labs, Inc.	
Formula Audio, Inc.	105
FSR Inc.	
Full Compass Systems	
Gentner Electronics Corp.	
Ghielmetti Switzerland	
Grass Valley Group	
Harrison by GLW Enterprises	
HEDCO	
Innovative Electronic Designs, Inc.	
Intelix	111
McCurdy Radio Industries Ltd.	
Opamp Labs, Inc.	
Oxmoor Corp.	
Pacific Recorders & Eng. Corp.	
The Patchbay Designation Co.	
Peavey Audio Media Research	
ProTech Audio Corp.	
Ram Broadcast Systems Inc.	
Richmond Sound Design Ltd.	
ROH Div. of Anchor Audio Inc.	

Confused About "Exciters"?

Read the Facts.

Seems like a good thing always leads to imitators. Which is why there seems to be a rash of so-called "brightness enhancers," "phase correctors" and "exciters."

The Aphex Aural Exciter® is a *patented* audio process that will recreate and restore missing harmonics. When added, they restore *natural* brightness, clarity and presence, and actually extend audio bandwidth. All without adding any appreciable power to the signal.

As a result, the Aural Exciter has become a standard tool in the recording, film, broadcast and sound reinforcement industries around the world. It has been licensed for use in prod-

ucts sold by Yamaha, Numark, AKG, Proton, Gentner Engineering, MacKenzie Labs, and Vestax.

Other "brightness enhancers" only boost existing high frequencies, pumping as much as an additional 12dB, which can distort the amp or even blow your speakers... in addition to sounding unnatural. In fact, you could probably achieve the same effect more flexibly and economically by using any equalizer.

Don't be confused by hype. Listen to any device claiming to do what only an Aphex Aural Exciter does, then listen to the real thing. Your ears will hear the difference.



APHEX
SYSTEMS

All Aphex products are designed and manufactured in the U.S.A.
© 1989 Aphex Systems Ltd.
Aphex and Aural Exciter are registered trademarks of Aphex Systems Ltd.

11068 Randall Street
Sun Valley, CA 91352
(818) 767-2929

Circle (24) on Rapid Facts Card

www.americanradiohistory.com

See Adv. Page

S.E.M. Co.
Target Technology
360 Systems
VRI Scharff Rentals
Ward-Beck Systems Ltd.
Wheatstone Broadcast Group
Whirlwind, Inc.

SEQUENCERS

Akai/IMC 17



Alesis Studio Electronics 3
E-Mu Systems Inc.
Imagine Music Group
Kawai America Corp.
Midisoft Corp.
Opcode Systems, Inc.
Optronics Technology
Passport Designs Inc.
Roland Corp. US
Simmons Electronics (USA) Inc.
Steinberg/Jones
Yamaha Corp. of America Pro
Audio Div. 22,23
Zoom Corp.

**SIGNAL PROCESSORS,
OTHER**

ADM Technology Inc.
AKG Acoustics Inc.



Alesis Studio Electronics 3
Altec Lansing Corp.
AMS Industries Inc



Aphex Systems Ltd. 49
Ariel Corp.
Arsonic Tonstudio Elektronik US



ART-Applied Research &
Technology, Inc. 43
Ashly Audio, Inc.
Audio Developments, Ltd.
Audio/Digital Inc.
Audio Logic
Avalanche Effects Inc.
BBE Sound
The Bertech Organization
BSS Audio
Canetics, Inc.
Cerwin-Vega Inc.

See Adv. Page

Circuit Research Labs, Inc.
Clarity
J.L. Cooper Electronics
Court Acoustics Systems
Dalbec Audiolab
dbx Inc.
Delta Electronics Inc.
DigiTech
DOD Electronics Corp.
Dolby Labs 11



D&R USA 81
Drawmer Distribution Ltd. Charlotte St.
Business Centre
Drew Engineering Co.
DW Labs, Inc.
Eventide, Inc.
Focusrite c/o Sonic Image Ltd.
FSR Inc.
Gentner Electronics Corp.
John Hardy Co. 77
Head Acoustics North America
Industrial Research Products
Industrial Strength Industries
Innovative Electronic Designs, Inc.
IQS Inc.



JBL Professional BC
Keyboard Technologies Inc.



Klark-Teknik 51
Lake People
Lexicon Inc.
Mark IV Audio Canada Inc.
Marshall Electronic
Minim Electronics Ltd.
Motorola
Opamp Labs, Inc.
Orban, A Div. of AKG Acoustics, Inc.
Oxmoor Corp.
Peavey Audio Media Research
Peavey Electronics Corp. 35
Publison S.A.



Quad Eight Electronics, Inc. 64A-64B,106
Quest Marketing
Renkus-Heinz, Inc.
Rocktron Corp.
Roland Corp. US
RSP Technologies
Sansui KDS Technologies
Scantek, Inc.
S.E.M. Co.
Sescom, Inc.

See Adv. Page

Simon Systems Engineering, Inc.
Sonic Research Associates, Inc.
Sontec Electronics
Sound Concepts Inc.
Soundcraftsmen
Spatial Sound Inc.
Studiomaster Inc.
T.C. Electronic America
Tektronix Television Div.
Trident Audio USA 73
Turtle Beach Softworks
UltraAnalog, Inc.
UREI
Valley International 39
WaveFrame Corp.
White Instruments Div. C Van R
Inc. 99
Yamaha Corp. of America Pro
Audio Div. 22,23

SOUND SAMPLERS

Akai/IMC 17
AMS Industries Inc
Canetics, Inc.
Casio, Inc.
Drum Workshop
Ensoniq Corp.
Eventide, Inc.
Harrison Information Technology
Hybrid Arts, Inc.
Interval Music Systems
Mellotron Digital Corp.
Numark Electronics
Roland Corp. US
Simmons Electronics (USA) Inc.



Soundmaster USA Inc. 103
Southworth Music Systems, Inc.
T.C. Electronic America
360 Systems
Virtual Designs Ltd.
WaveFrame Corp.
Yamaha Corp. of America Pro
Audio Div. 22,23

SYNCHRONIZER SYSTEMS

Adams-Smith
ADX Systems 106
Alpha Audio 107
Audio Kinetics Ltd.
Auricle Control Systems
Cipher Digital, Inc.
CMX Corp.
J.L. Cooper Electronics
Denecke Inc. 89
Evertz Microsystems Ltd.
Fostex Corp. of America
Howe Technologies Corp.
JRF Magnetic Sciences Inc.
Keyboard Technologies Inc.
Opcode Systems, Inc.
Peavey Audio Media Research
Ramware Designs Corp.

See Adv. Page

See Adv. Page

Roland Corp. US
The Rubber Dubbers

soundmaster

Soundmaster USA Inc. 103
Southworth Music Systems, Inc.
Steinberg/Jones
Strategic Sound, Inc.

STUDER REVOX

Studer Revox America, Inc. IFC
TAO Logic Co.
TASCAM. Teac Professional Div. 62,63
Tektronix Television Div.
Timeline Inc.
Trident Audio USA 73
Voice Over L.A., Inc.

SYNTHESIZERS AND KEYBOARDS

Akai/IMC 17
Casio, Inc.
Coherent Communications Inc.
Drum Workshop
E-Mu Systems Inc.

Ensoniq Corp.
Hybrid Arts, Inc.
Imagine Music Group
Instruments Lyre Inc.
Kawai America Corp.
Keyboard Technologies Inc.
Kurzweil Music Systems, Inc.
Oberheim-ECC
Peavey Electronics Corp. 35
Roland Corp. US
Steinway & Sons
Technos Inc.
WaveFrame Corp.
Yamaha Corp. of America Pro
Audio Div. 22,23
Zoom Corp.

TAPE DUPLICATION SYSTEMS AND ACCESSORIES

Accurate Sound Corp.
Advance Recording Products
ADX Systems 106
AEG-Audio Systems Div.
Apex Machine Co.
Audio Cassette Center
Audio Video Consultants
Audio-VideoGraphics
Cassette Tek, Inc.

CintasVAC®

Cintas VAC A Div. of Cintas
Technologies Inc. 65
Concept Design Electronics & Mfg., Inc.
Davkore Co.
Digital 1 Duplication Inc.
Domain Communications Inc.
Duplitronics, Inc.
Eastern Standard Productions, Inc.
Electro Sound, Inc.
Eva-Tone Inc.

gauss

Gauss A Mark IV Co. 91
HAVE, Inc.
Inovonics Inc.
JRF Magnetic Sciences Inc.



KABA Research & Development 83
King Instrument Corp.



Dynamic Processing Has Reached A New Peak.

The name Klark-Teknik has always been synonymous with audio technology at its highest level. Innovative engineering combined with quality components ensure products of outstanding musical purity and durability.

Now, that same commitment has been brought to dynamic processing. With the new Series 500.

The DN500 is the only two-channel compressor/limiter/expander that lets you use its processing functions in any combination — with full function variable knee compression, independent peak limiting and clipping. Plus a variable ratio expander/gate for total dynamic control.

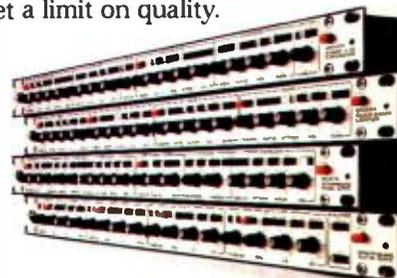
Most importantly, it delivers all the clean, quiet sound quality and reliability you'd expect from Klark-Teknik.

The same high standards are common to all Series 500 products — from the compact DN504 Quad Compressor/Limiter, to the flexible DN510 Dual MIDI Noise Gate and DN514 Quad Auto Gate.

If you're looking for the ultimate in dynamic processing, visit your local Klark-Teknik dealer and find out more about the Series 500. Because at Klark-Teknik, we never set a limit on quality.



Klark-Teknik Electronics Inc.
30B Banfi Plaza North,
Farmingdale, NY 11735 U.S.A.
Tel: (516) 249-3660 Fax: (516) 420-1863
Klark-Teknik Plc., Klark Industrial Pk.,
Kidderminster, Worcs., U.K. DY11 7HJ
(0562) 741515



Circle (25) on Rapid Facts Card

www.americanradiohistory.com

Looking for
a job?

Have something
to sell?

Have a professional
service to offer?

Put
**Recording
Engineer/
Producer's
Classifieds**

to work for you!

- RE/P's total readership of over 50,000 . . .*
- low, low rates of only \$35/column inch . . .
- and
- readership studies show average magazine retention of over 2 years for longer exposure of your ad message

—means
you get results
for a very
small
investment!—

Call Renée Hambleton
at 913-888-4664 to
place your classified ad
in the very next
available issue.

*Aug. '88 Ad-Q Study (pass-along readership)

The Little Warehouse, Inc.
MAC Cassettes
Magnefax International, Inc.
Majestic Duplicating Service
Mark IV Audio Canada Inc.
Mineroff Electronics Inc.
Nakamichi America Corp. 31
Otari Corp. 33
Paktec Automation
Panasonic Communications & Systems Co.
Platic Reel Corp. of America
Bill Rase Productions, Inc.
Recortec Inc.
Roldex Industries
Shape Systems Design
Sony Communications Products Co.
Professional Audio Div. 15,69
Sony Magnetic Products Co. Professional Tape Div.
Star Case Mfg. Co., Inc.
Studio Magnetics Co., Inc.
Tape Automation America
Telex Communications, Inc.
Versadyne International, Inc.

TAPE MACHINES, ANALOG

Accurate Sound Corp.
Akai/IMC 17
Fostex Corp. of America
International Tapetronics 3M
Broadcasting & Related Products Div.
Mann Endless Cassette Industries
Ortofon Inc.
Otari Corp. 33
Panasonic Communications & Systems Co.
Phi Technologies, Inc.
Sony Communications Products Co.
Professional Audio Div. 15,69

STUDER REVOX

Studer Revox America, Inc. IFC
TASCAM, Teac Professional Div. 62,63
Uher of America
Voice Over L.A., Inc.
VRI Scharff Rentals
Yamaha Corp. of America Pro
Audio Div. 22,23

**TAPE MACHINES,
CASSETTE AND
CARTRIDGE**

Accurate Sound Corp.
Acoustilog Inc.
AEG-Audio Systems Div.
Akai/IMC 17
Audico, Inc.
Auditronics Inc.
Broadcast Electronics, Inc.
Denon America

Fidelipac Corp.
Fostex Corp. of America
H & E Micro-Trak Corp.
International Tapetronics 3M
Broadcasting & Related Products Div.
Mineroff Electronics Inc.
Nakamichi America Corp. 31
Panasonic Communications & Systems Co.
Peavey Audio Media Research
Sansui KDS Technologies
Sharp Electronics Corp. Professional Products Div.

STUDER REVOX

Studer Revox America, Inc. IFC
TASCAM, Teac Professional Div. 62,63
Uher of America
Yamaha Corp. of America Pro
Audio Div. 22,23

TAPE MACHINES, DAT

Casio, Inc.
Fostex Corp. of America
Gotham Audio Corp.
H & E Micro-Trak Corp.
Head Acoustics North America
JVC Professional Products Co.
Nakamichi America Corp. 31
Panasonic Communications & Systems Co.
Ramsa/Panasonic 27
Sharp Electronics Corp. Professional Products Div.
Sony Communications Products Co.
Professional Audio Div. 15,69
TASCAM, Teac Professional Div. 62,63
VRI Scharff Rentals
Yamaha Corp. of America Pro
Audio Div. 22,23

TAPE MACHINES, DIGITAL

Akai/IMC 17
COLOSSUS: By The Numbers
Duplitratics, Inc.
Mineroff Electronics Inc.



Mitsubishi Digital Pro Audio c/o
Neve 29

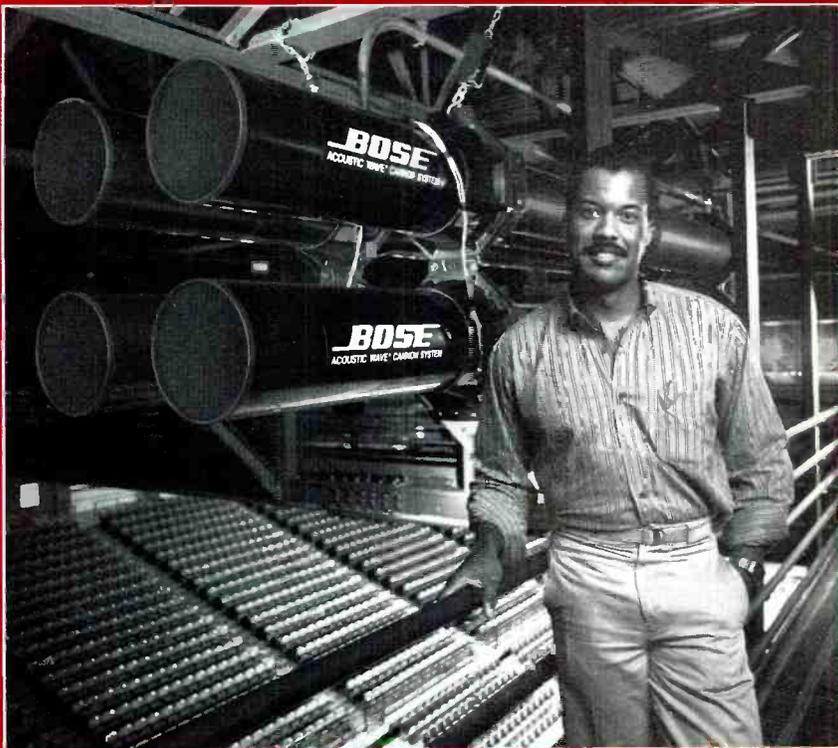


Neve 29
Ortofon Inc.
Otari Corp. 33
Panasonic Communications & Systems Co.
Sony Communications Products Co.
Professional Audio Div. 15,69

Bose® ProFiles

"When I went after this job, I looked at several manufacturers. But when I examined cost vs. performance and considered ease of installation, Bose was the clear choice."

*— Phil Thorne
Taft Broadcasting Company*



The Site: Health & Physical Education Building
Texas Southern University, Houston, Texas

The Challenge: Provide a quality sound installation for 12,000 seat enclosed basketball arena with anticipated crowd noise level exceeding 95dB

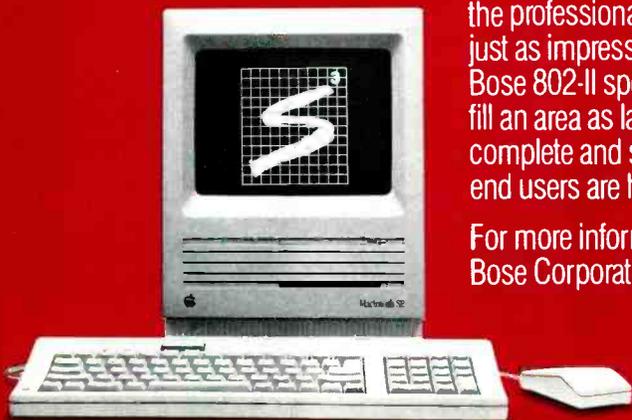
The Contractor: Phil Thorne—Taft Broadcasting Company

The Tools: Bose® Sound System® Software

The Products: Bose 802-III/Acoustic Wave® Cannon Central Speaker Cluster
Bose 802-II Distributed-Delayed Speaker System

The Result: "Using Bose Sound System Software, I was able to show my customer a graphic representation of what their system would look like, and a computer projection of how it would perform. My customer was very impressed with the professionalism and in-depth analysis of the presentation, and they're just as impressed with the final product. When you first look at the size of the Bose 802-II speakers, you wonder if they'll really produce enough sound to fill an area as large as an arena effectively. When you use them the sound is complete and sound pressure levels are consistent over the whole area. My end users are happy I chose Bose products."

For more information on Bose products, call 508-879-7330, or write:
Bose Corporation, Dept REP, The Mountain, Framingham, MA 01701-9168



BOSE
Better sound through research.

Circle (26) on Rapid Facts Card

www.americanradiohistory.com

See Adv. Page

STUDER REVOX

Studer Revox America, Inc. IFC
 TASCAM, Teac Professional Div. 62,63
 VRI Scharff Rentals
 Yamaha Corp. of America Pro
 Audio Div. 22,23

TAPE MACHINES, OTHER

Accurate Sound Corp.
 Cello Ltd.
 Mellotron Digital Corp.
 Mineroff Electronics Inc.
 Phi Technologies, Inc.
 Sansui KDS Technologies
 Strategic Sound, Inc.
 Tape Automation America
 VRI Scharff Rentals

TAPE SUPPLIES AND ACCESSORIES

American Recorder Technology
 Ampex Recording Media Corp. 55
 Audiolab Electronics, Inc.
 BASF Corp. Information Systems
 Benjamin International, Inc.
 Cartunes

CintasVAC®

Cintas VAC A Div. of Cintas
 Technologies Inc. 65
 Clean Co.
 Editall
 El Mar Plastics Inc.
 Fidelipac Corp.
 Greencorp USA Inc.
 Lion Recording Services, Inc.
 The Little Warehouse, Inc.
 MAC Cassettes
 Mag-Tags, Inc.
 Microtran Co. Inc.
 Otari Corp. 33
 Platic Reel Corp. of America
 Polyline Corp. 100
 Precision Audio Inc.
 Bill Rase Productions, Inc.
 Solid Sound, Inc.
 Sony Magnetic Products Co. Professional
 Tape Div.
 Sprague Magnetics, Inc. 105
 Star Case Mfg. Co., Inc.
 Strand Magnetics, Inc.
 Strategic Sound, Inc.
 Studio Magnetics Co., Inc.
 Swire Magnetics Co. Professional
 Products Div.
 TASCAM, Teac Professional Div. 62,63
 3M Professional Audio/Video &
 Specialty Products Div. 41
 Traxx Recording Products
 VRI Scharff Rentals
 Xedit Corp.

TIME COMPRESSION/ EXPANSION

AMS Industries Inc
 Auricle Control Systems
 Digidesign, Inc.
 Eventide, Inc.
 Lexicon Inc.

soundmaster

Soundmaster USA Inc. 103
 Symetrix Inc.

TRANSFORMERS, AUDIO

AB International Electronics
 Atlas/Soundolier
 Conquest Sound, Inc.
 Four Designs Co.
 FSR Inc.
 H & E Micro-Trak Corp.
 ILP Mfg.
 Jensen Transformers, Inc.
 Mark IV Audio Canada Inc.
 Microtran Co. Inc.
 Neutrik USA, Inc.
 Opamp Labs, Inc.
 Pro Co Sound
 ProTech Audio Corp.
 Reichenbach Engineering Co., Inc.
 Sescor, Inc.
 Shure Brothers Inc.
 Spectra Sonics/Spectra Sound
 Whirlwind, Inc.
 White Instruments Div. C Van R
 Inc. 99

VIDEO EQUIPMENT, ALL

Audico, Inc.
 Canare Cable Inc.
 Dwight Cavendish Co.
 Conquest Sound, Inc.
 J.L. Cooper Electronics
 FSR Inc.
 Grass Valley Group
 HEDCO
 Horita
 JVC Professional Products Co.
 King Instrument Corp.
 Leitch Video of America Inc.
 Lenco, Inc.
 Network Technologies Inc.
 Numark Electronics
 Opamp Labs, Inc.
 Optical Disc Mastering
 Panasonic Communications & Systems
 Co.
 The Patchbay Designation Co.
 Ramsa/Panasonic 27
 Recortec Inc.
 Research Technology International
 Seriously Sound
 Sharp Electronics Corp. Professional
 Products Div.
 Sony Communications Products Co.
 Professional Audio Div. 15,69
 Star Case Mfg. Co., Inc.
 Strand Magnetics, Inc.
 Tektronix Television Div.
 3M Broadcasting & Related Products
 Video Accessory Corp.
 VRI Scharff Rentals
 Winsted Corp.
 Wireworks Corp.



Help us help you.

If your company is *not* listed in this year's Black Book and you want a FREE listing in next year's issue, fill out this form and return it by July 1, 1990. (Please type or print.)

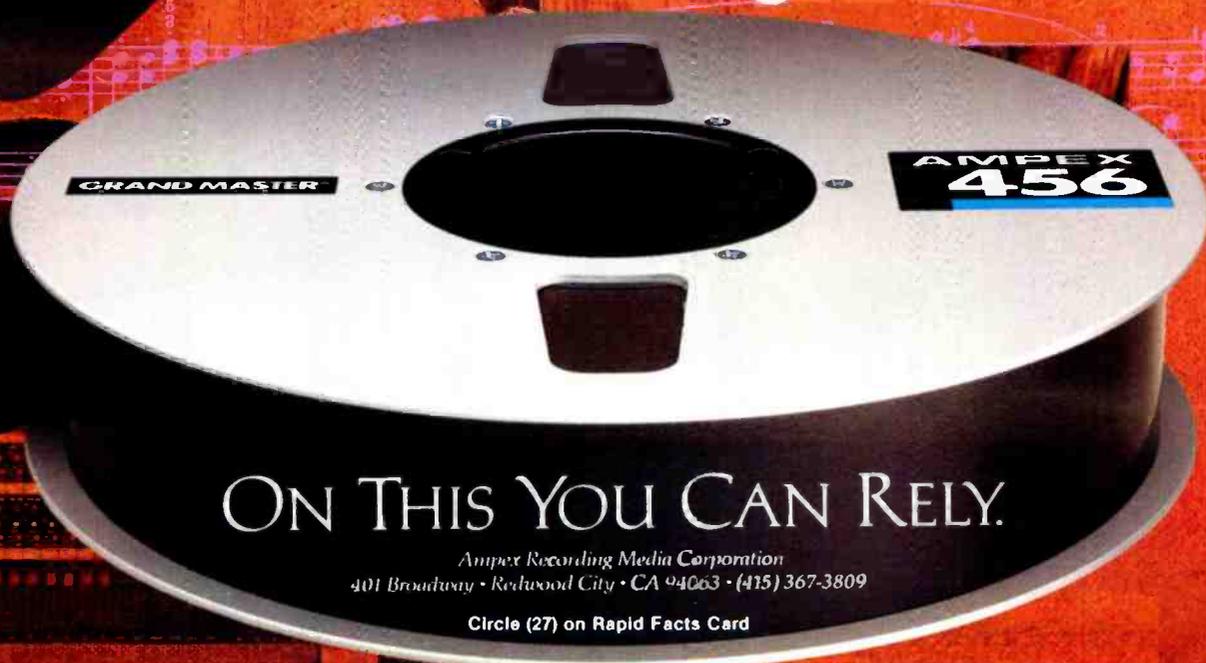
Company name _____
 Address _____
 City _____ State _____ Zip _____
 Phone _____ Fax _____
 Your name _____
 Title _____

Mail this form to: Recording Engineer/Producer's Black Book, Pat Blanton, directory editor, P. O. Box 12901, Overland Park, KS 66212.

INCH AFTER INCH,

SESSION AFTER SESSION,

THRILL AFTER THRILL.

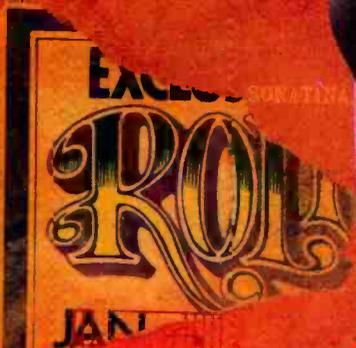


ON THIS YOU CAN RELY.

AmpeX Recording Media Corporation
401 Broadway • Redwood City • CA 94063 • (415) 367-3809

Circle (27) on Rapid Facts Card

Op. 30, No. 3



Manufacturers Directory

An alphabetical list of manufacturers' addresses and phone numbers.

A

Aapex Inc.

28 Paul Drive, Suite E
San Rafael, CA 94903
415-492-1300

AB International Electronics

1830-6 Vernon St.
Roseville, CA 95678
916-783-7800

Accurate Sound Corp.

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

ACO Pacific Inc.

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

Acoustech Corp.

42 Enterprise Drive
Ann Arbor, MI 48103
313-663-3790

Acoustic Systems

P.O. Box 3610
Austin, TX 78764
512-444-1961
800-531-5412

Acoustics Design Group

Friary Mews, 28 Commercial Road
Guildford, Surrey, England
GU1 4SU
44-483-503681

Acoustilog Inc.

19 Mercer St.
New York, NY 10013
212-925-1365

ADA Signal Processors, Inc.

7303-D Edgewater Drive
Oakland, CA 94621
415-632-1323
800-241-8888

Adams-Smith

34 Tower St.
Hudson, MA 01749
508-562-3801

Adamson Acoustic Design Corp.

817 Brock Road, Suite 9
Pickering, Ont., Canada
L1W 3L9
416-420-6279

ADC Telecommunications

4900 West 78th St.
Minneapolis, MN 55435
612-835-6800
800-255-3891

ADM Technology Inc.

1626 E. Big Beaver Road
Troy, MI 48007-2525
313-524-2100

Advance Recording Products

7190 Clairemont Mesa Blvd.
San Diego, CA 92111
619-277-2540

ADX Systems

274 Madison Ave., Suite 1406
New York, NY 10016
212-779-2580
800-444-4ADX

AEG-Audio Systems Div.

2201-K Fifth Ave.
Ronkonkoma, NY 11779
516-467-1200

Aerco

P.O. Box 18093
Austin, TX 78760
512-451-5874

Aesthetic Engineering

175 Duane St.
New York, NY 10013
212-925-7049

AGFA



Agfa Corp.

100 Challenger Road
Ridgefield Park, NJ 07660
201-440-2500

Aircraft Music Library

77 N. Washington St.
Boston, MA 02114
617-367-4962
800-343-2514

Aire Born Recording

4700 N.W. Plaza W. Drive
Zionsville, IN 46077
317-876-1556

Akai/IMC

P.O. Box 2344
Fort Worth, TX 76113
817-336-5114

Akashic Records Group

125 Meese Court
Danville, CA 94526
415-837-7959

AKG Acoustics Inc.

77 Selleck St.
Stamford, CT 06902
203-348-2121
800-243-7885



Alesis Studio Electronics

3630 Holdrege Ave.
Los Angeles, CA 90016
213-467-8000

Allen & Heath

5 Connair Road
Orange, CT 06477
203-795-3594

Alpha Audio

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



Altec Lansing Corp.

P.O. Box 26105
Oklahoma City, OK 73126
405-324-5311

Amber Electro Design Inc.

3391 Griffith St.
St. Laurent, Que., Canada
H4T 1W5
514-735-4105
800-361-3697

Amek/TAC US Operations

10815 Burbank Blvd.
North Hollywood, CA 91601
818-508-9788

American Helix

1857 Colonial Village Lane
Lancaster, PA 17601
717-392-7840

American Recorder Technology

P.O. Box 3592
Simi Valley, CA 93063
800-777-9580

Ampex Recording Media Corp.

401 Broadway M/S 22-02
Redwood City, CA 94063
415-367-2288

Amplified Music Products Corp.

9829 Independence Ave.
Chatsworth, CA 91311
818-709-0518

AMS Industries Inc

3827 Stone Way
Seattle, WA 98103
206-633-1956

AMS Industries Plc.
Billington Road
Burnley, Lancs, England
BB11 5ES
0282-57011

Amtel Systems, Inc.
33 Main St., Suite 303
Nashua, NH 03060
603-880-9011

Analog Digital Synergy Inc.
120 S.W. 21st Terrace, Suite C 104
Fort Lauderdale, FL 33312
305-791-1501

Anchor Audio, Inc.
913 West 223rd St.
Torrance, CA 90502
213-533-5984
800-262-4671

ANT Telecommunications Inc.
205 Perry Parkway
Gaithersburg, MD 20877
301-670-9777

Anvil Cases (Unit of Zero Halliburton)
4128 Temple City Blvd.
Rosemead, CA 91770
818-575-8614

Apex Machine Co.
3000 N.E. 12th Terrace
Fort Lauderdale, FL 33334
305-566-1572

**APHEX
SYSTEMS**

Apex Systems Ltd.
11068 Randall St.
Sun Valley, CA 91352
818-767-2929

API-Audio Products Inc.
7951 Twist Lane
Springfield, VA 22153
703-455-8188

Apogee Electronics Corp.
1517 20th St.
Santa Monica, CA 90404
213-828-1930

Apogee Sound, Inc.
1150 Industrial Ave., Suite C
Petaluma, CA 94952
707-778-8887

A-R Editions, Inc.
801 Deming Way
Madison, WI 53717
608-836-9000

A&R Record & Tape Mfg. Co.
902 N. Industrial Blvd.
Dallas, TX 75207
214-741-2027
800-527-3472

Ariel Corp.
433 River Road
Highland Park, NJ 08904
201-249-2900

Arsonic Tonstudio Elektronik US
146 Paoli Pike
Malvern, PA 19355
215-647-9426



ART-Applied Research & Technology, Inc.
215 Tremont St.
Rochester, NY 14608
716-436-2720

ARX Systems
P.O. Box 842
Silverado, CA 92676-0842
714-649-2346

ASC-Tubetraps
P.O. Box 1189
Eugene, OR 97440
503-343-9727
800-ASC-TUBE

Ashly Audio, Inc.
100 Fernwood Ave.
Rochester, NY 14621
716-544-5191
800-828-6308

Associated Production Music
6255 Sunset Blvd., Suite 820
Hollywood, CA 90028
213-461-3211
800-543-4276

AST Sound
250 W. Broadway
New York, NY 10013
212-226-7781

Astatic/CTI
P.O. Box 120
Conneaut, OH 44030
216-593-1111
800-421-3161

Astra Services
422 Route 206 S., Suite 188
Somerville, NJ 08876
201-359-6014

ATC Loudspeaker Technology, Ltd.
231 Elwood Drive
Rochester, NY 14616
716-865-9938



ATI-Audio Technologies, Inc.
328 W. Maple Ave.
Horsham, PA 19044
215-443-0330

Atlas/Soundolier
1859 Intertech Drive
Fenton, MO 63026
314-349-3110
800-876-7337

ATM Audio
17104 Figueroa St.
Gardena, CA 90248
213-538-2004

Audico, Inc.
219 Crossen Ave.
Elk Grove Village, IL
60007
312-640-1030

audio accessories 
audio line

Audio Accessories, Inc.
Mill St.
Marlow, NH 03456
603-446-3335

Audio Analysts USA Inc.
13 Industrial Blvd. W.
Plattsburgh, NY 12901
518-561-5071

Audio Animation
210 W. Magnolia Ave.
Knoxville, TN 37917
615-544-0458

Audio Cassette Center
P.O. Box 46606
West Hollywood, CA 90046
213-850-5044

Audio Centron
1400 Ferguson Ave.
St. Louis, MO 63133
314-727-4512

Audio Control Industrial..

Audio Control Industrial
22313 70th Ave. W.
Mountlake Terrace, WA
98043
206-775-8461

Audio Design Associates
610 Mamaroneck Ave.
White Plains, NY 10605
914-946-9595

Audio Development AB
Jagersrovagen 217
Malmö, Sweden S-213 77
46-40-228440

Audio Developments, Ltd.
Hall Lane, Walsall Wood
Walsall West Midlands, England
WS9 9AU
0543 375351

Audio/Digital Inc.
10000 S. Bertelsen Road, Suite 4
Eugene, OR 97402
503-687-8412
800-423-1082

Audio Engineering Associates
1029 N. Allen Ave.
Pasadena, CA 91104
818-798-9127

Audio Intervisual Design
1032 N. Sycamore Ave.
Los Angeles, CA 90038
213-469-4773

Audio Kinetics Ltd.
Kintic Centre, Theobald St.
Borehamwood, Herts, England
WD6 4PJ
01-953-8118

Audio Logic
5639 S. Riley Lane
Salt Lake City, UT 84107
801-268-8400
800-453-7484

Audio M

952 Saturn Way
Livermore, CA 94550
415-447-0284

Audio Precision, Inc.

P.O. Box 2209
Beaverton, OR 97075
503-627-0832
800-231-7350

Audio Rents, Inc.

7237 Santa Monica Blvd.
Hollywood, CA 90046
213-874-1000

Audio Resources

1750 Kalakaua
Honolulu, HI 96826
808-944-9400

Audio Sound Productions

114-D Allen Blvd.
Farmingdale, NY 11735
516-755-1102

**audio-technica.****Audio-Technica US, Inc.**

1221 Commerce Drive
Stow, OH 44224
216-686-2600

Audio Video Consultants

P.O. Box 441
Caledon, Ont., Canada
L0N 1C0
519-927-3401

Audio-VideoGraphics

13801 East 35th St.
Independence, MO 64055
816-254-0400
800-322-2832

Audio Visual Assistance

565 Sherwood Road
Shoreview, MN 55126
612-481-9715

Audiolab Electronics, Inc.

5831 Rosebud Lane, Building C
Sacramento, CA 95841
916-348-0200

Audiorent

Kurfuerstenwall 11
D-4350 Recklinghausen 1, West Germany
49-2361-59494

AudioTechniques, Inc.

1619 Broadway
New York, NY 10019
212-586-5989

Auditronics Inc.

3750 Old Getwell Road
Memphis, TN 38118
901-362-1350
800-638-0977

Audix Corp.

5635 W. Las Positas
Pleasanton, CA 94566
415-463-1112
800-888-9992

Audra International

P.O. Box 38
Silverado, CA 92676
714-649-2207

Aura Sonic Ltd.

P.O. Box 791
Flushing, NY 11352-0791
718-886-6500

Auratone Corp.

P.O. Box 698
Coronado, CA 92118
619-297-2820

Auricle Control Systems

3828 Woodliff Road
Sherman Oaks, CA 91403
818-990-8442

Australian Monitor (Pty) Ltd.

53 College St.
Gladesville, NSW 2111, Australia
61-2-816-3544

Auteri Associates, Inc.

53 Foreston Circle
Manorville, NY 11949
516-878-6421

Avalanche Effects Inc.

Box 582, Postal Station C
Toronto, Ont., Canada
M6J 3R9
416-864-0306

Avedis Zildjian Co.

22 Longwater Drive
Norwell, MA 02061
617-871-2200

Azonic, Inc.

1600 E. Cliff Road
Burnsville, MN 55337
800-842-9790

B**Bacchus Software Systems**

2210 Wilshire Blvd., Suite 330
Santa Monica, CA 90403
213-820-9145

BASF Corp. Information Systems

Crosby Drive
Bedford, MA 01730
617-271-4000
800-225-4350

B&B Systems Inc.

28111 N. Ave. Stanford
Valencia, CA 91355
805-257-4853
800-345-1256

BBE Sound

5500 Bolsa Ave., Suite 245
Huntington Beach, CA 92649
714-897-6766
800-233-8346

Belden Wire & Cable

P.O. Box 1980
Richmond, IN 47375
317-983-5200

Benchmark Media Systems, Inc.

3817 Brewerton Road
North Syracuse, NY 13212
315-452-0400
800-262-4675-orders only

Benjamin International, Inc.

1460 Old Country Road
Plainview, NY 11803
516-753-0700
800-572-8989

Berklee College of Music

1140 Boylston St.
Boston, MA 02215
617-266-1400

The Bertech Organization

14447 Califa St.
Van Nuys, CA 91401
818-909-0262
800-992-2272

Bertus Productions

The Studio
22723 Berdon St.
Woodland Hills, CA 91367
818-883-1920

Beyer Dynamic Inc.

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

BGW Systems Inc.

13130 Yukon Ave.
Hawthorne, CA 90251-5042
213-973-8090
800-468-AMPS

Biamp Systems

14270 N.W. Science Park Drive
Portland, OR 97229
503-641-7287
800-826-1457

Bi-Tronics Inc.

P.O. Box 125
Tuckahoe, NY 10707
914-961-2004
800-666-0996

Black Audio Devices

P.O. Box 106
Ventura, CA 93002
805-653-5557

Blank Software

P.O. Box 6561
San Francisco, CA 94101
415-863-9224

Bose Corp.

The Mountain
Framingham, MA 01701
508-879-7330

Boston Acoustics, Inc.

70 Broadway
Lynnfield, MA 01940
617-592-9000

Boulder Amplifiers, Inc.

4850 Sterling Drive
Boulder, CO 80301
303-449-8220

Brainstorm Electronics, Inc.

1515 Manning Ave., Suite 4
Los Angeles, CA 90024
213-475-7570

Brick Audio

102 S. Porter
Elgin, IL 60120
312-742-7425

Broadcast Audio Corp.

11306 Sunco Drive
Ranch Cordova, CA 95742
916-635-1048

Broadcast Electronics, Inc.

4100 North 24th St.
Quincy, IL 62301
217-224-9600

Bruel & Kjaer A/S

Naerum Hovedgade 18
Naerum, Denmark 2850
45 2 800500

Bruel & Kjaer Instruments

185 Forest St.
Marlborough, MA 01752
508-481-7000



Not your average woofer and tweeter.

Loudspeakers are wholly man-made devices. In the evolutionary calendar of man, the loudspeaker is just milliseconds old. By sheer ingenuity, man has refined a system which is capable of mimicking natural sounds.

The degree of realism, and hence the quality of natural reproduction, can simply be defined as **characteristics added** to the original sound. The quantification of these clues given to the human ear, decipher whether the sound is real

or reproduced by a loudspeaker on the end of an audio system.

The design and production of high quality loudspeakers is dependent on being able to measure, assess and therefore, rank and quantify these **added characteristics**. Having assessed the characteristics, the next and most important step is to select materials and techniques which will minimize or eliminate these

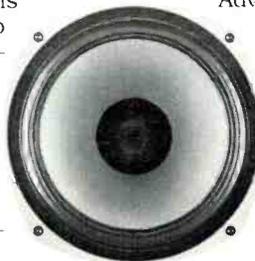
added characteristics altogether.

Differential Material Technology- An essential in the realization of Advanced Reference Monitoring.

For more information on Differential Material Technology call or write:

TANNOY

Tannoy / TGI North America Inc.
c/o Bill Calma
300 Gage Ave., Unit 1, Kitchener,
Ontario, Canada N2M 2C8
(519) 745-1158 Telex 069-55328
Fax (519) 745-2364



Circle (28) on Rapid Facts Card

Bryant Electric
Westinghouse Electric Corp.
 Westinghouse Building, Gateway Center
 Pittsburgh, PA 15222
 203-876-3600

Bryston
 979 Franklin Lane
 Maple Glen, PA 19002
 800-673-7899

BSS Audio
 30B Banfi Plaza N.
 Farmingdale, NY 11735
 516-249-3660

Burlington Audio/Video Tapes, Inc.
 106 Mott St.
 Oceanside, NY 11572
 516-678-4414
 800-331-3191

C

Caig Labs, Inc.
 P.O. Box J
 Escondido, CA 92025
 619-743-7143

California Switch & Signal
 13717 S. Normandie Ave.
 Gardena, CA 90249
 213-770-2330

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

Canare Cable Inc.
 511 Fifth St., Suite G
 San Fernando, CA 91340
 818-365-2446

Canetics, Inc.
 P.O. Box 70549
 Pasadena, CA 91107
 818-584-0438

Capitol Magnetic Products
 6902 Sunset Blvd.
 Los Angeles, CA 90028
 213-461-2701

David Carroll Electronics
 805 Gilman St.
 Berkeley, CA 94710
 415-528-8054

Cartunes
 P.O. Box 20384
 Indianapolis, IN 46220
 317-257-6776

CARVER
 PROFESSIONAL

Carver Corp.
 20121 48th Ave. W.
 Lynnwood, WA 98046
 206-775-1202

Casio, Inc.
 570 Mount Pleasant Ave.
 Dover, NJ 07801
 201-361-5400

Cassette Tek, Inc.
 1605 Thomaston Ave.
 Waterbury, CT 06704
 203-757-4848

Dwight Cavendish Co.
 2117 Chestnut Ave.
 Wilmette, IL 60091
 312-673-0937

Celestion Industries, Inc.
 89 Doug Brown Way
 Holliston, MA 01746
 508-429-6706

Cello Ltd.
 315 Peck St., Building 23
 New Haven, CT 06513
 203-865-1237

Centro Corp.
 369 Billy Mitchell Road
 Salt Lake City, UT 84116
 801-537-7779

**Century Financial Services Group,
 Ltd.**
 15455 Conway Road, Suite 350
 Chesterfield, MO 63017
 314-537-0330

Cerwin-Vega Inc.
 555 E. Easy St.
 Simi Valley, CA 93065
 805-584-9332

CintasVAC[®]

Cintas VAC
 A Div. of Cintas Technologies Inc.
 1207 Fifth St.
 Imperial Beach, CA 92032
 904-445-5545



Cipher Digital, Inc.
 P.O. Box 170
 Frederick, MD 21701
 301-695-0200
 800-331-9066

Circuit Research Labs, Inc.
 2522 W. Geneva Drive
 Tempe, AZ 85282
 602-438-0888
 800-535-7648

Clarity
 Nelson Lane
 Garrison, NY 10524
 914-424-4071

Clarity
 CASSETTE DUPLICATION

Clarity Cassette Duplication
 Post Office Square, Main St.
 Waterville, ME 04901
 207-873-3911
 800-458-6405

Clean Co.
 P.O. Box 1125
 Burbank, CA 91507
 818-842-5547

Clear-Com Intercom Systems
 945 Camelia St.
 Berkeley, CA 94710
 415-527-6666

CMS Digital, Inc.
 182 S. Raymond Ave.
 Pasadena, CA 91105
 818-405-8002

CMX Corp.
 2230 Martin Ave.
 Santa Clara, CA 95050
 408-988-2000
 800-982-3400

Coda Music Software
 1401 East 79th St.
 Bloomington, MN 55425-1126
 612-854-1288
 800-843-2066

Coherent Communications Inc.
 28245 Ave. Crocker
 Valencia, CA 91355
 805-295-0300

COLOSSUS[™]
 DIGITAL STEREO

COLOSSUS: By The Numbers
 P.O. Box 8359
 Incline Village, NV 89450-8359
 702-831-4459

Commodore Business Machines
 1200 Wilson Drive
 West Chester, PA 19380

Community Light & Sound, Inc.
 333 E. Fifth St.
 Chester, PA 19013
 215-876-3400
 800-523-4934

CompuSonic Corp.
 744 San Antonio Road, Suite 4
 Palo Alto, CA 94303
 415-494-1183

Computer Music Supply
 382 N. Lemon Ave.
 Walnut, CA 91789
 714-594-5051
 800-322-MIDI

**Concept Design Electronics & Mfg.,
 Inc.**
 1105-A Pomeroy St.
 Graham, NC 27253
 919-229-6500

Connectronics Corp.
 652 Glenbrook Road
 Stamford, CT 06906
 203-324-2889
 800-322-2537

Conquest Sound, Inc.
 RR 2 Box 1AB
 Monee, IL 60449
 708-534-0390
 800-323-7671

JL COOPER ELECTRONICS

J.L. Cooper Electronics
 13478 Beach Ave.
 Marina Del Rey, CA 90292
 213-306-4131

Countryman Associates Inc.
 417 Stanford Ave.
 Redwood City, CA 94063
 415-364-9988
 800-669-1422

At today's prices, who can afford trial and error?

As America's largest pro audio dealer we talk to more studio pros on a regular basis than anyone. We hear their successes and their failures. We hear what works and what doesn't.

Now that information is available to you. With Everything Audio you can profit from the experience of others. Call us for...

- A vast array of signal processing gear, as well as consoles, tape machines, and disc-based multi-channel audio systems.
- Demos in your facility or ours
- Six full-time technicians on 24 hour call
- Creative financing plans
- Acoustical design services

Sales Staff (1 to r): Paul Svenson, Zenobia Millet, Garth Hedin, Craig Bell, Paul Freudenberg, Jan Courtney, Phil Celia, Jeff Pierce, Chrissie McDaniel, Lincoln Zimmanck, Mark Lever, David Gilbert, Nat Hecht, Ben Ing



Our Pro Demo Room



Technical Staff (1 to r): Tony Pekler, Rik Shannon, Jim Albert, Paul Hulse, Greg Dougan, Steve Smulian



Office Staff (front): Brian Cornfield, (1 to r): Kimberly Grogan, Brian "Jones" DeFrew, Michele Schwartz, Niki Simpson, Ken Gabriel, Carol Gumbel, Mark Henderson

ea **Everything Audio**
Advancing with Technology

2721 West Burbank Boulevard • Burbank, California 91505
Phone (818) 842-4175 or (213) 276-1414 • Fax (818) 953-2908

Circle (29) on Rapid Facts Card

www.americanradiohistory.com

Court Acoustics Systems
Box 831, Oakley Green Road
Windsor, Berkshire, England
628-38555

Creative Sound Corp.
25429 Malibu Road
Malibu, CA 90265
213-456-5482
800-323-PACK

Crest Audio
150 Florence Ave.
Hawthorne, NJ 07506
201-423-1300



Crown International Inc.
P.O. Box 1000
Elkhart, IN 46514
219-294-8000

CST Mfg. & Sales Inc.
6679 Peachtree Ind'l. Blvd., Suite J
Norcross, GA 30092
404-449-4903

C-T Audio Marketing Inc.
3050 S.W. 14th Place, Suite 3
Boynton Beach, FL 33426
407-738-0622
800-CT-AUDIO

Current Music Technology
146 Paoli Pike

Malvern, PA 19344
215-647-9426

The Cutting Edge Disc Mastering
P.O. Box 217
Ferndale, NY 12734
914-292-5965

Cyber-Kinetek Systems, Inc.
11839 Starcrest Drive
San Antonio, TX 78247
512-496-0717

D

Dago Cases
6945 Indiana Court, Suite 600
Golden, CO 80403
303-421-7912
800-342-3246

Dalbec Audiolab
Red Mill Road
Rensselaer, NY 12144
518-477-7873
800-641-1616

Davkore Co.
1300 Space Park Way
Mountain View, CA 94043
415-969-3030

Dax Audio Group, Inc.
1231 S.E. Gideon St.
Portland, OR 97202
503-232-4445

DB Plus Digital Services
P.O. Box 694

Lynbrook, NY 11563
516-872-2325

DB Systems
P.O. Box 460
Rindge Center, NH 03461
603-899-5121

dbx Inc.
71 Chapel St.
Newton, MA 02195
617-964-3210

DDA
30-B Banfi Plaza N.
Farmingdale, NY 11735
516-249-3660

DeCuir Corp.
4012 S. Broadway Place
Los Angeles, CA 90037
213-233-4184

Delicate Productions
1390 Flynn Road, Suite A
Camarillo, CA 93010
805-388-1800

Delta Electronics Inc.
5730 General Washington Drive
Alexandria, VA 22312
703-354-3350

Denecke Inc.
5417 Cahuenga, Suite B
North Hollywood, CA 91601
818-766-3525

Denon America
222 New Road
Parsippany, NJ 07054
201-575-7810



DCI DESIGN[®] ACOUSTICS

Design Acoustics
1225 Commerce Drive
Stow, OH 44224
216-686-2600

Design Direct Sound, Inc
9320 15th Ave. S., Suite C-E
Seattle, WA 98108
206-527-4371

DeWolfe Music Library, Inc.
25 West 45th St.
New York, NY 10036
212-382-0220

D&G Mastering
P.O. Box 370
Englishtown, NJ 07726
201-446-2411

DIC//DAT™
Digital Audio Tape

DIC Digital
2 University Plaza
Hackensack, NJ 07601
201-487-4605
800-328-1342

Digidesign, Inc.
1360 Willow Road, Suite 101
Menlo Park, CA 94025
415-327-8811

Digital Audio Research
6363 Sunset Blvd., Suite 802
Los Angeles, CA 90028
213-466-9151

Digital Audio Research
2 Silverglade Business Park, Leatherhead Road
Chessington, Surrey, England
KT9 2OL
3727-42848

Digital Brothers
1731 Bonaire Way
Newport Beach, CA 92660
714-645-9702

DIGITAL
dispatch

Digital Dispatch, Inc.
P.O. Box 4426
Burbank, CA 91503
818-952-FAST
800-446-FAST

Digital Dynamics, Inc.
270-02 E. Pulaski Road
Greenlawn, NY 11740
516-271-5600

Digital Music Corp.
5312-J Derry Ave.
Agoura Hills, CA 91301
818-991-3881

Digital 1 Duplication Inc.
658 Douglas Ave.
Altamonte Springs, FL

32714
407-682-7790

DigiTech
5639 S. Riley Lane
Salt Lake City, UT 84107
801-268-8400
800-453-7484

Diless Ltd.
Melkonkatu 16 A
00210 Helsinki, Finland
358-0-679 271

Dimension Music & Sound Effects
P.O. Box 1561
Jupiter, FL 33468
407-747-8081
800-634-0091

Disc Makers
1328 N. Fourth St.
Philadelphia, PA 19112
215-232-4140
800-468-9353

Dr. T's Music Software
220 Boylston St., Suite 206
Chestnut Hill, MA 02167
617-244-6954

DOD Electronics Corp.
5639 S. Riley Lane
Salt Lake City, UT 84107
801-268-8400
800-453-7484

Dolby Labs
100 Potrero Ave.
San Francisco, CA 94103
415-558-0200

THE BOARD FOR PEOPLE WITH BETTER THINGS TO DO WITH THEIR MONEY THAN BUY A BOARD.

Let's face it.

As an electronic musician, the new board you'd really like to buy has keys, not faders. In fact, you probably wouldn't be buying a new board at all if you didn't need more inputs.

That's why Tascam's M-600 Input Console is the board for you. It gives you top panel access to as many as 64 stereo or 128 mono inputs. That's capacity.

Equally accessible is the M-600's surprisingly low price. You can put one in your studio for less than \$10,000, thanks to its modular design. Starting with 16 channels, the M-600 expands to a full 32 as you need them.

But despite its attractive price, the M-600 has that great sound of boards costing twice as much. And when you experience its intuitive feel, the way everything is where you need it when you need it, you'll know this is the board you've been looking for.

Write for our free *Configuration and Installation Guide*. Then get your hands on the powerful M-600 Input Console at your Tascam dealer.

It may be the last board you ever have to buy.

TASCAM.

© 1989 TEAC America, Inc., 7733 Telegraph Road, Montebello, CA 90640, 213/726-0303.

Circle (30) on Rapid Facts Card

www.americanradiohistory.com

Domain Communications Inc.

P.O. Box 337
Wheaton, IL 60189
312-668-5300

Dorrough Electronics

5221 Collier Place
Woodland Hills, CA 91364
818-999-1132

Dorsey Productions, Inc.

P.O. Box 9409
Anaheim, CA 92812
714-535-3344

D&R Electronica b.v.

Rynkade 15B
1382 GS Weesp, Holland
2940-18014

**D&R USA**

Route 3 Box 184-A
Montgomery, TX 77356
409-588-3411

**Drawmer Distribution Ltd.
Charlotte St. Business Centre**

Charlotte St., Wakefield
West Yorkshire, England
WF1 1UH

Drew Engineering Co.

624 DeWitt Road
Webster, NY 14580
716-787-0258

Drum Workshop

2697 Lavery Court, Unit 16
Newbury Park, CA 91320
805-499-6863

Duplitronics, Inc.

160 Abbott Drive
Wheeling, IL 60090
312-459-6610

DW Labs, Inc.

P.O. Box 882
Millburn, NJ 07041
201-376-8453
800-542-2454

E**Earworks**

780 Frontage Road
Northfield, IL 60093
312-446-4263

E.A.R.S., Inc.

90 Windom St.
Boston, MA 02134
617-783-5229

East Coast MIDI Bulletin Board

21 September St.
Coram, NY 11727
516-928-4284

Eastern Acoustic Works

One Main St.
Whitinsville, MA 01588
800-992-5013

Eastern Standard Productions, Inc.

26 Baxter St.
Buffalo, NY 14207
716-876-1454
800-527-9225

Editall

218-31 97th Ave.
Queens Village, NY 10550
914-668-0388

El Mar Plastics Inc.

840 E. Walnut St.
Carson, CA 90746
213-327-3180
800-255-5210

Electro Sound, Inc.

160 San Gabriel Drive
Sunnyvale, CA 94086
408-245-6600



Electro-Voice®
a MARK IV company

Electro-Voice, Inc.

600 Cecil St.
Buchanan, MI 49107
616-695-6831

Electron Processing, Inc.

P.O. Box 68
Cedar, MI 49621
616-228-7020

Electronic Specialists, Inc.

171 S. Main St.
Natick, MA 01760
508-655-1532
800-225-4876

Electronic Systems Labs, Inc.

120 S.W. 21st Terrace, C-104
Fort Lauderdale, FL 33312
305-791-1501

Embassy Cassette Inc.

3617 W. Macarthur, Suite 500
Santa Ana, CA 92704
714-557-5757
800-541-8899

**Emilar Corp.**

4570 E. Eisenhower Circle
Anaheim, CA 92807
714-779-8394
800-421-7071

E-Mu Systems Inc.

P.O. Box 66303
Scotts Valley, CA 95066
408-438-1921

ENAK Microphone Repair

420 Carew Ave.
Pitman, NJ 08071
609-589-6186

Ensoniq Corp.

155 Great Valley Parkway
Malvern, PA 19355
215-647-3930
800-553-5151

The Enterprise

4620 W. Magnolia Blvd.
Burbank, CA 91505
818-505-6000

Euphonix, Inc.

441 Page Mill Road
Palo Alto, CA 94306
415-325-5003

Europadisk, Ltd.

75 Varick St.
New York, NY 10013
212-226-4401

Eva-Tone Inc.

P.O. Box 7020-R

Clearwater, FL 34618

813-572-7000
800-EVA-TONE

Eventide, Inc.

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

Evertz Microsystems Ltd.

3465 Mainway
Burlington, Ont., Canada
L7M 1A9
416-335-3700

Eye & I Productions

930 Jungfrau Court
Milpitas, CA 95035
408-945-0139

F**F.A.C.E. Network**

25 Lafayette Ave., Suite 2B
Brooklyn, NY 11217-1428
718-624-6602

Fane Acoustics

286 Bradford Road
Batley, West Yorkshire, England
WF17 5PW
0924-476431

Fat Box

814 E. Walnut Ave.
Burbank, CA 91501
818-842-6600

Fidelipac Corp.

P.O. Box 808
Moorestown, NJ 08057
609-235-3900

FirstCom/Music House

13747 Montfort Drive, Suite 220
Dallas, TX 75240
214-934-2222
800-858-8880

First Light Video Publishing

374 N. Ridgewood Place
Los Angeles, CA 90004
213-467-1700
800-777-1576

Five Towns College

2165 Seaford Ave.
Seaford, NY 11783
516-783-8800

Flood Zone Studios

11-15 South 18th St.
Richmond, VA 23221
804-644-0935

FM Acoustics Ltd.

Tiefenhofstrasse 17
CH-8820 Wadenswil, Switzerland
01/780-64-44

FM Acoustics USA

P.O. Box 854
Benicia, CA 94510
707-745-4444

FM Tubecraft

1121-26 Lincoln Ave.
Holbrook, NY 11741
516-567-8588
800-553-0051

Focusrite

c/o Sonic Image Ltd.
1100 Wheaton Oaks Court
Wheaton, IL 60187
312-653-4544



quad eight

is an old established company **and** a brand new corporation. Originally formed in 1962, it has continuously delivered quality product to the professional audio industry for over 27 years.

Quad Eight is not just a manufacturer of audio mixing consoles, we are systems designers and circuit engineers, making our products fit your needs. Custom is a word we thrive on, and innovation is a word we enjoy. Many of the major design concepts that have changed and pushed forward recording and film sound consoles have come from the engineering staff of Quad Eight Electronics. We conceived and implemented the multitrack monitor mix, digital automation, the multitrack film scoring console, and the modern film re-recording console.





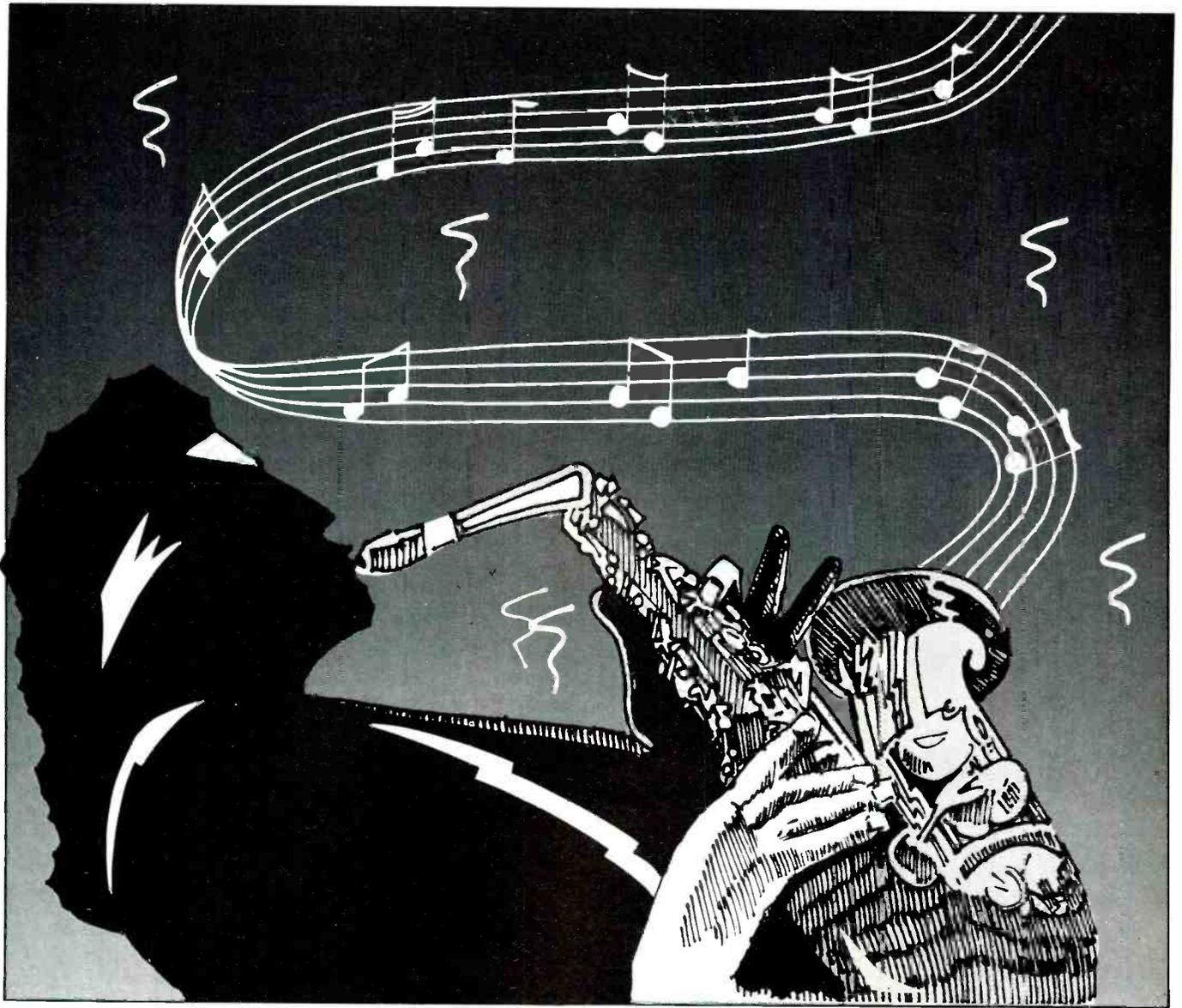
Years of experience and a shining future make Quad Eight the company of choice for your console needs. We are continuing the forward advance in console design, based always on solid engineering principles. This gives you one other advantage—our engineering and attention to details lets our console deliver great sound, transparent sound—the best you can get!

Write, FAX, or call for details.



**quad eight
electronics, inc.**

225 Parkside Drive
San Fernando, CA, 91340 U.S.A.
TEL 818-898-2341
FAX 818-365-8310
TELEX 311 786



Hot Cakes That Cook.

Producers want their duplicated recordings to sound as hot as the master. So, you've got to use tape that lets their music really cook. Tape that's especially hot on the top end.

CintasCHROME™ pancakes really stack up to BASF* and AGFA* when it comes

to delivering those steamy hot highs, low noise and consistency, pancake after pancake.

There's just one difference. When you use CintasCHROME Audio Duplicating Tape, you'll save a lot of dough. For your free samples, call Bob Piselli at (904) 445-5545.

MANUFACTURING PLANT
 Av. 19 Norte No. 130-13
 Centro Industrial Los Pinos
 La Mesa, Tijuana, B.C.
Fax USA: (619) 575-6814

CintasVAC®

A Division of Cintas Technologies, Inc.

For-A Corp. of America
320 Nevada St.
Newton, MA 02160
617-244-3223

Formula Audio, Inc.
Route 5, Box 440-3
Zebulon, NC 27597
919-269-6441

Forte Music, Inc.
897 Independence Ave., Suite 40
Mountain View, CA 94043
415-965-8880

Fostex Corp. of America
15431 Blackburn Ave.
Norwalk, CA 90650
213-921-1112

Four Designs Co.
6531 Gross Ave.
Canoga Park, CA 91307
818-716-8540
800-544-3746

Frazier
Route 3 Box 319
Morrilton, AR 72110-9532
501-727-5543
800-643-8747

FSR Inc.
220 Little Falls Road
Cedar Grove, NJ 07009
201-239-0988
800-332-3771

Full Compass Systems
5618 Odana Road
Madison, WI 53719-1208
800-356-5844

Full Sail Center for the Recording Arts
3300 University Blvd.
Winter Park, FL 32792
407-679-6333

FURMAN
Signal Processing

Furman Sound, Inc.
30 Rich St.
Greenbrae, CA 94904
415-927-1225

Future Disc Systems
3475 Cahuenga Blvd. W.
Hollywood, CA 90068
213-876-8733

G

Galaxy Audio
625 E. Pawnee
Wichita, KS 67211
316-263-2852

Galaxy Design Group
625 E. Pawnee
Wichita, KS 67211
316-263-2852

Gallien-Krueger, Inc.
1355 Dell Ave.

Campbell, CA 95008
408-379-3344

gauss

Gauss A Mark IV Co.
9130 Glenoaks Blvd.
Sun Valley, CA 91352
213-875-1900

Gefen Systems
5068 San Feliciano Drive
Woodland Hills, CA 91364
818-884-6294

General Devices Co., Inc.
P.O. Box 39100
Indianapolis, IN 46239
317-897-7000

Gentner Electronics Corp.
1825 Research Way
Salt Lake City, UT 84119
801-975-7200

Ghielmetti Switzerland
Biberiststrasse 24
CH-4501 Solothurn, Switzerland
0041 65 22 43 41

GHL Audio Engineering
2807 Azalea Place
Nashville, TN 37204
615-269-5183

GML, Inc.
7821 Burnet Ave.
Van Nuys, CA 91405
818-781-1022

Gold Line/Loft
P.O. Box 500
West Redding, CT 06896
203-938-2588

Gotham Audio Corp.
1790 Broadway
New York, NY 10019
212-765-3410

Grass Valley Group
P.O. Box 1114
Grass Valley, CA 95945
916-478-3000

Greencorp USA Inc.
1015 W. Newport Center Drive, Suite 105
Deerfield Beach, FL 33442
305-429-9225
800-972-0707

Groupe Andre Perry Software
7810 Whiterim Terrace
Potomac, MD 20854
301-983-2478

H

Hamilton House Entertainment Group
10443 N. May Ave., Suite 772
Oklahoma City, OK 73120
405-755-6333
800-762-5243

John Hardy Co.
P.O. Box AA631
Evanston, IL 60204
312-864-8060

Harrison by GLW Enterprises
437 Atlas Drive

Nashville, TN 37211
615-331-8800

Harrison Information Technology
Unit 3, Button End
Harston, Cambridge, England
CB2 5NX
0223-871711

HAVE, Inc.
309 Power Ave.
Hudson, NY 12534-2448
518-828-2000
800-999-HAVE

H & E Micro-Trak Corp.
165 Front St.
Chicopee, MA 01013
413-733-8743
800-358-8729

Head Acoustics North America
114-A Washington St.
Norwalk, CT 06854
203-838-4167

HED Productions
P.O. Box 28820
San Diego, CA 92128
619-436-8110

HEDCO
P.O. Box 1985
Grass Valley, CA 95945
916-273-9524
800-433-2648

Hi-Tech Audio Systems Inc.
260 Grove St.
Half Moon Bay, CA 94019
415-726-2428

HM Electronics, Inc.
6675 Mesa Ridge Road
San Diego, CA 92121
619-535-6060



Hollywood Edge
7080 Hollywood Blvd., Suite 711
Hollywood, CA 90028
213-488-8723
800-292-3755

Horita
P.O. Box 3993
Mission Viejo, CA 92690
714-364-1143

Hot House Professional Audio
275 Martin Ave.
Highland, NY 12528
914-691-6077

Howe Technologies Corp.
2300 Central Ave., Suite E
Boulder, CO 80301
303-444-4693
800-525-7520

Hybrid Arts, Inc.
8522 National Blvd.
Los Angeles, CA 90232
213-841-0340

I

ILP Mfg.
250 Wildcat Road
Downsview, Ont., Canada
M3J 2N5
416-667-9914

Heino Ilsemann
Verpackungsmaschinen
Vertriebs-G-mbH
 Zum Panrepel 24
 D-2800 Bremen 44, West Germany
 421-48-60-60

Imagine Music Group
 751 S. Kellogg
 Santa Barbara, CA 93117
 805-683-1183
 800-662-MIDI

InConcert
 12919 Earhart Ave.
 Auburn, CA 95603
 916-888-0600

Industrial Research Products
 409-415 Busse Road
 Elk Grove Village, IL
 60007
 312-640-9553
 800-255-6993

Industrial Strength Industries
 13042 E. Moore St.
 Cerritos, CA 90701
 213-921-2341
 800-537-5199

Innovative Electronic Designs, Inc.
 9701 Taylorsville Road
 Louisville, KY 40299
 502-267-7436

Inovonics Inc.
 1305 Fair Ave.
 Santa Cruz, CA 95060
 408-458-0552
 800-733-0552

Instruments Lyre Inc.
 2909 Kepler
 Sainte-Foy, Que., Canada
 G1X 3V4
 418-654-0181

Integral Systems
 446 West 47th, Suite 5D
 New York, NY 10036
 212-262-3300

Intelix
 5618 Odana Road
 Madison, WI 53719-1208
 608-273-6333

Intelligent Music
 116 N. Lake Ave.
 Albany, NY 12206
 518-434-4110
 800-344-2086

Int'l. Electro-Magnetics, Inc.
 350 N. Eric Drive, Unit B
 Palatine, IL 60067
 312-358-4622

International Tapetronics
3M Broadcasting & Related
Products Div.
 P.O. Box 241
 Bloomington, IL 61702
 309-828-1381
 800-447-0414

Interonics, Inc.
 3453 Commercial Ave.
 Northbrook, IL 60062
 312-272-1772

Interval Music Systems
 12077 Wilshire Blvd., Suite 515
 Los Angeles, CA 90025
 213-478-3956

IQS Inc.
 12862-F Garden Grove Road
 Garden Grove, CA 92643
 714-539-7842

Island Cases
 1121-20 Lincoln Ave.
 Holbrook, NY 11741
 516-563-1181
 800-343-1433

ITT Cannon
Components Div.
 1851 E. Deere Ave.
 Santa Ana, CA 92705-6500
 714-261-5300

Ivie A Mark IV Co.
 1366 W. Center St.
 Orem, UT 84057
 801-224-1800

J

Jan-Al Cases
 3339 Union Pacific Ave.
 Los Angeles, CA 90023
 213-260-7212
 800-735-2625

Jasoni Electronics
 2900 E. Charleston Blvd., Suite 197
 Las Vegas, NV 89104
 702-384-0081



JBL Professional
 8500 Balboa Blvd.
 Northridge, CA 91329
 818-893-8411

Jensen Tools Inc.
 7815 South 46th St.
 Phoenix, AZ 85044
 602-968-6241

Jensen Transformers, Inc.
 10735 Burbank Blvd.
 North Hollywood, CA 91601
 213-876-0059

J.L. Sound Systems Ltd.
 250 King St. E.
 Hamilton, Ont., Canada
 L8N 1B7
 416-527-6863

Joe's Sound & Salami Co.
 303 Clymer Ave.
 Morrisville, PA 19067
 215-736-0811

The Joiner Rose Group
 4125 Centurion Way
 Dallas, TX 75244
 214-392-7800

Josephson Engineering
 3729 Corkerhill
 San Jose, CA 95121
 408-238-6062

JRF Magnetic Sciences Inc.
 249 Kennedy Road
 Greendell, NJ 07839
 201-579-5773

Juice Goose
c/o Whittenton Industries Inc.
 7320 Ashcroft, Suite 302
 Houston, TX 77081
 713-772-1404

Julian Systems
 2280 Bates Ave., Suite J
 Concord, CA 94520
 415-686-4400

JVC Professional Products Co.
 41 Slater Drive
 Elmwood Park, NJ 07407
 201-794-3900

K



KABA Research & Development
 24 Commercial Blvd., Suite E
 Novato, CA 94949-9959
 415-883-5041
 800-231-TAPE

Kalglo Electronic Co. Inc.
 6584 Ruch Road
 Bethlehem, PA 18017-9359
 215-837-0700
 800-524-0400

Kawai America Corp.
 2055 E. University Drive
 Compton, CA 90220
 213-631-1771
 800-421-2177

Keyboard Technologies Inc.
 16137 Sherman Way, Suite 169
 Van Nuys, CA 91406
 818-891-6999

Kimber Kable
 2675 Industrial Drive
 Ogden, UT 84401
 801-621-5530

King Instrument Corp.
 80 Turnpike Road
 Westboro, MA 01581
 508-366-9141



Klark-Teknik
 30-B Banfi Plaza N.
 Farmingdale, NY 11735
 516-249-3660
 800-249-3660

Klark-Teknik
 Walter Nash Road
 Kidderminster, Worcs, England
 DY11 7HJ
 0562-741515

Klipsch & Associates, Inc.
 P.O. Box 688
 Hope, AR 71801
 501-777-6751

KMD Labs
 1212 N. San Fernando Blvd., Suite 226
 Burbank, CA 91504
 818-842-2460

Korg USA Inc.
89 Frost St.
Westbury, NY 11590
516-333-9100
800-645-3188

Kurzweil Music Systems, Inc.
411 Waverly Oaks Road
Waltham, MA 02154
617-893-5900

L

Lake People
Rosgartenstr. 13
Konstanz 7750, Fed. Rep. Germany
0049-0-7531-24428

Lakeside Associates, Inc.
1540 E. First St., Suite 260
Santa Ana, CA 92701
714-836-6496

Lambchops North
2235 W. Alice
Phoenix, AZ 85021
602-997-8981

Lambchops Studios
323 W. McDowell Road
Phoenix, AZ 85003
602-254-3849

Larson/Davis Architects
611 Broadway, Suite 708
New York, NY 10012
212-353-9005

**Latin Recording Brokerage HQI
Consultation Agency**
163 Amsterdam Ave., Suite 115
New York, NY 10023
212-459-4802

Lectrosomics Inc.
P.O. Box 15900
Rio Rancho, NM 87174
505-892-4501
800-821-1121

Leitch Video of America Inc.
825-K Greenbrier Circle
Chesapeake, VA 23320
804-424-7920
800-231-9673

Lenco, Inc.
300 N. Maryland
Jackson, MO 63755
314-243-3147
800-325-8494

Leonardo Software
10378 Holman Ave.
Los Angeles, CA 90024
213-277-5161

Lester Audio Labs
1122 N. Windomere Ave.
Dallas, TX 75208
214-943-7300

Lexicon Inc.
2323 Cornith Ave.
West Los Angeles, CA 90064
213-479-2771

Lexicon Inc.
100 Beaver St.
Waltham, MA 02154
617-891-6790

Lion Recording Services, Inc.
7532 Fullerton Court
Springfield, VA 22153
703-569-3200

The Little Warehouse, Inc.
5505 Valley Belt Road, Suite F
Independence, OH 44131
216-398-0022
800-445-8273

Littlite/CAE Inc.
P.O. Box 430
Hamburg, MI 48139
313-231-9373

J.S. LoBianco Enterprises
36 Park Ave.
Oyster Bay, NY 11771
516-922-3958

Loran Cassettes & Audio Products
10-48 Clark St.
Warren, PA 16365
814-723-8600
800-633-0455

LTM Corp. of America
11646 Pendleton St.
Sun Valley, CA 91352
818-767-1313

M

MAC Cassettes
3965 Investment Lane, Suite A6
Riviera Beach, FL 33404
407-845-2722

Macpherson Loudspeakers
3351 Remy Drive
Lansing, MI 48906
517-321-0700

Madisound Speaker Components
P.O. Box 4283
Madison, WI 53711
608-831-3433

Magnefax International, Inc.
Route 1, Box 764
Rogers, AR 72756
501-925-1818

Magnetic Music
6 Twin Rocks Road
Brookfield, CT 06804-1910
203-775-7832

Magnetic Reference Lab
229 Polaris Ave., Suite 4
Mountain View, CA 94043
415-965-8187

Mag-Tags, Inc.
2531 W. Tharpe St.
Tallahassee, FL 32303
904-386-5611

Majestic Duplicating Service
1208 W. Isabel St.
Burbank, CA 91506
818-843-1806
800-423-7779

Mann Endless Cassette Industries
P.O. Box 1347
San Francisco, CA 94101
415-221-2000

Mark IV Audio Canada Inc.
P.O. Box 520
Gananoque, Ont., Canada
K7G 2V1
613-382-2141
800-267-0900

Mark of the Unicorn
222 Third St.
Cambridge, MA 02142
617-576-2760

Markertek Video Supply
145 Ulster Ave.
Saugerties, NY 12477
914-246-3036
800-522-2025

Marshall Electronic
P.O. Box 438
Brooklandville, MD 21022
301-484-2220

Martin America
21000 Devonshire St., Suite 205
Chatsworth, CA 91311
818-718-1031

Master Blaster America
215 Tremont St.
Rochester, NY 14608
716-436-3020

Mayhew & Co.
3115 W. Olive, Suite 6
Burbank, CA 91505
818-840-9293

McCurdy Radio Industries Ltd.
108 Carnforth Road
Toronto, Ont., Canada
M4A 2L4
416-751-6262

Media Touch Systems
50 Northwestern Drive
Salem, NH 03079
603-893-5104
800-321-5104

Mellotron Digital Corp.
13191 56th Court N., Suite 102
Clearwater, FL 34620
813-572-4066

Meyer Sound Labs, Inc.
2832 San Pablo Ave.
Berkeley, CA 94702
415-486-1166

MicroAudio Inc.
4438 S.W. Hewett
Portland, OR 97221
503-292-8896
800-445-1248

Micron Audio Products, Ltd.
210 Westlake Drive
Valhalla, NY 10595
914-761-6520

Micro-Point Inc.
45 Kensico Drive
Mount Kisco, NY 10549
914-241-4439

Microtran Co. Inc.
P.O. Box 236
Valley Stream, NY 11582
516-561-6050

Middle Atlantic Products
P.O. Box 96
Haskell, NJ 07420
201-839-1011

Midimix
P.O. Box 161
Ashland, OR 97520
503-488-1023
800-888-MIDI

MIDImouse Music
P.O. Box 877
Welches, OR 97067
503-622-4034

Midisoft Corp.
P.O. Box 1000
Bellevue, WA 98009
206-881-7176
800-PRO-MIDI

Milab
30-B Banfi Plaza N.
Farmingdale, NY 11735
516-249-3660

Mineroff Electronics Inc.
574 Meacham Ave.
Elmont, NY 11003
516-775-1370

OAP
310 Peachtree Industrial
Buford, GA 30518
404-945-1028

Minim Electronics Ltd.
Lent Rise Road
Burnham, Slough, England
SL1 7NY
44-628-663724

Mirromere Audio
7150 West 38th Ave.
Wheatridge, CO 80033
303-431-2348

The Mitek Group
One Mitek Plaza
Winslow, IL 61089
815-367-3000



Mitsubishi Digital Pro Audio
c/o Neve
Berkshire Industrial Park
Bethel, CT 06801
203-744-6230

Mobile Fidelity Sound Lab
1260 Holm Road
Petaluma, CA 94952
707-778-0134
800-423-5759

Modular Wood Systems Inc.
736 12th St.
Wilmette, IL 60091
312-251-6401

Mogami Product Div.
Marshall Electronics, Inc.
P.O. Box 2027
Culver City, CA 90230
213-390-6608

Monster Cable Products Inc.
274 Wattis Way
South San Francisco, CA
94080-6761
415-871-6000

Mosses & Mitchell
Weydon Lane
Farnham, Surrey, England
GU9 8QL
0252-721236

Motorola
6501 William Cannon Drive W., M/S OE314
Austin, TX 78735-8598
512-891-2030

Music Box Productions
1006 N.W. 51st St.
Vancouver, WA 98663

The Music People, Inc.
P.O. Box 648
West Hartford, CT 06107
203-236-7134
800-289-8889

Musician's Organizer
Mega Disk Organizers
P.O. Box 17060
Encino, CA 91416-7060
818-789-5379

Musicode
5575 Baltimore Drive, Suite 105-127
La Mesa, CA 92042
619-469-7194
800-448-3601

Musik Produktiv
Gildestrasse 60
D-4530 Ibbenburen, West Germany
5451 50010

Musonix
2537 N. Ontario St.
Burbank, CA 91504
800-888-0848

CHECK YOUR BALANCE.

Before you invest in a professional DAT recorder, check to see if it stacks up against the Sony PCM-2500:

- Records at 44.1kHz as well as 48kHz
- Has professional SDIF-2, AES/EBU and S/P DIF interfaces
- Has built-in error indicator
- Operates on 100/120/220/240V, 50/60Hz
- Is supplied with both wired and wireless remote control
- Can individually trim L/R analog input and output



If it's a Sony, you can check all of the above — which is what you'd expect from The Leader in Digital Audio™. For more information call 1-800-635-SONY.

PCM-2500

- Recording and erasure of Start ID, Skip ID and Program Number subcodes
- Two-hour recording time (with DT-120 Sony DAT cassette) •Less than 0.005% Total Harmonic Distortion at +4dB •Greater than 90dB dynamic range
- High-speed locate capability at 60 times normal playback speed

SONY

PROFESSIONAL AUDIO

Sony Communications Products Company,
1600 Queen Anne Rd., Teaneck, N.J. 07666
© 1989 Sony Corporation of America,
Sony and The Leader in Digital Audio are
trademarks of Sony

N

Nady Systems, Inc.

1145 65th St.
Oakland, CA 94608
415-652-2411

Nakamichi America Corp.

19701 S. Vermont Ave.
Torrance, CA 90502
213-538-8150
800-421-2313

Narrative Productions

1182 Glenway Drive
St. Louis, MO 63122
314-725-0099, 314-822-4640

Neotek Corp.

1154 W. Belmont Ave.
Chicago, IL 60657
312-929-6699

Network Music, Inc.

16935 W. Bernardo Drive
San Diego, CA 92127
619-451-6400
800-854-2075

Network Technologies Inc.

19145 Elizabeth St.
Aurora, OH 44202
216-543-1646
800-RGB-TECH

Georg Neumann GmbH

Charlottenstrasse 3
Berlin 61, Germany D-1000
030 259 930

Neutrik USA, Inc.

1600 Malone St.
Millville, NJ 08332
609-327-3113

**Neve**

Berkshire Industrial Park
Bethel, CT 06801
203-744-6230

New Ear Productions

1033 Euclid Ave.
Syracuse, NY 13210
315-425-0048

New England Digital Corp.

P.O. Box 546
White River Junction, VT
05001
802-295-5800

New York Technical Support, Ltd.

35 Hardscrabble Hill
Chappaqua, NY 10514
914-238-4171

Newsreel Service

360 West 22nd St.
New York, NY 10011
212-243-5950

Northam Electronics Inc.

1122 S. Robertson Blvd., Suite 4
Los Angeles, CA 90035
213-550-6781

Northeastern Communications Concepts

P.O. Box 1853
New York, NY 10017
212-972-1320

Northeastern Digital Recording

12 Sadler Ave.
Shrewsbury, MA 01545
508-753-1192

Norton Associates Inc.

557 Oak St.
Copiague, NY 11726
516-842-4666

Novation International

Button End, Harston
Cambridge, England CB2 5NX
011 44 223-872644

Numark Electronics

503 Raritan Center
Edison, NJ 08837
201-225-3222

O

Oberheim-ECC

2015 Davie Ave.
Commerce, CA 90040-1704
213-725-7870

Omnimount Systems

10850 Vanowen St.
North Hollywood, CA 91605
818-766-9000

Omnimusic

52 Main St.
Port Washington, NY 11050
516-883-0121
800-828-OMNI

Opamp Labs, Inc.

1033 N. Sycamore Ave.
Los Angeles, CA 90038
213-934-3566

Opcod Systems, Inc.

3641 Haven Drive, Suite A
Menlo Park, CA 94025-1010
415-369-8131

Optical Disc Corp.

17517-H Fabrica Way
Cerritos, CA 90701
714-522-2370

Optical Disc Mastering

8000 Corporate Center Drive
Charlotte, NC 28226
704-542-5303

Optical Media International

485 Alberto Way
Los Gatos, CA 94019
408-395-4332
800-347-2664

Optifile A/V Technologies

Konrad-Adenauer-Platz 6
D-4018 Langenfeld, West Germany
01149-2173-72627

Optronic Technology

P.O. Box 3239
Ashland, OR 97520
503-488-5040

Orban, A Div. of AKG Acoustics, Inc.

645 Bryant St.
San Francisco, CA 94117
415-957-1063

Orion Research

4650 West 160th St.
Cleveland, OH 44135
216-267-7700
800-82-AUDIO

Ortofon Inc.

122 Dupont St.

Plainview, NY 11803
516-349-9180

Otari Corp.

378 Vintage Park Drive
Foster City, CA 94404
415-341-5900

OWI Inc.

1160 Mahalo Place
Compton, CA 90220
213-638-4732
800-638-IOWI

Oxmoor Corp.

237 Oxmoor Circle
Birmingham, AL 35209
205-942-6779

P

Pacific Digital

2340 Bryan Ave.
Venice, CA 90291
213-305-8566

Pacific Recorders & Eng. Corp.

2070 Palmas Drive
Carlsbad, CA 92009
619-438-3911

Packburn Electronics Inc.

P.O. Box 335
Dewitt, NY 13214-0335
315-472-5644

Paktec Automation

28130 Ave. Crocker, Unit 308
Valencia, CA 91355
805-257-7616

Paltex Editing Systems

2752 Walnut Ave.
Tustin, CA 92680
714-838-8833

Panasonic Communications & Systems Co.

One Panasonic Way
Secaucus, NJ 07094
800-553-7222

Paso Sound Products Inc.

14 First St.
Pelham, NY 10803
914-738-4800
800-231-3034

Passport Designs Inc.

625 Miramontes, Suite 103
Half Moon Bay, CA 94019
415-726-0280

The Patchbay Designation Co.

4742 San Fernando Road
Glendale, CA 91204
818-241-5585

**Peavey Audio Media Research**

711 A St.
Meridian, MS 39302-2898
601-483-5372

Peavey Electronics Corp.

711 A St.
Meridian, MS 39302-2898
601-483-5365

Penn Fabrication NJ Inc.

P.O. Box 506
Hawthorne, NJ 07506
201-423-4404

Manufacturers Addresses

Penn Fabrication USA Inc.
1111 Rancho Conejo Blvd., Suite 303
Newbury Park, CA 91320
805-499-5932

Penny & Giles
2716 Ocean Park Blvd., Suite 1005
Santa Monica, CA 90405
213-393-0014

Perma Power Electronics Inc.
5601 W. Howard Ave.
Chicago, IL 60648
312-647-9414

Phi Technologies, Inc.
4605 N. Stiles
Oklahoma City, OK 73105
405-521-9000

Platic Reel Corp. of America
Brisbin Ave.
Lyndhurst, NJ 07071
201-933-5100

Polydax Speaker Corp.
10 Upton Drive
Wilmington, MA 01887
508-658-0700

Polyline Corp.
1233 Rand Road
Des Plaines, IL 60016
312-298-5300

Popper Stoppers
P.O. Box 6010-658
Sherman Oaks, CA 91413
818-788-3635
800-446-7677

Portland Instrument-SCV
1101-A Air Way
Glendale, CA 91201
818-500-0137
800-999-5260

Posthorn Recordings
142 West 26th St.
New York, NY 10001
212-242-3737

Power Mountain Software Systems
P.O. Box 161
Cora, WY 82925
307-367-4766

Precision Audio Inc.
18582 US 20
Bristol, IN 46507
219-295-7493

Precision Design
27106 46th Ave. S.
Kent, WA 98032-7147
206-852-5070

Prime Solutions
1940 Garnet Ave.
San Diego, CA 92109
619-274-5000
800-847-5000

Primera Software
1411 209th Ave. N.E.
Redmond, WA 98053
206-868-6360

Pristine Systems
8489 W. Third, Suite 1017
Los Angeles, CA 90048
213-852-0737

Pro Co Sound
135 E. Kalamazoo Ave.
Kalamazoo, MI 49007
616-388-9675
800-253-7360

STATE OF THE ROAD.

The most powerful ultra-lightweight amplifier in the world. The Carver PM-2.0t delivers 1,200 watts, yet weighs under 11 pounds!

Magnetic Field Amplifier Technology, the choice of touring professionals.

CARVER
PROFESSIONAL



Carver Corporation, P.O. Box 1237, Lynnwood, WA 98046

For more information or the dealer nearest you,
call 1-800-443-CAVR

Professional Audio Systems

1224 West 252nd St.
Harbor City, CA 90710
213-534-3570

Professional Sound Corp.

10639 Riverside Drive
North Hollywood, CA 91602
818-760-6544

Promusic Inc.

6555 N.W. Ninth Ave., Suite 303
Fort Lauderdale, FL 33309
305-776-2070
800-322-7879

Prosonus

1616 Vista Del Mar
Los Angeles, CA 90028
213-463-6191
800-999-6191

ProSystems

632 Arch St.
Meadville, PA 16335
814-337-3690

ProTech Audio Corp.

Flowerfield Building 1
St. James, NY 11780
516-584-5855

Publison S.A.

18, Ave. DeLa Republique
Bagnolet, France 93170
43 60 84 64

Pulizzi Engineering Inc.

3260 S. Susan St.
Santa Ana, CA 92704
714-540-4229

Q**QSC Audio Products, Inc.**

1926 Placenta Ave.
Costa Mesa, CA 92627
714-645-2540
800-854-4079

**Quad Eight Electronics, Inc.**

225 Parkside Drive
San Fernando, CA 91340
818-898-2341

Quadim Corp.

31542 Rustic Oak Drive
Westlake Village, CA 91361
818-706-8843

Quantum Audio Labs

2752 Walnut Ave.
Tustin, CA 92680
714-838-8833

Quest Marketing

P.O. Box 20
Auburndale, MA 02166
617-964-9466

Quested Monitoring Systems

59 Maltings Place, Bagleys Lane
London, England SW62BX
01-731-7434

Quiet Lion

P.O. Box 219
Sun Valley, CA 91353
818-765-6224

R**RADIAN****Radian Audio Engineering Inc.**

162 E. Orangethorpe Ave.
Placentia, CA 92670
714-961-1213

Rainbow Sound & Lighting**Rainbow Recording Studios Inc.**

2322 South 64th Ave.
Omaha, NE 68106
402-554-0123

Ram Broadcast Systems Inc.

346 W. Colfax St.
Palatine, IL 60067
312-358-3330

Ramsa/Panasonic

6550 Katella Ave.
Cypress, CA 90630
714-373-7277

Ramware Designs Corp.

411 Richmond St. E., Suite 201
Toronto, Ont., Canada
M5A 3S5
416-364-8506

**Rane Corp.**

10802 47th Ave. W.
Everett, WA 98204-3400
206-355-6000

Bill Rase Productions, Inc.

955 Venture Court
Sacramento, CA 95825
916-929-9181

Gary Raymond Sound Systems

P.O. Box 1722
Thousand Oaks, CA 91360
805-492-5858

RCA Test Tapes

108 Monticello Road
Weaverville, NC 28787
704-658-2067

Real World Research

20 Conduit Place
London, England W2 1HS
01-724-2451

Re-An Products

Sano International
16 Passaic Ave., Building 9
Fairfield, NJ 07006
201-808-0063

The Recording Workshop

455-Y Massieville Road
Chillicothe, OH 45601
614-663-2510
800-848-9900

Recortec Inc.

1290 Lawrence Station Road
Sunnyvale, CA 94089-2220
408-734-3443

Red Acoustics (USA) Ltd.

P.O. Box 13006

Lansing, MI 48901
517-694-3618

Reichenbach Engineering Co., Inc.

6887 Farmdale Ave., Building 10
North Hollywood, CA 91605
818-765-6040

Remote Recording Services

P.O. Box 334
Lahaska, PA 18931
215-794-5005

Renkus-Heinz, Inc.

17191 Armstrong Ave.
Irvine, CA 92714
714-250-0166

Research Technology International

4700 Chase Ave.
Lincolnwood, IL 60646
312-677-3000

Roger Rhodes Music, Ltd.

Box 1550, Radio City Station
New York, NY 10101
212-245-5045

Richmond Sound Design Ltd.

1234 W. Sixth Ave.
Vancouver, BC, Canada
V6H 1A5
604-734-1217

RLS

300 Branna St., Suite 610
San Francisco, CA 94107
415-541-0818

Rock City Sound

P.O. Box 33
Annandal-On-Hudson, NY
12504
914-758-2928

Rocktron Corp.

2870 Technology Drive
Rochester Hills, MI 48309
313-853-3055
800-432-ROCK

ROH Div. of Anchor Audio Inc.

913 West 223rd St.
Torrance, CA 90502
213-533-1498
800-262-4671

Roland Corp. US

7200 Dominion Circle
Los Angeles, CA 90040
213-685-5141

Roldex Industries

2447 Glendale Blvd.
Los Angeles, CA 90039
213-663-9123

Ross Systems

Div. of IMC
P.O. Box 2344
Fort Worth, TX 76113
817-336-5114

RPG Diffusor Systems, Inc.

12003 Wimbledon St.
Largo, MD 20772
301-249-5647

R P L, Inc.

1100 State St.
Camden, NJ 08105
609-963-3000
800-235-2679

Rediscover The Art.

Console manufacturers limited what you could buy. Market pressures dictated what you could own. Until today.

Now there's a console that provides what you want: Creative power. Sonic transparency. Highly adaptable integration.

A new artform for expression. From Trident. Because we haven't forgotten what a console is all about. The VECTOR 432.



RPS Communications

520 Arthur St.
Centerport, NY 11721
516-423-4038

RSP Technologies

2870 Technology Drive
Rochester Hills, MI 48309
313-853-3055
800-432-7625

RTS Systems

1100 W. Chestnut St.
Burbank, CA 91506
818-566-6700

The Rubber Dubbers

626 Justin Ave.
Glendale, CA 91201
818-241-5600

S**Saje**

3, Rue Verte
95100 Argenteuil, France
33 1 39611562

Saki Magnetics, Inc.

26600 Agoura Road
Calabasas, CA 91302
818-880-4054

Samson Technologies Corp.

485-19 S. Broadway
Hicksville, NY 11801
516-932-3810
800-328-2882

**Sanken Microphone Co. Ltd.
c/o Pan Communications, Inc.**

1-12-12 Akasaka
Minato-Ku, Tokyo 107 Japan
81 03-505-5463

Sano International

16 Passaic Ave., Building 9
Fairfield, NJ 07006
201-808-0063

Sansui**KDS Technologies**

1399 Blue Hills Ave.
Bloomfield, CT 06002
203-286-0498

Scantek, Inc.

51 Monroe St., Suite 1606
Rockville, MD 20850
301-279-9308

Schmid Telecommunication

Rieterstr. 6
CH-8002 Zurich, Switzerland
41-1-206-14-06

Schoeps GmbH

Postbox 410970
D-7500 Karlsruhe, Germany
0721-42016

Scientific Design Software

P.O. Box 3248
Chatsworth, CA 91313
818-718-1201

SCS/Sound Code Systems

P.O. Box 2198
Garden Grove, CA 92640
714-554-0903

SECK

SECK

8500 Balboa Blvd.
Northridge, CA 91329
818-893-4351

Selco/Sifam

7580 Stage Road
Buena Park, CA 90621
714-521-8673
800-25-SELCO

Sellmark Electronic Services Ltd.

Rockwood House, Barn Hill, Stanley
Durham, England DH9 8AN
0207-282880

S.E.M. Co.

3782 Westridge Ave.
West Vancouver, BC, Canada
V7V 3H5
604-922-0526

Sencore Inc.

3200 Sencore Drive
Sioux Falls, SD 57107
605-339-0100
800-SENCORE

Sennheiser Electronic Corp.

P.O. Box 987
Old Lyme, CT 06371
203-434-9190

Seriously Sound

550-C Amsterdam Ave.
Atlanta, GA 30306
404-872-0346

Sescom, Inc.

2100 Ward Drive
Henderson, NV 89015
702-565-3400

Shape Systems Design

125 John Roberts Road
South Portland, ME 04106-3204
207-879-0550

Sharp Electronics Corp.**Professional Products Div.**

Sharp Plaza
Mahwah, NJ 07430
201-529-8731

Shure Brothers Inc.

222 Hartrey Ave.
Evanston, IL 60202-3696
312-866-2200

signet

Signet

4701 Hudson Drive
Stow, OH 44224
216-688-9400

Simmons Electronics (USA) Inc.

2630 Towngate Road, Suite H
Westlake Village, CA 91361
805-494-5007
800-447-3786

Simon Systems Engineering, Inc.

707 Clear Haven Drive
Agoura Hills, CA 91301
818-707-9980

Simpson Electric

853 Dundee
Elgin, IL 60120
312-697-2260

Skotel Corp.

3730 Matte Blvd.
Brossard, Que., Canada
J4Y 2Z2
514-444-2088
800-361-4999

Skyelabs Inc.

2200 Bridgeway
Sausalito, CA 94965
415-332-6100

Sola, A Unit of General Signal

1717 Busse Road
Elk Grove Village, IL
60007
708-439-2800

Solid Sound, Inc.

P.O. Box 7611
Ann Arbor, MI 48107
800-365-0669

Solid State Logic

320 West 46th St.
New York, NY 10036
212-315-1111
800-343-0101

Solid State Logic

Begbroke
Oxford, England OX5 1RU
44-0865-842300

Solid Support Industries

2453 Chico Ave.
South El Monte, CA 91733
818-579-6063
800-782-6377

Sonic Research Associates, Inc.

P.O. Box 13744
Arlington, TX 76049-0744
817-834-4711

Sonic Systems Inc.

737 Canal St., Building 23B
Stamford, CT 06902
203-356-1136

Sonosax S.A.

Au Glapin
1162 St-Prex, Switzerland
021/806.02.02

Sontec Electronics

Audio Drive
Goldbond, VA 24094
703-626-7256

Sony Communications Products Co.**Professional Audio Div.**

1600 Queen Anne Road
Teaneck, NJ 07666
201-833-5200

Sony Magnetic Products Co.**Professional Tape Div.**

Sony Drive, MD 3-2
Park Ridge, NJ 07656-8038
201-930-6080

SoperSound Music Library

P.O. Box 498
Palo Alto, CA 94301
415-321-4022
800-227-9980

Sound Concepts Inc.
27 Newell Road
Brookline, MA 02146
617-566-0110

Sound Ideas
105 W. Beaver Creek Road
Richmond Hill, Ont., Canada
L4B 1C6
416-886-5000

Sound Quest Inc.
1573 Eglinton Ave. W., Suite 200
Toronto, Ont., Canada
M6E 2G9
416-256-0466
800-387-8720 USA

Sound Technology, Inc.
1400 Dell Ave.
Campbell, CA 95008
408-378-6540

Soundcraft
Unit 2, Borehamwood Industrial Park Rowley
Lane, Borehamwood
Herts, England WD6 5PZ
01-207-5050

Soundcraft

Soundcraft
8500 Balboa Blvd.
Northridge, CA 91329
818-893-4351

Soundcraftsmen
2200 S. Ritchey
Santa Ana, CA 92705
714-556-6191

soundmaster

Soundmaster USA Inc.
950 Hampshire Road, Suite 102
Westlake Village, CA 91361
805-494-4545

Soundscape
P.O. Box 3511
Champaign, IL 61821
217-352-1342

Soundtracs PLC
91 Ewell Road
Surbiton, Surrey, England
KT6 6AH
01-399-3392

Southern Thunder Sound Inc.
2814 Washington Ave. N.
Minneapolis, MN 55411
612-521-2356

Southworth Music Systems, Inc.
91 Ann Lee Road
Harvard, MA 01451
617-772-9471

Spatial Sound Inc.
743 Center Blvd.

Fairfax, CA 94930
415-457-8114

SpeakerCraft
3615 Presley Ave.
Riverside, CA 92507
714-787-0543

Spectra Sonics/Spectra Sound
3750 Airport Road
Ogden, UT 84405
801-392-7531

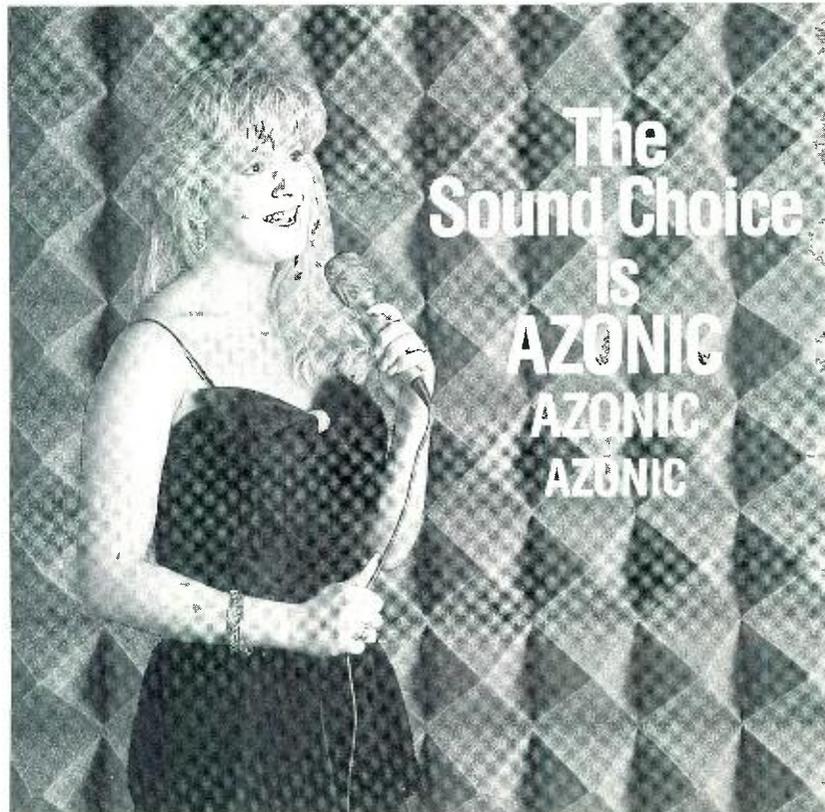
Spectrum Design & Development
6265 Hamilton Blvd.
Allentown, PA 18106
215-395-6934

Sprague Magnetics, Inc.
15720 Stag St.
Van Nuys, CA 91406
818-994-6602
800-553-8712

Standard Tape Lab, Inc.
26120 Eden Landing Road, Suite 5
Hayward, CA 94545
415-786-3546

Stanton Magnetics Inc.
101 Sunnyside Blvd.
Plainview, NY 11803
516-349-0235

Stantron
6900 Beck Ave.
North Hollywood, CA 91605
818-841-1825



PAT. PEND.

©1989 AZONIC, INC.

AZONIC is a unique acoustic foam that costs up to 20% less than Sonex and has 25% greater noise absorption than our competition.

AZONIC, the sound choice for audio production, radio communications, voice-overs, video—anywhere you demand crystal clear sound.

Eliminate "slap echo" and other harmful background noise, beautifully—AZONIC saves the true sound.

For more information and distributors in your area write or call AZONIC, Inc., 1600 E. Cliff Road, Burnsville, Minn. 55337. 1-800-842-9790. FAX 1-612-894-2748.



Noise reduction from A to Z.

Circle (33) on Rapid Facts Card

Star Case Mfg. Co., Inc.
648 Superior Ave.
Munster, IN 46321
219-922-4440
800-822-STAR

State of The Art Electronik
43-1010 Polytek St.
Ottawa, Ont., Canada K1J 9J3
613-745-2003

Steinberg Digital Audio
17700 Raymer St., Suite 1003
Northridge, CA 91325
818-993-4091

Steinberg/Jones
17700 Raymer St., Suite 1002
Northridge, CA 91325
818-993-4091

Steinway & Sons
109 West 57th St.
New York, NY 10019
212-246-1100

Stewart Electronics
11460 Sunrise Gold Circle, Suite B
Rancho Cordova, CA 95742
916-635-3011

Storeel Corp.
3337 W. Hospital Ave.
Atlanta, GA 30341
404-458-3280

Stramp USA
7 Charles Lane
New York, NY 10014
212-242-1479

Strand Magnetics, Inc.
1550 Higgins Road, Suite 117
Elk Grove Village, IL
60007
312-439-9883

Strategic Sound, Inc.
2495 Middlefield Ave.
Fremont, CA 94539
415-656-4154

Studer Editech
1370 Willow Road
Menlo Park, CA 94025
415-326-7030

STUDER REVOX

Studer Revox America, Inc.
1425 Elm Hill Pike
Nashville, TN 37210
615-254-5651

Studio C Music Library
P.O. Box 767 Murray Hill Station
New York, NY 10156-0602
212-986-2219

Studio Equipment Distribution Ltd.
15 Cam Square, Wilbury Way
Hitchin, Herts, England
SG4 0TZ
0462-421919

Studio Magnetics Co., Inc.
12 Long Island Ave.
Holtsville, NY 11742
516-289-3400
800-874-2202

Studio Master Systems
229 Sunny Isles Blvd.

North Miami Beach, FL
33160
305-945-9774

Studio Technologies, Inc.
5520 W. Touhy Ave.
Skokie, IL 60077
708-676-9177

Studiomaster Inc.
3941 Mira Loma Ave.
Anaheim, CA 92807
714-524-2227



Summit Audio Inc.

Summit Audio Inc.
131 W. Main St., Suite 11
Los Gatos, CA 95030
408-395-2448

Sunkyoung Magnetic/America, Inc.
17106 S. Avalon Blvd.
Carson, CA 90746
213-327-3063
800-237-8372

Sunn Pro Sound
1130 Columbia St.
Brea, CA 92621
714-990-0909
800-854-6230

Sweetwater Sound
4821 Bass Road
Fort Wayne, IN 46808
219-432-8176

Swintek Enterprises
587 Division St.
Campbell, CA 95008
408-378-8091

**Swire Magnetics Co.
Professional Products Div.**
301 E. Alondra Blvd.
Gardena, CA 90248
213-515-0494
800-421-2448

**Swire Magnetics Co.
Professional Products Div.**
6701-H Northpark Blvd.
Charlotte, NC 28216
704-597-7145
800-777-7947

Switchcraft, Inc.
5555 N. Elston Ave.
Chicago, IL 60630
312-792-2700

Symetrix

Symetrix Inc.
4211 24th Ave. W.
Seattle, WA 98199
206-282-2555

Sync Sound
450 West 56th St.
New York, NY 10019
212-246-5580

Synergetic Services, Inc.
1926 N.E. 151st St.
North Miami Beach, FL
33162
305-947-7372

T

TAD Technical Audio Devices

TAD-Technical Audio Devices
2265 East 220th St.
Long Beach, CA 90810
213-816-0415

Talent Associates, Inc.
935 Pennsylvania, Suite 10
Denver, CO 80203-3159
303-830-2228

TANNOY®

Tannoy-T.G.I. North America Inc.
300 Gage Ave., Unit 1
Kitchener, Ont., Canada
N2M 2C8
519-745-1158

TAO Logic Co.
17300 17th St., Suite J-306
Tustin, CA 92680
714-997-7165

Tape Automation America
P.O. Box 340
West Kennebunk, ME 04094
207-985-2892
800-888-2892

Target Technology
P.O. Box 609
Penn Valley, CA 95946
916-639-2102

TASCAM, Teac Professional Div.
7733 Telegraph Road
Montebello, CA 90640
213-726-0303

Tatum Labs, Inc.
3917 Research Park Drive, Suite B-1
Ann Arbor, MI 48108
313-663-8810

T.C. Electronic America
1 Serpentine Road
Tenafly, NJ 07670
201-568-1820

T.C. Electronic A/S
Grimhojvej 3
DK-8220 Brabrand, Denmark
45 6262800

TDK Electronics Corp.
12 Harbor Park Drive
Fort Washington, NY 11050
516-625-0100
800-835-8273

Technetronics Inc.
P.O. Box 496
West Chester, PA 19381-0496
215-430-6800

Technical Projects Inc.
P.O. Box 3247
Barrington, IL 60010
312-381-5350
800-562-5872

Technical Service Specialists Inc.
187 E. Market St., Suite 160
Rhinebeck, NY 12572
914-876-3999

Manufacturers Addresses

Technics
One Panasonic Way
Secaucus, NJ 07094
201-392-4449

Technos Inc.
55 Delisle
Levis, Que., Canada G6V 6K1
418-835-1416
800-463-5593

Techron
1718 W. Mishawaka Road
Elkhart, IN 46517
219-294-8300

Tek Media Supply Co.
4700 Chase Ave.
Lincolnwood, IL 60646
708-677-3000
800-323-7520

Tektronix Television Div.
P.O. Box 500 M/S 58-699
Beaverton, OR 97077
503-627-1274

Telex Communications, Inc.
9600 Aldrich Ave. S.
Minneapolis, MN 55420
612-884-4051

Tentel Corp.
4475 Golden Foothill Parkway
El Dorado Hills, CA 95630
916-939-4005
800-538-6894

Thermodyne International
20850 S. Alameda St.
Long Beach, CA 90810
213-603-1976

3M Broadcasting & Related Products
3M Center, 223-55-08
St. Paul, MN 55144
800-328-1008

3M Professional Audio/Video & Specialty Products Div.
3M Center, 223-5N-01
St. Paul, MN 55144
612-733-1110

360 Systems
18740 Oxnard St.
Tarzana, CA 91356
818-342-3127

TIMELINE

Timeline Inc.
270 Lafayette St.
New York, NY 10012
212-431-0330

TLM Electronics Inc.
343 Manville Road
Pleasantville, NY 10570
914-769-6423

TOA Electronics, Inc.
601 Gateway Blvd.
San Francisco, CA 94080
415-588-2538

Top Notch Audio (TNA Case Co.)
P.O. Box 403
Highlands, NJ 07732
201-493-3979

"I Love It. . ."

Doug Sax
Mastering Lab
Los Angeles

*"Great concept,
great execution. . . this CD
deserves a public service award."*

Craig Anderton, Narada Recording Artist

*"The quickest reference available. . .
saves time and money"*

Jay Antista,
Lion Share Recording Studios, Los Angeles

"SRD may be your best audio investment of 1990"

George Petersen, Mix/Electronic Musician magazines

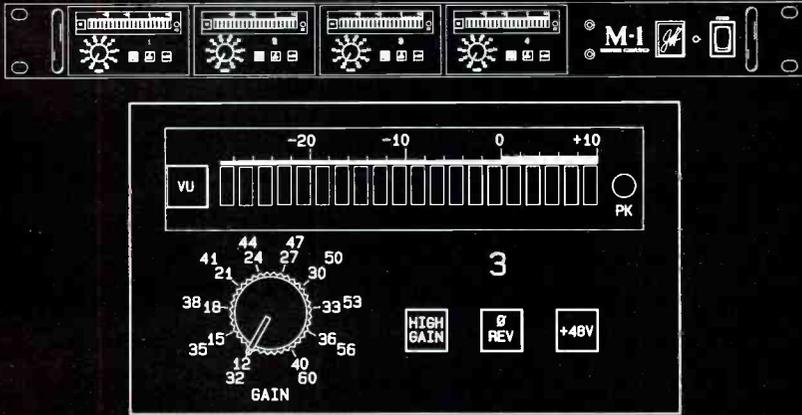
SRD features 70 minutes of audio test tones and references. SRD is available now for **\$69.95**.

For information on a dealer near you, or to order direct, call Toll-Free **1-800-999-6191** now!

PROSONUS 
1616 Vista del Mar • Hollywood, California 90028

Circle (34) on Rapid Facts Card

M-1
MICROPHONE PREAMPLIFIER
SUPERIOR SOUND QUALITY. RE-DISCOVER YOUR MICROPHONES!



(ACTUAL SIZE)

- THE BEST JENSEN INPUT TRANSFORMER: THE JE-16-B.
- THE BEST OP-AMP: THE 990 DISCRETE OP-AMP.
- DC-SERVO ELIMINATES ALL COUPLING CAPACITORS.
- THE BEST JENSEN OUTPUT TRANSFORMER OPTION: THE JE-11-BM.
- ILLUMINATED SWITCH BUTTONS.
- TOROIDAL POWER TRANSFORMER.
- UNIVERSAL POWER SUPPLY.
- XLR CONNECTORS. GOLD OPTIONAL.
- TWO METER OPTIONS. VU-1 SHOWN.
- CUSTOM KNOB & PUSH BUTTONS.

THE JOHN HARDY COMPANY
P.O. Box AA631
Evanston, IL 60204 (708) 864-8060 Telex: 910-380-4670 (JOHN HARDY CO)

Circle (35) on Rapid Facts Card

A Total Effect

P.O. Box 18401
Encino, CA 91416-8401
818-345-4404

Touch Technologies Inc.

363 Adelaide St. E.
Toronto, Ont., Canada
M5A 1N2
416-868-0528

Transtector Systems

P.O. Box 300
Hayden Lake, ID 83835-0300
208-772-8515
800-829-2901

Trax Audio & Music

332 Martin Lane
Salt Lake City, UT 84107
801-262-3601

Traxx Recording Products

24 Crestway KC
New Fairfield, CT 06812
203-746-3561

Trend Textiles Inc.

9509 Foster
Schiller Park, IL 60176
708-678-8300

TRF Production Music Libraries

40 East 49th St.
New York, NY 10017
212-753-3234

Trident Audio USA

2720 Monterey St., Suite 403
Torrance, CA 90503
213-372-3894

Turbosound

30B Banfi Plaza N.
Farmingdale, NY 11735
516-249-3660

Turtle Beach Softworks

P.O. Box 5074
York, PA 17405
717-757-2348

27th Dimension Inc.

P.O. Box 1149
Okeechobee, FL 34974-1149
813-763-4107
800-634-0091

U

UCLA Extension Recording Engineering Program

10995 LeConte Ave., Suite 414
Los Angeles, CA 90024-0901
213-825-9064

Uher of America

7067 Vineland Ave.
North Hollywood, CA 91605
818-764-1120

Ultimate Support

2506 Zurich Drive
Fort Collins, CO 80522
303-493-4488
800-525-5628

UltraAnalog, Inc.

47747 Warm Springs Blvd.
Fremont, CA 94539
415-657-2227

Underground Sound

P.O. Box 121643

Nashville, TN 37212
615-321-0956

University of Sound Arts

1645 N. Vine St., Suite 609
Hollywood, CA 90028
213-467-5256



**UREI
ELECTRONIC
PRODUCTS**

UREI

8500 Balboa Blvd.
Northridge, CA 91329
818-893-8411

U.S.A. Audio

259 E. Fourth St.
London, KY 40741
606-864-7618

V

Valentino, Inc.

151 West 46th St.
New York, NY 10036
212-869-5210
800-223-6278

Valley International

2817 Erica Place
Nashville, TN 37204
615-383-4737

Steve Vans Productions

9590 Chesapeake Drive
San Diego, CA 92123
619-292-1333
800-HIT-SONG

Vetronix Inc.

1600 West 13th St.
Lexington, NE 68850
308-324-4600



Vega

a MARK IV company

Vega, A Mark IV Co.

600 Cecil St.
Buchanan, MI 49107
616-695-6831
800-527-6701

Velodyne Acoustics

1746 Junction Ave.
San Jose, CA 95112
408-436-0688
800-835-6396

Versadyne International, Inc.

504-D Vandell Way
Campbell, CA 90058
408-379-0900

Video Accessory Corp.

2450 Central Ave., Suite H
Boulder, CO 80301
303-443-1319
800-821-0426

Video Design Pro

749 Carver Road
Las Cruces, NM 88005
505-524-8959

Virtual Designs Ltd.

7325 Hinds Ave.
North Hollywood, CA 91605
818-503-0404

Voice Over L.A., Inc.

1717 N. Highland Ave., Suite 620
Hollywood, CA 90028
213-463-8652

VRI Scharff Rentals

599 11th Ave.
New York, NY 10036
212-582-4400
800-777-4400

W

Ward-Beck Systems Ltd.

841 Progress Ave.
Scarborough, Ont., Canada
M1H 2X4
416-438-6550

WaveFrame Corp.

2511 55th St.
Boulder, CO 80301
303-447-1572

Westlake Audio

Westlake Audio

2696 Lavery Court, Unit 18
Newbury Park, CA 91320
805-499-3686

Wheatstone Broadcast Group

6720 VIP Parkway
Syracuse, NY 13211
315-455-7740

Whirlwind, Inc.

100 Boxart St.
Rochester, NY 14612
716-663-8820
800-772-9997

**White Instruments
Div. C Van R Inc.**

P.O. Box 90099
Austin, TX 78709
512-892-0752

Williams Sound Corp.

5929 Baker Road
Minnetonka, MN 55345-5997
612-931-0291
800-328-6190

Winsted Corp.

10901 Hampshire Ave. S.
Minneapolis, MN 55438
612-944-8556
800-447-2257

Wireworks Corp.

380 Hillside Ave.
Hillside, NJ 07205
201-686-7400
800-624-0061

Woodworx Audio Enclosures

913 S. Chapman St.
Greensboro, NC 27403
919-378-0650

Words & Deeds

448 Sunnycrest Drive
Los Angeles, CA 90065
213-255-2887

X

Xedit Corp.
218-31 97th Ave.
Queens Village, NY 10550
914-668-0388

Y

Yamaha Corp. of America
Pro Audio Div.
P.O. Box 6600

Buena Park, CA 90660
714-522-9011

Yellowtec GmbH
Konrad Adenauer Platz 6
D-4018 Langenfeld, West Germany
2173-72627

Z

Zeus Light & Sound Co.
2702 Pricetown Road
Temple, PA 19560-9799
215-921-0520

Zoom Corp.
10 Marine Parkway, Suite 435
Redwood City, CA 94065
415-593-1664

Zuma Mesa Music
6375 Zuma Mesa Drive
Malibu, CA 90265
213-457-7728



IN OUR CONTINUING EFFORTS TO SERVE YOU...

From time to time, Intertec Publishing Corp. makes its subscriber lists available to carefully screened companies or organizations whose products, services, or information may be of interest to you. In every case, list users must submit their promotional material for approval. They may use the list only once.

No information other than name and address is ever divulged, although names may be selected by segments to which the particular offer might appeal.

We are confident that the majority of our readers appreciate this controlled use of our mailing lists. A few people may prefer their names not be used.

If you wish to have your name removed from any lists that we make available to others, please send your request, together with your mailing address.

Direct Mail Mgr.
Intertec Publishing Corp.
P.O. Box 12901
Overland Park, KS 66212

Our Commitment to Quality

At RADIAN, we believe that professional Compression Drivers must meet high standards:

- **Uncompromised Performance**
accurate reproduction, low distortion, and high efficiency.
- **High Reliability**
dependable under the most demanding conditions.



• Excellent Value for Your Investment

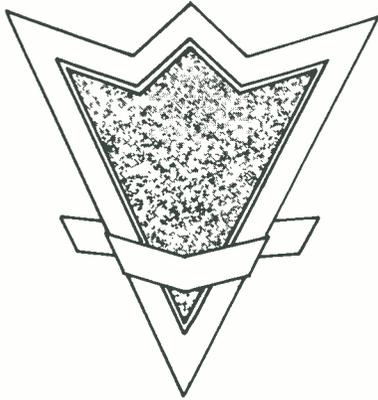
Professional performance and reliability are not accidents. They are *deliberately engineered* into every RADIAN product. Innovative designs using superior bonding technology and advanced metallurgical techniques are *standard* in all RADIAN products.

We invite you to examine, compare and prove RADIAN's performance to yourself.

RADIAN

AUDIO ENGINEERING, INC.

162 E. Orangethorpe • Placentia, CA 92670 • 714-961-1213 • FAX: 714-961-0869



Fax Directory

An alphabetical list of manufacturers', dealers' and distributors' fax numbers.

AB International Electronics	916-784-1050	Ashly Audio	716-266-4589	Bi-Tronics Inc.	914-961-4244
Accurate Sound Corp.	415-365-3057	Associated Production Music	213-461-9102	Blank Software	415-863-9226
ACO Pacific Inc.	415-591-2891	AST Sound	212-226-7957	Bose Corp.	508-872-6541
Acoustech Corp.	313-663-2877	ATI—Audio Technologies Inc.	215-443-0394	Boston Acoustics	617-592-6148
Acoustic Systems	512-444-2282	Atlas/Soundolier	314-349-1251	Boulder Amplifiers Inc.	303-449-4806
Acoustics Design Group	4833-03217	ATM Audio	213-516-1829	Brainstorm Electronics	213-475-7570
(England)		Audio Accessories Inc.	603-446-7453	Broadcast Audio Corp.	916-638-0512
ADA Signal Processors Inc.	415-632-9358	Audio Analysts USA	518-561-3617	Broadcast Electronics Inc.	217-224-9607
Adams-Smith	508-568-0404	Audio Animation	615-637-3423	Bruel & Kjaer Instruments	508-485-0591
Adamson Acoustic		Audio Centron	314-727-8929	BSS Audio/Edge Distr.	914-677-6287
Design Corp.	416-420-0813	Audio Control Industrial	206-778-3166	Caig Laboratories	619-743-2460
ADC Telecommunications	612-893-3292	Audio Design Associates	914-723-4642	California Switch and Signal	213-327-2741
ADM Technology	313-524-0039	Audio Development AB	464-022-9680	Calzone Case Co.	203-336-4406
Advance Recording Studio	619-277-7610	(Sweden)		Canare Cable	818-365-0479
ADX Systems	212-532-0514	Audio Developments Ltd.	054-336-1051	Canetics Inc.	818-584-0439
AEG-Olympia	516-467-1258	(England)		Carver Corp.	206-778-9453
Aesthetic Engineering	212-966-7176	Audio/Digital	503-687-0632	Casio	201-361-3819
Agfa-Gevaert	201-440-2865	Audio Engineering Associates	818-798-2378	Dwight Cavendish	312-673-1389
Aircraft Music Library	617-367-1521	Audio Innovators Inc.	412-621-9887	Celestion Industries	508-429-2426
Akai/IMC	817-870-1271	Audio Intervisual		Centro Corp.	801-537-7513
AKG Acoustics	203-324-1942	Design/Sanken	213-466-8835	Century Financial Services	314-537-4026
Alesis Studio Electronics	213-836-9192	Audio Kinetics Ltd.	0195-31118	Cerwin-Vega Inc.	805-583-0865
Allen & Heath	203-795-6814	(England)		Cintas Vac	904-446-0964
Alpha Audio	804-358-9496	Audiolab Electronics	916-348-1512	Cipher Digital Inc.	301-694-5152
Altec Lansing Corp.	405-324-8981	Audio Logic	801-262-4966	Circuit Research Labs Inc.	602-438-8227
Amber Electro Design Inc.	514-340-1468	Audio Precision	503-641-8906	Clarity	914-424-3467
Amek/TAC US Operations	818-508-8619	Audiorent	2361-28881	Clarity Cassette Duplication	207-873-3924
American Helix	717-392-7897	(W. Germany)		Clear-Com Intercom Systems	415-527-6699
American Recorder		Audio Rents Inc.	213-851-9586	CMS Digital	818-796-4319
Technology	805-527-1433	Audio-Technica US Inc.	216-688-3752	CMX	408-986-0452
Ampex Recording		AudioTechniques	212-489-4936	Coda Music Software	612-854-4631
Media Corp.	415-367-4132	Audio Video Consultants	519-927-3439	Coherent Communications	805-295-0090
Amplified Music Products	818-709-6816	Audio-VideoGraphics	816-254-0045	Community Light	
AMS Industries (US)	206-547-6890	Auditronics	901-365-8629	& Sound Inc.	215-874-0190
AMS Industries Inc	0282-39542	Audix Corp.	415-463-2149	CompuSonics Corp.	415-494-3040
(England)		Audra International	714-649-3064	Computer Music Supply	714-594-7033
Amtel Systems Inc.	603-880-8781	Aura Sonic Ltd.	718-886-7214	Concept Design	919-229-0063
Analog Digital Synergy	305-791-8986	Auratone Corp.	612-817-4303	Connectronics	203-324-7027
Anchor Audio Inc.	213-533-6050	Australian Monitor Ltd.	612-817-4303	Conquest Sound Inc.	708-534-0398
ANT Telecommunications	301-670-3992	(Australia)		J.L. Cooper	213-822-2252
Anvil Cases	818-448-0892	Auteri Associates	516-878-6421 x210	Countryman Associates Inc.	415-364-2794
Apex Machine Co.	305-563-2844	Avedis Zildjian Co.	617-871-3984	Court Acoustics Systems	6287-84706
Aphex Systems Ltd.	818-767-2641	BASF Corporation		(England)	
API—Audio Products Inc.	703-455-4240	Information Systems	617-275-2708	Creative Sound Corp.	213-456-7886
Apogee Electronics Corp.	213-828-9720	B&B Systems Inc.	805-257-8065	Crest Audio	201-423-2977
Apogee Sound Inc.	707-778-6923	BBE Sound	714-895-6728	Crown International Inc.	219-294-8329
A-R Editions	608-831-8200	Belden Wire & Cable	317-983-5294	Crown Magnetics Inc.	717-274-3615
ART—Applied Research		Benchmark Media Systems	315-452-0691	CST Mfg. & Sales Inc.	404-449-5013
& Technology Inc.	716-436-3942	Benjamin International	516-753-0839	CT Audio Marketing	407-738-0319
Ariel	201-249-2123	Berklee College of Music	617-247-6878	Current Music Technology	215-640-4271
Arsonic Tonstudio		Bertech Organization	818-994-2553	The Cutting Edge	
Elektronik U.S.	215-640-4271	Beyer Dynamic Inc.	516-935-8018	Disc Mastering	914-292-2313
ARX	714-649-3064	BGW Systems Inc.	213-676-6713	Cyber-Kinetek Systems	512-490-4101
ASC-Tubetraps	503-343-9245	Biamp Systems	503-626-0281	Dago Cases	303-421-7916

The _____ **Bottom Line.**



The fact is: it just doesn't get any better than the **D&R Dayner Series** when you need great specs, more inputs in less space, functions, and features like D&R's "Floating Subgroup System" and custom configurations utilizing the in-line and split formats together. You get all this and more for thousands less than our competition.

Now that's **THE BOTTOM LINE!**

D&R
mixing consoles

D&R USA • Rt. 3, Box 184-A • Montgomery, Texas 77356 • Phone (409) 588-3411
D&R Holland • Rijnkade 15B • 1382 GS Weesp • The Netherlands

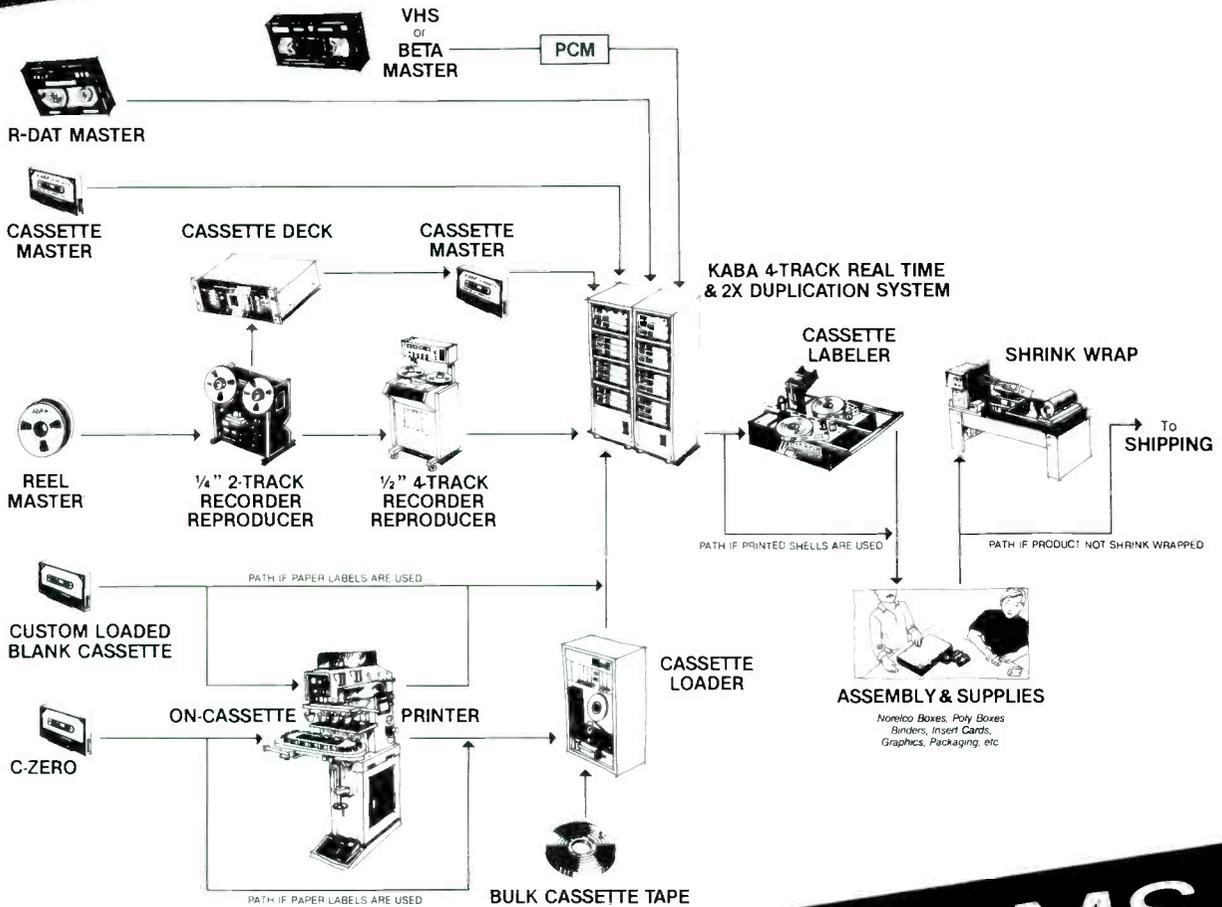
Circle (37) on Rapid Facts Card

www.americanradiohistory.com

DB Systems	603-899-6415	Gauss, A Mark IV Company	818-767-4479	Leonardo Software	213-277-9086
dbx Inc.	617-527-5288	Gefen Systems	818-884-3108	Lester Audio Laboratories	214-941-8800
DDA	516-420-1863	General Devices Co. Inc.	317-898-2917	Lexicon Inc.	617-891-0340
DeCuir Corp.	213-233-2957	Gentner Electronics Corp.	801-977-0087	Lion Recording Services	703-455-5600
Delicate Productions	805-388-1037	Ghielmetti Switzerland	652-31286	Littlelite/CAE Inc.	313-231-1631
Delta Electronics Inc.	703-354-0216	(Switzerland)		The Little Warehouse	216-398-9980
Denecke Inc.	818-766-0269	GHL Audio Engineering	615-385-0204	Loran Cassettes	
Denon America	201-808-1608	GML Inc.	818-781-3828	& Audio Products	814-723-9490
Design Acoustics	216-688-3752	Gold Line	203-938-8740	LTM Corp. of America	818-767-1442
DIC Digital	201-487-1026	Grass Valley Group	916-478-3187	Macpherson Loudspeakers	517-321-6385
Digidesign	415-327-0777	Greencorp USA Inc.	305-429-9214	Madisound Speaker	
Digital Audio Research (US)	213-466-8793	Groupe Andre Perry Software	202-331-9600	Components	608-831-3771
Digital Audio Research	3727-43532	Harrison by GLW Enterprises	615-331-8883	Magnifax International Inc.	501-925-1841
(England)		Harrison Information		Magnetic Music	203-775-6909
Digital Brothers	714-642-7249	Technologies	022-387-2094	MAGNETIC Reference Lab	415-965-8548
Digital Dynamics	516-271-5607	(England)		MAG-TAGS	904-385-5710
Digital Music Corp.	818-991-4185	HAVE Inc.	518-828-2008	Majestic Duplicating Service	818-954-0770
DigiTech	801-262-4966	HEDCO	916-273-6948	Mann Endless Cassette Indus	415-387-2425
Diless Ltd.	358-067-1910	HM Electronics Inc.	619-452-7207	Markertek Video Supply	914-246-1757
(Finland)		Hot House Professional		Mark IV Audio Canada	613-382-7466
Disc Makers	215-236-7763	Audio	914-691-6822	Mark of the Unicorn	617-576-3609
Dr. T's Music Software	617-244-5243	Howe Technologies Corp.	303-444-8447	Marshall Electronic	301-486-0280
DOD Electronics Corp.	801-262-4966	Hybrid Arts	213-841-0346	Martin America	818-718-2886
Dolby Laboratories	415-863-1373	Heino Ilseman	421-486-0648	Master Blaster America	716-436-3942
Domain Communications Inc.	312-668-0158	(W. Germany)		McCurdy Radio Industries	416-751-6455
Dorough Electronics	818-998-1507	ILP Mfg.	416-667-8928	Media Touch Systems	603-893-6390
Dorsey Productions	714-535-0383	Imagine Music Group	805-683-7749	Mellotron Digital Corp.	813-572-6357
D&R Electronica	2940-16927	InConcert	916-888-0872	Meyer Sound Laboratories	415-486-8356
(Holland)		Industrial Research Products	312-640-9607	MicroAudio Inc.	503-293-0562
D&R USA	409-588-3299	Industrial Strength Industries	213-404-3487	Micron Audio Products	914-761-9501
Drawmer Distribution	092-429-0460	Innovative Electronic		Microtran Co. Inc.	516-561-1117
(England)		Designs	502-267-9070	Middle Atlantic Products	201-839-1976
Duplitrronics Inc.	312-459-4076	Inovonics Inc.	408-458-0554	MIDmouse Music	503-622-3933
EARS Inc.	617-254-8781	Instruments Lyre Inc.	418-658-0365	MIDISOFT	206-455-8080
Earworks	312-446-9082	Intelix	608-273-5483	Milab	516-420-1863
Eastern Acoustic Works	508-234-8251	Intelligent Music	518-434-0308	Mineroff Electronics	516-775-1371
Eastern Standard Productions	716-877-6395	International		Minim Electronics Ltd.	6286-67002
Edge Distribution	914-677-6287	Electro-Magnetics Inc.	312-358-4623	(England)	
(BSS Audio, Turbosound)		International Tapetronics (3M)	309-828-1396	The Mitek Group	815-367-3851
Editall	914-668-0719	Intersonics	312-272-9324	Mitsubishi Digital	
El Mar Plastics Inc.	213-327-0491	Interval Music Systems	213-478-5791	Pro Audio (Neve)	203-792-7863
Electronic Systems		ITT Cannon	714-757-8301	Mobile Fidelity Sound Lab	707-778-6328
Laboratories	305-791-8986	Ivie, A Mark IV Co.	801-224-7526	Mogami Product Division	213-391-8926
Electro Sound Inc.	408-733-0632	Jan-Al Cases	213-260-4696	Monster Cable Products Inc.	415-896-1745
Electro-Voice Inc.	616-695-1304	JBL Professional	818-893-3639	Mosses & Mitchell	025-771-2718
Emilar	714-779-6696	Jensen Tools	602-438-1690	(England)	
E-mu Systems Inc.	408-438-8612	Jensen Transformers	818-763-4574	Motorola	512-891-2947
Ensoniq Corp.	215-647-8908	J.L. Sound Systems Ltd.	416-527-5523	The Music People	203-233-6888
The Enterprise	818-505-6006	Joe's Sound & Salami	215-736-1262	Musik Produktiv	545-150-0140
Euphonix	415-325-5056	The Joiner Rose Group	214-991-3781	(W. Germany)	
Eva-Tone	813-572-6214	Josephson Engineering	408-238-6022	Nady Systems Inc.	415-652-5075
Eventide Inc.	201-641-1640	JRF Magnetic Sciences	201-579-6021	Nakamichi America Corp.	213-324-7614
Evertz Microsystems Ltd.	416-335-3573	Julian Systems	415-686-4244	Neotek Corp.	312-975-1700
Eye and I Productions	408-945-5712	JVC Professional Products Co.	201-523-2077	Network Music Inc.	619-451-6409
Fairlight Instruments Inc.	213-474-9716	KABA Research		Network Technologies Inc.	216-543-5423
Fane Acoustics	092-447-1799	and Development	415-382-1417	Georg Neumann GmbH	259-93108
(England)		Kalglo Electronic Co. Inc.	215-837-7978	(E. Germany)	
Fane Acoustics (US)	312-766-7397	Kawai America Corporation	213-604-6913	Neutrik USA Inc.	609-825-4804
Fidelipac Corp.	609-235-7779	Keyboard Technologies	818-891-9339	Neve	203-792-7863
FirstCom/Music House	214-404-9656	Kimber Kable	801-627-6980	New England Digital Corp.	802-296-2075
FM Acoustics	0178-00488	King Instrument Corp.	508-870-5932	Northam Electronics Inc.	213-550-6783
(England)		Klark-Teknik	516-420-1863	Northwestern Digital	
FM Tubecraft	516-563-1390	Klark-Teknik	056-274-5371	Recording	508-753-1270
Focusrite US Ltd.	312-665-4966	(England)		Norton Associates	516-842-4667
For-A Corp. of America	617-965-5085	Klipsch & Associates	501-777-6753	Novation International	2338-72094
Forté Music Inc.	415-965-0508	KMD Labs	818-249-6608	(England)	
Fostex Corp. of America	213-802-1964	Korg USA Inc.	516-333-9108	OAP	404-945-1843
Frazier	501-727-5402	Kurzweil Music Systems	617-893-2733	Oberheim-ECC	213-888-2874
FSR Inc.	201-239-7708	Lake People	0731-25994	Omnimount Systems	818-766-9669
Full Compass Systems	608-273-6336	(Germany)		Omnimusic	516-944-6586
Full Sail Center		Lambchops North	602-944-5391	Opamp Labs Inc.	213-464-0977
for the Recording Arts	407-671-1112	Lambchops Studios	602-257-8104	Opcode Systems	415-369-1747
Furman Sound Inc.	415-927-4548	Larson/Davis Architects	212-353-8444	Optical Disc Corp.	714-670-9356
Galaxy Audio	316-263-0642	Latin Recording Brokerage	212-874-6018	Optical Disc Mastering	704-542-5309
Galaxy Design Group	316-263-0642	Leitch Video of America Inc.	804-424-0639	Optical Media International	408-395-6544
Gallien-Krueger Inc.	408-379-0247	Lenco Inc.	314-243-7122	Optifile A/V Technologies	2173-81497

AUDIOPHILE QUALITY CASSETTE DUPLICATION PLANT

TYPICAL EQUIPMENT AND PROCESS FLOW CHART



TURNKEY SYSTEMS CUSTOM DESIGNED BY KABA

(send for free planning kit)



KABA Research & Development
(a division of Kenneth A. Bacon Associates)
Toll Free (800) 231-TAPE

24 Commercial Blvd., Novato, CA 94949
in CA call (415) 883-5041

Orban	415-957-1070	Samson Technologies Corp.	516-932-3815	Sunkyong Magnetic/America	213-327-8864
Orion Research	216-267-5894	Sancken Microphone,		Sweetwater Sound	219-432-1758
Ortofon	516-349-8670	Pan Communications Inc.	0350-55464	Swintek Enterprises	408-378-6980
Otari Corp.	415-341-7200	(Japan)		Swire Magnetics	213-515-0371
OVI Inc.	213-638-8347	Sano International	201-808-6517	Switchcraft Inc.	312-792-2129
Oxmoor Corp.	205-942-9631	Sansui/KDS Technologies	203-286-4122	Symetrix Inc.	206-283-5504
Pacific Recorders		Scantek Inc.	301-279-9309	Synergetic Services	305-947-7372
& Eng. Corp.	619-438-9277	Schmid Telecommunications	1201-2372	TAD	213-816-0472
(Switzerland)		Schoeps GmbH	072-149-5750	Tannoy North America Inc.	519-745-2364
Paktec Automation	805-257-9474	(Germany)		Tape Automation	207-985-4917
Paltex Editing Systems	714-838-9619	SCS/Sound Code Systems	714-554-5643	Target Technology	916-639-2212
Paso Sound Products	914-738-3954	SECK	818-893-3639	TASCAM	213-727-7656
Passport Designs Inc.	415-726-2254	Selco Products Co.	714-739-1507	Tatum Labs	313-663-3640
The Patchbay Designation	818-507-5050	Sellmark Electronic		TDK Electronics Corp.	516-625-0171
Peavey Audio Media		Services Ltd.	020-723-2023	Technetronics Inc.	215-4306804
Research, Peavey		(England)		Technical Projects	312-381-4360
Electronics	601-484-4278	Sencore Inc.	605-335-6379	Technical Service	
Penn Fabrication NJ Inc.	201-423-4603	Sennheiser Electronics	203-434-1759	Specialists Inc.	914-876-5432
Penn Fabrication USA Inc.	805-499-3184	Seriously Sound	404-872-9586	Technics	201-348-7954
Penny & Giles	213-450-9860	Sescom	702-565-4828	Tek Media Supply	708-677-1311
Perma Power Electronics	312-647-1472	Shape Systems Design	207-879-0439	Tektronix Inc.,	
Phi Technologies, Inc.	405-524-4254	Sharp Electronics Corp.		Television Div.	503-627-4486
Polyline Corp.	312-827-6851	Professional Products Div.	201-529-9636	Telex Communications Inc.	612-884-0043
Portland Instrument	818-240-1828	Shure Brothers Inc.	312-866-2279	Tentel	916-939-4114
Posthorn Recordings	212-924-1243	Signet	216-688-3752	Thermodyne International	213-603-1929
Precision Design	206-852-5046	Simmons		3M Broadcasting &	
Prime Solutions	619-272-4008	Electronics (USA) Inc.	805-494-9415	Related Products	612-736-9433
Pristine Systems	213-655-6207	Simpson Electric	312-697-2272	3M Professional Audio/Video	
Pro Co Sound Inc.	616-388-9681	Skotel Corp.	515-444-2083	& Specialty Product Div.	612-736-1246
Professional Audio Systems	213-530-2384	Sola, a Unit of Gen. Signal	800-626-6269	360 Systems	818-342-4372
Professional Sound Corp.	818-980-9911	Solid State Logic (US)	212-315-0251	TimeLine Inc.	212-966-7824
Promusic Inc.	305-776-2074	Solid State Logic	8658-42118	TLM Electronics	914-769-0012
Prosonus	213-462-7036	(England)		Toa Electronics	415-588-3349
ProSystems	814-333-1176	Solid Support Industries	818-444-5157	Touch Technologies	416-868-6419
ProTech Audio Corp.	516-584-5904	Sonic Systems Inc.	203-324-0893	Transtector Systems	208-772-9016
Publison America		Sonosax SA	021-806-0299	Trax Audio & Music	801-269-8886
(France)	4360-8031	(Switzerland)		TRF Prod. Music Libraries	212-753-4218
Pulizzi Engineering Inc.	714-641-9062	Sony Communications		Trident Audio USA	213-533-7072
QSC Audio Products	714-645-7927	Products Co.,		Turbosound	516-420-1863
Quad Eight Electronics	818-365-8310	Professional Audio Div.	201-833-9645	Turtle Beach Softworks	717-755-9402
Quadim Corp.	818-706-8426	Sony Magnetic Products	201-930-1131	27th Dimension	813-763-0410
Quantum Audio Labs	714-838-9619	SoperSound Music Library	415-321-9261	Ultimate Support	303-221-2274
Quest Marketing	617-969-7758	Soundcraft Electronics	0120-70194	Ultra Analog	415-657-4225
Quested Monitoring		(England)		University of Sound Arts	213-962-3376
Systems	0173-13280	Soundcraft USA	818-893-3639	UREI	818-893-3639
(England)		Soundcraftsmen	714-662-0750	USA Audio	606-864-8417
Radian Audio		Sound Ideas	416-886-6800	Valentino Inc.	212-869-6259
Engineering Inc.	714-961-0869	Soundmaster USA Inc.	805-494-4936	Valley International Inc.	615-269-5441
Ram Broadcast Systems	312-358-3577	Sound Technology Inc.	408-378-6847	Steve Vaus Productions	619-292-4099
Ramsa/Panasonic	714-373-7242	Soundtracs PLC	0139-96821	Vetronix Inc.	308-324-4985
Ramware Designs Corp.	416-866-7968	(England)		Vega, A Mark IV Co.	616-695-9626
Rane Corp.	206-347-7757	Southern Thunder Sound	612-521-2258	Velodyne Acoustics	408-436-0311
Bill Rase Prod	916-929-4751	Spatial Sound	415-457-6250	Versadyne International Inc.	408-379-0902
RCA Test Tapes	704-658-2008	Spectra Sonics	801-392-7531	Video Design Pro	505-524-9669
Real World Research		Spectrum Design		Virtual Designs Ltd.	818-503-0633
(England)	0126-25081	& Development	215-395-7735	VRI Scharff Rentals	212-757-6367
Re-An Products	201-808-6517	Sprague Magnetics Inc.	818-994-2153	Ward-Beck Systems Ltd.	416-438-3865
Recortec Inc.	408-734-2140	Standard Tape Lab	415-786-1180	WaveFrame Corp.	303-447-2351
Remote Recording Services	215-794-3263	Stanton Magnetics Inc.	516-349-0230	Westlake Audio	805-498-2571
Renkus-Heinz Inc.	714-250-1035	Stantron	818-841-8892	Wheatstone Broadcast Group	315-454-8104
Richmond Sound Design	604-734-3901	Star Case	219-922-4442	White Instruments	716-865-8930
RLS Acoustics	415-541-7872	State of the Art Electronik	613-745-9687	Whirlwind	716-865-8930
Rock City Sound	914-758-2932	Steinberg Digital Audio	818-701-7452	Williams Sound Corp.	612-931-0620
Rocktron Corp.	313-853-5937	Steinberg/Jones	818-701-7452	Winsted Corp.	612-944-1546
ROH Div. Of Anchor		Steinway and Sons	212-262-4680	Wireworks	201-686-0483
Audio Inc.	213-533-6050	Stewart Electronics	916-635-1787	Woodworx Audio Enclosures	919-854-2617
Roland Corp.	213-722-0911	Storeel Corp.	404-457-5585	Words and Deeds	213-255-6291
Roldex Industries	818-761-2715	Strand Magnetics	312-439-2880	Xedit Corp.	914-668-0719
Ross Systems	817-870-1271	Studer Editech	415-326-7039	Yamaha Corp. of America	714-739-2680
RPG Diffusor Systems	301-249-3912	Studer Revox America Inc.	615-256-7619	Yellowtec GmbH	2173-81497
RPL Inc.	609-963-3854	Studio Equipment Dist.	046-242-1171	(W. Germany)	
RPS Communicationa	516-423-6155	Studio Magnetics Co. Inc.	516-289-9150	Zoom Corp.	415-593-1181
RSP Technologies	313-853-5937	Studiomaster	714-524-0747		
RTS Systems Inc.	818-843-7953	Studio Technologies Inc.	708-982-0747		
Saje	1396-13184	Summit Audio	408-395-1403		
(France)					
Saki Magnetics Inc.	818-880-6242				



1989 Article Index

1989 articles grouped by issue and subject.

Monthly Index

Month	Page
January 1989	
Building the Biggest PA in the Galaxy	46
Coping with Wireless Microphone Systems	51
Electronically Controlled Speaker Systems	22
Remote Recording: Chet Atkins HBO/Cinemax "Sessions Series"	40
Sockhops to Woodstock: An Interview with Bill Hanley	61
Where Have all the Sprockets Gone?	58
February 1989	
Engineer/Producer Interview: Ed Seay	58
Michael Jackson on Tour	40
MIDI and the Mixing Console	22
MIDI-Based Automation	50
Post-Production: the BBC Radiophonic Workshop	55
Theater Sound in England: A Conversation with Andrew Bruce of Autograph Sound Recording	37
True Digital Audio Mixers	28
March 1989	
Digital Signal Processing: Living up to the Promises?	49
Engineer/Producer Interview: Keith Olsen	42
Live Recording: The Boston Symphony Orchestra	60
Performance Aspects of Digital Oversampling	20
Prince on Tour	32
Sampling vs. Hard Disk Recording	54
April 1989	
Analog Signal Processing for Digital Recording	32
Audio Tapes for TV and Video Production	18
Digital Audio, Dynamic Range and the Real World	26
Digital Satellite Production for the Media Recording Facility	40
NAMM Show Wrap-up	48
May 1989	
Acoustic Measurement Techniques Dedicated to Excellence: SPARS 1979-1989	66
Subwoofers and Sound Systems	33
Using Power Amplifiers in the Real World	22
June 1989	
Computer Software for the Audio Industry	57

Computer/Studio Interfacing at Studio Malibu	24
Electronic Musical Instruments in the Studio	32
George Michael on Tour	54
July 1989	
Acoustic Room Treatments	Page 44
Control Room Design	18
Designing for Audio/Video Post	36
Facility Profile: Abbey Road Studio 3	28
Focusrite: A Special Report	50
August 1989	
Analog Multitrack Recorders: A New Breed	Page 49
Are You Biased?	30
The Care and Handling of DAT Cassettes	26
DAT in the Professional Environment	18
Nashville: The Third Coast Emerges	33
September 1989	
Electronic Editing: States of the Art	Page 20
The Marriage of SMPTE and MIDI	28
Outdoor Sound Reinforcement for the Pacific Symphony Orchestra	38
Sonic Restoration Through NoNOISE	32
State of the Industry: the British Perspective, Part 1	46
October 1989	
AES Convention Preview	Page 30
AES Exhibitors	34
AES Product Directory	56
AES Product Preview	72
AES Technical Session and Workshops	32
Facility Profile: Full Sail	16
State of the Industry: the British Perspective, Part 2	24
November 1989	
Audio Fidelity: The Grand Illusion	Page 42
Florida's Sunny Future	34
Recording the Sound of a Concert Hall	20
Some Good News: Salary Survey	26
Studio Profile: Le Studio, Canada	48
December 1989	
Black Book Dealer/Distributor Directory	Page 89
Black Book Fax Directory	80
Black Book Manufacturers Directory	56
Black Book Product Directory	20
Black Book Trade Associations	87
Black Book 1990 Trade Show Calendar	87
Matching Your Needs to Technology	14

Subject Index

Amplifiers	Month/Page
Using Power Amplifiers in the Real World	May/57
Audio For Video and Film	Month/Page
Audio Fidelity: The Grand Illusion	Nov/42
Electronic Editing: States of the Art	Sep/20
The Marriage of SMPTE and MIDI	Sep/28
Where Have All the Sprockets Gone?	Jan/48
Black Book	Month/Page
Black Book Dealer/Distributor Directory	89
Black Book Fax Directory	80
Black Book Manufacturers Directory	56
Black Book Product Directory	20
Black Book Trade Associations	87
Black Book 1990 Trade Show Calendar	87
Broadcast Production	Month/Page
Audio Tapes for TV and Video Production	Apr/18
BBC Radiophonic Workshop	Feb/55
Digital Audio, Dynamic Range and the Real World	Apr/26
Digital Satellite Production for the Media Recording Facility	Apr/40
Computer Software	Month/Page
Computer Software for the Audio Industry	Jun/46
Console Technology	Month/Page
MIDI and the Mixing Console	Feb/22
MIDI-Based Automation	Feb/50
True Digital Audio Mixers	Feb/28
Convention Coverage	Month/Page
AES Convention Preview	Oct/30
AES Exhibitors	Oct/34
AES Product Directory	Oct/56
AES Product Preview	Oct/72
AES Technical Sessions and Workshops	Oct/32
NAMM Show Wrap-up	Apr/48
Digital Technology	Month/Page
Digital Signal Processing: Living up to the Promises?	Mar/49
Performance Aspects of Digital Oversampling	Mar/20
Sampling vs. Hard Disk Recording	Mar/54

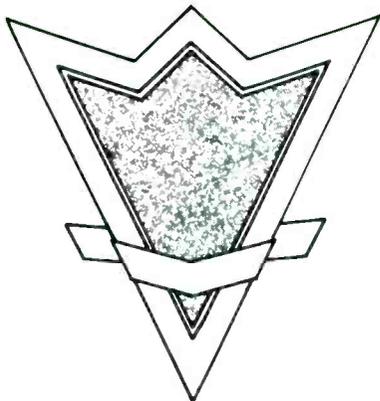
MOVING?

Take us with you.

Just peel off your subscription mailing label and attach it to the address change card inside this issue. Please allow 6-8 weeks to process your address change.

Engineer/Producer Interviews	Month/Page	Signal Processing	Month/Page
Hanley, Bill	Jan/61	Analog Signal Processing for Digital Recording	Apr/32
Olsen, Keith	Mar/42	Sonic Restoration Through NoNOISE	Sep/32
Seay, Ed	Feb/58		
Facility Profiles	Month/Page	SPARS On-Line Columns	Month/Page
Abbey Road Studio 3	Jul/28	Audio First, Business Second	Oct/12
Full Sail	Oct/16	Designing Economy	Jul/14
Le Studio, Canada	Nov/48	Digital Dreams and Nightmares	Sep/16
		Don't Confuse Professionalism with Elitism	Nov/16
Industry Issues	Month/Page	Exploring Sound Reinforcement Opportunities	Jan/14
Focusrite: A Special Report	Jul/50	Home Studio Competition: If You Can't Beat 'Em, Join 'Em	Jun/18
Matching Your Needs to Technology	Dec/14	Price, Speed and Quality in Commercials	Apr/16
Some Good News: Salary Survey	Nov/26	The Next Decade	Mar/14
State of the Industry: the British Perspective, Part 1	Sep/46	The SPARS Exam: Making the Grade	Feb/16
State of the Industry: the British Perspective, Part 2	Oct/24	A Viable Alternative	Aug/14
Live Sound Reinforcement	Month/Page	Special Projects	Month/Page
Building the Biggest PA in the Galaxy	Jan/46	Dedicated to Excellence: SPARS 1979-1989	May/33
Electronically Controlled Speaker Systems	Jan/22	Electronic Musical Instruments in the Studio	Jun/32
George Michael on Tour	Jun/54	Nashville: the Third Coast Emerges	Aug/32
Michael Jackson on Tour	Feb/40	Florida's Sunny Future	Nov/34
Outdoor Sound Reinforcement for the Pacific Symphony Orchestra	Sep/38		
Prince on Tour	Mar/32	Studio Design	Month/Page
Remote Recording: Chet Atkins	Jan/40	Acoustic Room Treatments	Jul/44
HBO/Cinemax "Sessions Series"		Control Room Design	Jul/18
Theater Sound in England: A Conversation with Andrew Bruce of Autograph Sound Recording	Feb/37	Designing for Audio/Video Post	Jul/36
Managing MIDI Columns	Month/Page	Tape Machines	Month/Page
Automation is Alive!	May/10	Analog Multitrack Recorders: A New Breed	Aug/49
Bridge to Transporter...	Sep/14	Are You Biased?	Aug/30
Gotta Resolution	Jan/12	DAT in the Professional Environment	Aug/18
SCMS for DAT: Friend or Fraud?	Nov/14		
Sequentially Speaking, Part 1	Feb/12	The Cutting Edge Columns	Month/Page
Sequentially Speaking, Part 2	Mar/12	Advances in Tape Machine Technology	Jan/68
A Stitch In Time	Jun/14	AES Sneak Preview	Oct/88
Taking MIDI to Multitask and Other Myths	Apr/14	Audio Paragon Playstation, DAR Soundstation II, Symetrix DPR-100	Apr/66
Time, Distance, Relativity	Jul/12	J.L. Cooper Fadermaster, Klark-Teknik DN504	Aug/70
Up from MIDI	Oct/10	Hot Stuff at January NAMM	Mar/70
Veni, Vidi(o), VITC!	Aug/12	News from NAB	Jul/64
Microphones	Month/Page	Now Available: DAT with Time Code	Feb/68
Coping with Wireless Microphone Systems	Jan/51	A Resourceful Remote	Nov/63
Recording the Sound of a Concert Hall	Nov/20	The Road to CD Refs	Jun/71
Monitoring	Month/Page	Summer NAMM Goodies	Sep/64
Acoustic Measurement Techniques	May/66	Two Industry Greats Lost: Keith Worsley and Wally Heider	May/71
Subwoofers and Sound Systems	May/22		
Project Studios	Month/Page	Understanding Computers Columns	Month/Page
Computer/Studio Interfacing at Studio Malibu	Jun/24	Choosing a MIDI Interface	Sep/18
Recording and Production Techniques	Month/Page	Computers as Sequencers	Aug/16
Live Recording: The Boston Symphony Orchestra	Mar/60	Databases, Part 1	Nov/18
		Modems	Mar/16
Recording Tape	Month/Page	Monitors and Graphics	Jul/16
The Care and Handling of DAT Cassette	Aug/26	A New Year's Resolution	Jan/16
		On-Line Database Services, Part 1	May/14
		On-Line Database Services, Part 2	Jun/20
		Telecommunications	Feb/18

REP



Trade Associations

American Federation of Musicians

1501 Broadway, Suite 600
New York, NY 10036
212-869-1330
Fax 212-764-6137

Acoustical Society of America

c/o American Institute of Physics
335 E. 45th St.
New York, NY 10017
212-661-9404
Fax 516-349-7669

American Society of Composers, Authors and Publishers (ASCAP)

One Lincoln Plaza
New York, NY 10023
212-595-3050
Fax 212-274-9064

2 Music Square West
Nashville, TN 37203
615-244-3936
Fax 615-244-3997

6430 Sunset Blvd., Suite 200
Hollywood, CA 90028
213-466-8401
Fax 213-466-6677

Association of Professional Recording Studios (APRS)

163A High St.
Rickmansworth
Herts, UK SD3 1AY
0923 772907
Fax 0923 773079

Audio Engineering Society (AES)

60 E. 42nd St.
New York, NY 10165
212-661-8528
Fax 212-682-0477

Broadcast Music International (BMI)

320 W. 57th St.
New York, NY 10019
212-586-2000
Fax 212-489-2368

10 Music Square East
Nashville, TN 37203
615-259-3625
Fax 615-256-7502

8737 Sunset Blvd.
Third Floor West
Los Angeles, CA 90069
213-659-9109
Fax 213-657-6947

Canadian Recording Industry Association (CRIA)

89 Bloor St. E.
Toronto, Ontario M4W 1A9 Canada
416-967-7272
Fax 416-967-9415

International MIDI Association (IMA)

5316 W. 57th St.
Los Angeles, CA 90056
213-649-MIDI
Fax 213-215-3380

MIDI Manufacturers Association (MMA)

5316 W. 57th St.
Los Angeles, CA 90056
213-649-MIDI
Fax 213-215-3380

Nashville Entertainment Association (NEA)

Box 121948
Nashville, TN 37212
615-256-4435

National Academy of Recording Arts & Sciences (NARAS)

303 N. Glenoak Blvd.
Burbank, CA 91505
818-843-8233
Fax 213-849-2529

National Association of Broadcasters (NAB)

1771 N St. NW
Washington, DC 20036
202-429-5300
Fax 202-429-5343

National Association of Music Merchants (NAMM)

5140 Avenida Encinas
Carlsbad, CA 92008
619-438-8001
Fax 619-438-7327

National Sound & Communications Association (NSCA)

501 W. Algonquin Road
Arlington Heights, IL 60005
312-598-7070
Fax 312-598-4888

Society of Motion Picture & Television Engineers (SMPTE)

595 W. Hartsdale Ave.
White Plains, NY 10607
914-761-1100
Fax 914-761-3115

Society of Professional Audio Recording Services (SPARS)

4300 10th Ave. North
Lake Worth, FL 33461
407-641-6648
Fax 407-642-8263

1990 Calendar

Jan. 19-21

National Association of Music Merchants,
Anaheim, CA.

January 21-25

MIDEM, Cannes, France.

March 21-April 3

National Association of Broadcasters,
Atlanta.

April 18-21

National Sound Contractors Association, Las
Vegas, NV.

May 3-6

Audio Engineering Society 8th International
Conference, Washington, DC.

June 6-8

Association of Professional Recording Studios,
London.

June 15-17

National Association of Music Merchants,
Chicago.

July 14-18

New Music Seminar, New York.

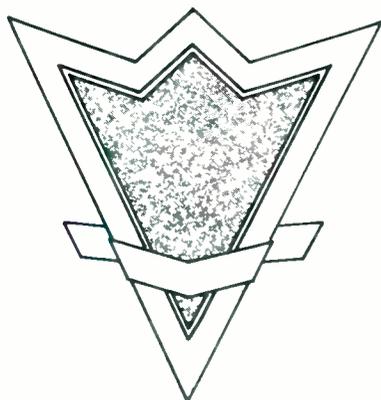
Sept. 22-25

Audio Engineering Society, Los Angeles.

Oct. 13-17

Society of Motion Picture and Television
Engineers, New York.

Dealer/Distributor Directory



A state-by-state list of regional dealers/distributors.

The format of these listings is as follows: company name, addresses (phone number), region served, products represented.

ALABAMA

Ram Audio, Inc., Morgan Plaza, Hartselle, AL, 35640 (205-773-0708) AL, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; Recording Tape; Signal Processors; Tape Machines, Analog; Cable Connectors

ARIZONA

Advanced Audio (Div. of Aljon Systems), 3943 E. Whitton Ave., Phoenix, AZ, 85018 (602-954-8155) AZ, CA, NV, NM, UT, Loudspeakers for Monitoring, etc.; General Systems Consulting; Design & Fabrication of Custom Electronics Devices; Specialists in Design & Fabrication of Custom Multi-Amplified Powered Loudspeaker Systems for Professional Applications

Arizona Cine Equipment, Inc., 2125 East 20th St., Tucson, AZ, 85719 (602-623-8268; Fax 602-623-1092) AZ, CA, NM, NV, UT, Amplifiers; Equalizers; Loudspeakers, S.R.; Microphones & Access.; Signal Processors; Test & Measurement; Lighting

Audio Services, P.O. Box 513, Tempe,

AZ, 85280 (602-966-0700) AZ, CA, CO, NV, NM, UT, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Acoustic Treatment Material

EAR Professional Audio-Video, 2641 E. McDowell Road, Phoenix, AZ, 85008 (602-267-0600) AZ, AK, CA, CO, FL, HI, IL, IN, KS, ME, MI, MN, MT, NE, NV, NJ, NM, OH, OK, OR, PR, TN, TX, UT, VI, WA, WY, NY, Alta, BC, Ont, Que, Amplifiers; Consoles; Editing Systems; Equalizers; Loudspeakers; Microphones; MIDI; Noise Reduction; Recording Tape; Signal Processors; Synthesizers; Tape Dupers; Analog & Digital Recorders, Time Code Synchronizers; Audio-Video DAT Tape & Editing Supplies; Video Products; Cameras, Editing Systems, Monitors, Processors, Switchers

The Guitar Shop Ltd., 6830 Fifth Ave., Scottsdale, AZ, 85251 (602-994-8749) AZ, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Reinforcement, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction; Signal Processors; Synthesizers; Tape Machines, Analog

Jensen Tools Inc., 7815 South 46th St., Phoenix, AZ, 85044 (602-968-6231) Worldwide, Test & Measurement Equip.

Precision Audio Services, 2641 E. McDowell Road, Phoenix, AZ, 85008 (602-267-0843) AZ, CA, CO, MN, TX, Maintenance, Repair, and Installation of All Professional Grade Audio and Video Production Equip.

Rainbow Guitars Inc., 2515 N. Campbell Ave., Tucson, AZ, 85719 (602-325-3376) AZ, Amplifiers; Consoles-Recording & Production; Microphones & Access.; MIDI Devices & Sound Samplers; Synthesizers & Keyboards; Editing Systems; Equalizers; Signal Processors; Recording Tape; Noise Reduction Systems; Time Code Synchronizers; Loudspeakers

ROH'S Inc., 2922 N. Campbell Ave., Tucson, AZ, 85719 (602-795-8573) AZ, NM, Amplifiers, Consoles, Sound Reinforcement, Recording & Production; Editing Systems, Equalizers, Loudspeakers, Sound Reinforcement, Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Recording Tape, Signal Processors, Tape Machines, Analog & Digital; Test and Measurement Equip., Time Code Synchronizers, Wireless Systems

ARKANSAS

Allrent, Inc., Box 1469, Mena, AR, 71953-1469 Central & No. West-AR, Audio; Keyboards; Synthesizers; Speakers

Electra Tc, Highway 65N, Route 7 Box 334, Conway, AR, 72032 (501-327-3724) AR, Services & Sales on: Amplifiers, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.

CALIFORNIA

David L. Abell, Inc., 8162 Beverly Blvd., Los Angeles, CA, 90048 (213-651-3060) CA, Amplifiers; Equalizers; Loudspeakers, Studio; MIDI Devices & Sound Samplers; Signal Processors; Synthesizers & Keyboards; Time Code Synchronizers

Advance Recording Products, 7190 Clairemont Mesa Blvd., San Diego, CA, 92111 (619-277-2540; 800-854-1061; CA-800-858-1061) Nationwide, Recording Tape;

Tape Duplication-audio Cassettes; Cassettes; Reels & Boxes; Splicing & Leader Tape; Hold Down Tape; Video Tape; Studio Dispensers and More

AEA, Inc. dba Audio Engineering Associates, 1029 N. Allen Ave., Pasadena, CA, 91104 (818-798-9127; Fax 818-798-2378) So.-CA, Consoles; Digital Processors; Recorders; Microphones; Stands & Acces.; Audio Tape; Signal Processing; Noise Reduction Systems; Reverb, Echo & Delay; Synchronizers; Preamps/Amps/Loudspeakers/Headphones; Cables & Connectors; Turntables; Cartridges; Test Equip.; MIDI; Accessories & Misc. Equip.

Dan Alexander Audio, 2944 San Pablo Ave., Berkeley, CA, 94702 (415-644-2363; Fax 415-644-1848) Worldwide, Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Signal Processors; Tape Machines-Analog & Digital; Time Code Synchronizers

Derek Allen Associates, P.O. Box 2229, Toluca Lake, CA, 91610-0229 (818-840-8327) AZ, So.-CA, HI, So.-NV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Studio Monitoring & Sound Reinforcement; Microphones & Acces.; Signal Processors; Test & Measurement Equip.; Noise Reduction Systems

American Recorder Technology, P.O. Box 3592, Simi Valley, CA, 93063 (800-777-9580; Fax 805-527-1433) USA, Cleaning Products, Recorders

ASC Video Corporation, 3816 Burbank Blvd., Burbank, CA, 91505 (818-843-7004) CA, Video Editing Systems; Microphones & Acces.; Recording Tape; Tape Machines, Analog; Time Code Synchronizers

Associated Sound, 2120 P St., Sacramento, CA, 95816 (916-443-4773; 800-492-6800; FAX 916-443-4748) CA, NV, Amplifiers; Consoles SR; Equalizers; Speakers; Microphones; Signal Processors, Tape Machines, DAT Analog; Test & Measurement Equip.; Walkie Talkies

Audio Affects, P.O. Box 1127, Burbank, CA, 91505 (818-980-4006) USA, Far East, England, Amplifiers; Consoles-Recording & Production; Editing Systems; Equalizers; Loudspeakers-Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers &

Keyboards; Tape Duplication; Tape Machines-Analog & Digital; Time Code Synchronizers

Audio Images Corp., 70 Oak Grove St., San Francisco, CA, 94107 (415-957-9131) AK, CA, CO, HI, ID, MT, NV, OR, WA, WY, Consoles, Recording & Production, Sound Reinforcement; Editing Systems; Equalizers; Loud Speakers, Sound Reinforcement, Studio Monitoring; Microphones & Accessories; MIDI Devices & Sound Samplers; Noise Reduction Systems; Signal Processors; Synthesizers & Keyboards; Time Code Synchronizers

Audio Intervisual Design, 1032 N. Sycamore Ave., Los Angeles, CA, 90038 (213-469-4773) AZ, CA, CO, FL, GA, HI, IL, MI, NV, OR, TN, UT, VA, Amplifiers; Consoles, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Recording Tape; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers; Digital Interfaces; Room Design & Wiring Installation Interfaces

Audio LA, 11349 Santa Monica Blvd., Los Angeles, CA, 90025 (213-477-1516) AK, AZ, CA, CO, HI, OR, NV, NM, TX, UT, WA, A full service organization specializing in Music and Audio Production Systems for recording, video and film-scoring applications. Our expertise includes system design and installation, advanced SMPTE and MIDI engineering, and computer-assisted musicsystems

Audio Services Corp., 10639 Riverside Drive, North Hollywood, CA, 91602 (818-980-9891) USA & Canada, Sales, Service, Rental; Everything For Production Sound; Audio Equip.-Film, Video, Live Entertainment, News; Test & Measurement Equip.; Tape; Used Equip.

Audio Village, P.O. Box 2902, Palm Springs, CA, 92263 (619-320-0728) USA, Asia, Canada, Europe, All Equip.-Used (Consignment & From Stock) Sales; Recording; PA; Musical Instruments; Computers; Replacement Heads

Bananas At Large, 802 Fourth St., San Rafael, CA, 94901 (415-457-7600) USA, GU, PR, VI, Amplifiers; Consoles, Recording Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement, Microphones & Acces.; Loudspeakers, Studio Monitoring; Microphones & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

The Bertech Organization, 14447 Califa St., Van Nuys, CA, 91401 (818-909-0262) USA, Canada, Mexico, Japan, Europe, Amplifiers; Signal Processors; Equalizers; Microphone & Acces.; Test & Measurement Equip.

B & L Sales, Inc., 10640 Magnolia Blvd., North Hollywood, CA, 91601 (818-985-1792) National, Recording Tape; Tape Duplication Equip.; Blank Cassettes; Cassette Recorders, Boxes & Labels; Empty Reels & Boxes; Recorder Care Accessories

Black Audio Devices, P.O. Box 106, Ventura, CA, 93002 (805-653-5557) USA, Microphones & Acces.; Maintenance Parts & Tools; Racks

Bowdish Associates, 4432 Ensenada Drive, Woodland Hills, CA, 91364 (818-704-6324) AR, CA, HI, NV, UT, A/V Distribution/Routing; Video Matting, Keys, Audio Edit Consoles, Degaussers, Encoders/Decoders, Time Code Equip.; Prompters

Broadcast Cartridge Service Inc., 15131 Triton Lane, Suite 108, Huntington Beach, CA, 92649 (714-898-7224) USA, Recording Tape

CAL SWITCH

Cal Switch, 13717 S. Normandie Ave., Gardena, CA, 90240 (213-770-2330; 800-CAL-SWCH; Fax 213-327-2741) USA, Cable Connectors, Patch Bay & Jack Panels; Switches; Audio Accessories

Christy's Editorial Film Supply, Inc., 135 N. Victory Blvd., Burbank, CA, 91502 (818-845-1755) USA, Alta, Ont. in Canada, Recording Tape; Film Editing Equip.-Sales & Rentals Magnetic Film; Leaders; Editorial Tapes and Supplies

Custom Audio Electronics, dba C.A.E. Sound, 1150 E. Santa Inez Ave., San Mateo, CA, 94401 (415-348-2737) CA, Service only on: Amplifiers; Consoles; Equalizers; MIDI Devices & Sound Samplers; Noise Reduction Systems; Signal Processors; Tape Machines, Analog; Time Code Synchronizers; Custom Equip. Design; Studio Installations; Keyboard Specialists

The DAT Store, 2624 Wilshire Blvd., Santa Monica, CA, 90403 (213-828-6487) USA & Canada, Tape Machines, Digital; All Brands of DAT Tape

See advertisement page 110

Dataware, P.O. Box 1122, Hollywood, CA, 90078 (818-996-1161; 800-759-7243 PIN #91643, orders only) Worldwide, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Sam-

DCODE TC-1 TIME CODE READER

- Reads Time Code from 1/50 - 50x speed
- Reshapes Time Code for copying
- 60 hz sync from 24 or 30 frame code



DENECKE, INC.

5417-B Cahuenga Bl., No. Hollywood, CA 91601 • (818) 766-3525 • FAX (818) 766-0269

Circle (39) on Rapid Facts Card

plers; Noise Reduction Systems-Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines-Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Computers-Hardware & Software, Music & Business

Delicate Electronic Sales, 1390 Flynn Road, Suite B, Camarillo, CA, 93010 (805-388-1800; Fax 805-388-1037) National, Amplifiers; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines-Analog & Digital; Test & Measurement Equip.

Digital Dispatch, Inc., P.O. Box 4426, Burbank, CA, 91503 (818-952-FAST; 800-446-FAST; 213-644-FAST) USA & Canada, Tape Machines, Analog & Digital; Time Code Synchronizers; Signal Processors; Recording Tape; Video Monitors; Equalizers; Digital Reverbs & Delays; MIDI Devices & Sound Samplers; Noise Reduction Systems; Microphones & Access.; Synthesizers & Keyboards; Video Tape Recorders;

R-DAT's; Focusrite Modules, ISA 110 & 130; Limiters, Compressors; Computers

Dan Dugan Sound Design, 290 Napoleon St., Studio E, San Francisco, CA, 94124 (415-821-9776) No.-CA, Tape Machines, Analog; Recording Tape

Educational Electronics Corp., P.O. Box 339, Inglewood, CA, 90306 (213-677-8167) National, Audio Cassette Duplicators

Embassy Cassette, Inc., 3617 W. MacArthur, Suite 500, Santa Ana, CA, 92704 (714-557-5757; 800-541-8899) USA, Recording Tape; Tape Duplication

Everything Audio, 2721 W. Burbank Blvd., Burbank, CA, 91505 (818-842-4175) CA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Loudspeakers, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
See advertisement page 61

Goodman Music, 4227 Lankershim Blvd., North Hollywood, CA, 91602 (818-760-4430) So.-CA, Keyboards & Synthesizers; MIDI Products; Drum Machines; Sequencers; Multi-Track Recorders; Mixing Consoles; Digitac Production Equip.

Guitar Trader, 5035 Shawline St., San Diego, CA, 92111 (619-565-8814) CA, Amplifiers; Consoles Equalizers; Synthesizers & Keyboards; Tape Machines Misc. Access.; Loudspeakers

Haight Ashbury Music Center, 1540 Haight St., San Francisco, CA, 94117 (415-863-7327) CA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement; Loudspeakers, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital

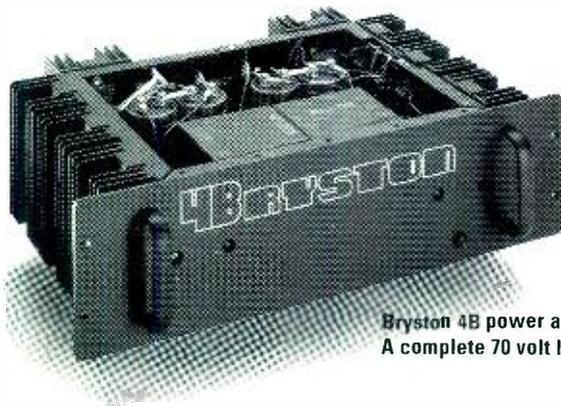
Integrity Sound, 728 N. Fulton, Fresno, CA, 93728 (209-237-9640) CA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound

Reinforcement, Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Recording Tape; Signal Processors

Japan America Electronics dba The D.A.T. Store, 2624 Wilshire Blvd., Santa Monica, CA, 90403 (213-828-6487) North & South America, Australia, Far East, Tape Machines, Digital; Recording Tape, Digital; Time Code; Microphones & Access.

Jensen Transformers, Inc., 10735 Burbank Blvd., North Hollywood, CA, 91601 (213-876-0059) Worldwide, Audio Transformers; Amplifiers; Microphone Pre Amps; Moving Coil Cartridge Step-Up Units, AC-Circuit Analysis & Optimization Software; Phono Pre Amps; Power Amplifiers

Julian Systems, 2280 Bates Ave., Suite J, Concord, CA, 94520 (415-686-4400; Fax 415-686-4244) CA-San Diego, San Francisco Bay Area, Computers; Editing Systems; Loudspeakers; MIDI Devices & Sound Samplers; Tape Machines, Analog; Time Code Synchronizers; Computer Interfaces, Video



Bryston 4B power amplifier.
A complete 70 volt line of amplifiers is also available, from 50 to 250 watt output.

**BRYSTON DESIGN PHILOSOPHY:
LONG-TERM RELIABILITY, SONIC
ACCURACY AND PRODUCT INTEGRITY**

Bryston considers reliability to be exceedingly important. We apply techniques and materials in our electronic construction more typically utilized in the military and aerospace industries. Every transistor and metal film resistor is hand matched to ensure a tolerance level which is less than 1 percent.

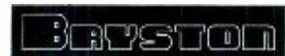
This is why we offer a five year warranty on all of our products.

Sonic accuracy is reflected throughout all Bryston power amplifiers. This 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.

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

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

Bryston takes very seriously the correct functioning and long-term reliability of its products.



Bryston-Marketing Ltd.
Tel: (416) 746-0300 Fax: (416) 746-0308
Brystonvermont Ltd. Toll Free: 1-800-673-7899

Circle (40) on Rapid Facts Card

Leo's Audio & Music Technologies, 5447 Telegraph Ave., Oakland, CA, 94609 (415-652-1553) CA, NV, OR, WA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers; Microphones; MIDI Devices; Noise Reduction Systems; Tape; Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test Equip.; Time Code Synchronizers

David Lint Associates, Inc., 19520 Chaffee Circle, Groveland, CA, 95321 (209-962-5555) CA, FL, HI, ID, OR, UT, WA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Studio Monitoring, Sound Reinforcement; Microphones & Access.; Noise Reduction Systems; Recording Tape; Tape Duplication; Tape Machines, Analog; Video Systems; Motor Repair Service

Master Recording Supply, 4000 W. Magnolia Blvd., Burbank, CA, 91505 (818-841-7500) AZ, CA, CO, HI, MT, NV, NM, OR, UT, WA, Recording Tape; Tape Duplication Systems; Test & Measurement Equip.; Tape Loading Equip., Cassette Labeling Equip.

Mated Hi-Fidelity, Inc., 2199 El Camino Real, San Mateo, CA, 94403 (415-573-6506) CA, Signal Processors; Amplifiers; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems, Recording Tape

Mayhew & Co., 3115 W. Olive, Suite 6, Burbank, CA, 91505 (818-840-9293) CA, Wireless Microphones; Sales; Rental & Service

Sye Mitchell Sound Co. Inc., 22301 Cass Ave., Woodland Hills, CA, 91364 (818-348-4977) Worldwide, Amplifiers; Consoles, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers

Music Power Rentals, 4693 University Ave., San Diego, CA, 92105 (619-282-4011) CA, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog & Digital

Music Solutions, 14760 Ventura Blvd., Sherman Oaks, CA, 91403 (800-442-6434) USA, All Music & MIDI Software

New World Music & Sound, 4792 Clairemont Mesa Blvd., San Diego, CA, 92117 (619-569-1944; 800-854-2005) USA, Amplifiers; Consoles (recording, production, sound reinforcement); Editing Systems; Equalizers; Loudspeakers (sound reinforcement, studio monitoring); Microphones & Access.; MIDI Devices & Sound Samplers, Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers &

Keyboards, Tape Duplication; Tape Machines (analog), Time Code Synchronizers; Guitars; Drums

Ocean Audio, 366 Las Casas, Pacific Palisades, CA, 90272 (213-459-2743; Fax 213-454-6043) National, Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors;

Synthesizers & Keyboards; Tape Machines Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Omega Video, Inc., 4196 Cleveland Ave., San Diego, CA, 92103 (619-299-6250; 602-258-0509) AZ, CA, NV, NM, Amplifiers; Consoles-Recording & Production; Editing Systems; Studio Monitoring; Microphones & Access.; Signal Processors; Tape Machines; Test &

Gauss.

The World's Greatest Woofers

At Gauss, we make low frequency transducers, not just bass guitar speakers. And we make them to be the best. Every Gauss loudspeaker is designed to perform at rated output levels where others *only survive*.

Gauss woofers are the greatest because they're *engineered* to be the best. They have the largest voice coil in the industry, 4.125 inches. It is directly wound on a unique metal former for maximum heat dissipation and efficiency. Our innovative double spider insures that the voice coil stays centered under high power operating conditions. Even our cast aluminum frames are thicker and heavier to make them more robust.

The result of these innovations is a line of woofers that are superior to all others. Bar none. Best of all, they're built to survive in the real world.

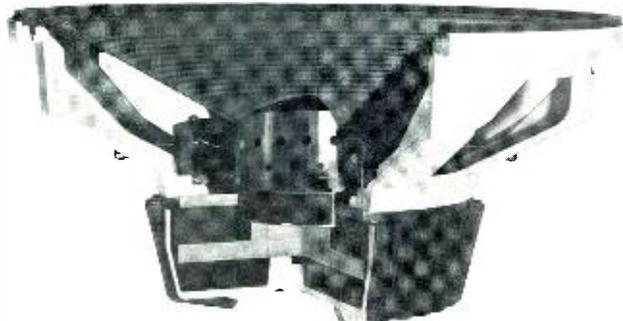
gauss

a MARK IV company

9130 Glenoaks Blvd.

Sun Valley, CA 91352

(213) 875-1900



Circle (43) on Rapid Facts Card

- Measurement Equip.; Time Code Synchronizers; Video Production & Editing Equip.; Cable & Connectors
- Optical Media International**, 485 Alberto Way, Los Gatos, CA, 95032 (408-395-4332) Domestic & Int'l. in 46 countries, Cable & Connectors; Business Computer Software; Libraries
- Pacific Coast Marketing**, 14125 Capri Drive, Los Gatos, CA, 95030 (408-370-3505) CA, NV, Test & Measurement Equip.
- Pacific Radio Electronics**, 1351 Ca-huenga Blvd., Hollywood, CA, 90028 (213-462-1393; 818-762-8950; 714-641-7433; 800-634-9476) National By Catalog, Wire & Cable; Connectors; Patching Systems; Tool & Technical Aids; Cleaning & Maintenance Supplies
- Pacific Recorders & Engineering Corp.**, 2070 Las Palmas Drive, Carlsbad, CA, 92009 (619-438-3911) Worldwide, Noise Reduction Systems; Consoles, Recording & Production; Equalizers; Tape Machines, Analog
- Patterson & Associates**, 2555 E. Chapman Ave., Suite 300, Fullerton, CA, 92631 (714-992-1422) CA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Signal Processors; MIDI Devices & Sound Samplers; Synthesizers & Keyboards, Tape Duplication; Tape Machines Analog
- Pegasus Productions**, 676 Bockman Road, Suite G, San Lorenzo, CA, 94580 (415-481-1126) CA, Amplifiers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Lighting; Special Effects, Mirror Balls, Lasers, Fog, Bubbles
- Peoples Music**, 122 N. Main St., Sebastopol, CA, 95472 (707-823-7664) CA, Amps; Loudspeakers; Microphones; Recording Tape; Signal Processors
- Professional Audio Services & Supply Co.**, 619 S. Glenwood Place, Burbank, CA, 91506 (818-843-6320) USA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; MIDI Devices & Sound Samplers; Microphones & Acces.; Signal Processors; Tape Duplication; Tape Machines, Analog; Loudspeakers, Sound Reinforcement & Studio Monitoring
- Rainbow Park**, 1033 Battery St., San Francisco, CA, 94111 (415-421-2875) CA, Amplifiers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Recording Tape; Tape Duplication; Multi-Image Control Equip.
- RGS-Richard Griffin Sales**, 8519 Chester St., Paramount, CA, 90723 (213-634-3042) So.-CA, Consoles Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Signal Processors; Tape Machines, Analog; Time Code Synchronizers; Full Line Video & Photographic Equip.
- R & M Pro Audio**, 1080 Pacheco St., San Francisco, CA, 94116-1318 (415-665-8480) CA, FL, ID, IL, IN, LA, MN, NY, NC, OK, WA, BC, Editing Systems; Microphones; Recording Tape; Tape Machines, Digital; Mixers, Head Cleaners; Plastic Reels; Alignment Tapes; Razor Blades; Access., Consoles; Recording & Production; Signal Processors
- Santa Cruz Sound Co.**, 2-1513 E. Cliff Drive, Santa Cruz, CA, 95062 (408-475-0768) Monterey Bay & San Francisco Metro. Areas, Amplifiers; Consoles; Equalizers; Loudspeakers (Loudspeaker Reconciling-Electronic Repair); Microphones; DJ Supplies; Sound Systems Rental, Microphone Stand Repair; Cabinet Hardware; Tube Specialists
- Sawyer Camera & Video Co.**, 1208 W. Isabel St., Burbank, CA, 91506 (818-843-1781; 800-423-7779) AK, AZ, AR, CA, CO, GU, HI, ID, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, MT, NE, NV, NM, ND, OK, OR, SD, TX, UT, WA, WI, BC in Canada, Amplifiers; Loudspeakers; Microphones
- Sequoia Electronics**, 1131 Virginia Ave., Campbell, CA, 95008 (408-866-8434) AK, AZ, CA, HI, ID, NV, NV, OR, WA, Canada, Equalizers; Signal Processors; Tape Machines, Analog; Magnetic Tape Heads; Recorder Care Products; Test Tapes, Carts & Cassettes; Clocks & Timers; Repair Parts; Consoles, Recording & Production; Cart Tape Recorders
- Skip's Music, Inc.**, 2740 Auburn Blvd., Sacramento, CA, 95821 (916-484-7575) No.-CA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog
- The Sound Center**, 9278 Civic Center Drive, Beverly Hills, CA, 90210 (213-274-6951) CA, Amplifiers; Equalizers; Loudspeakers, Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog
- Sound Expressions**, 3249 Santa Rosa Ave., Santa Rosa, CA, 95407 (707-528-3565) CA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring, Microphone & Acces.; MIDI Devices & Sound Samplers; Signal Processors; Tape Machines, Analog
- The Source Audio Group**, 471 Anaheim Blvd., Orange, CA, 92668 (714-937-1237) Worldwide, Audio Products; Recording, Sound System, Lighting-Sales Rental, Service, Concert Production
- South Bay Sound & Light**, P.O. Box 174, El Segundo, CA, 90245 (213-973-8871) Greater Los Angeles Area, Loudspeakers, Sound Reinforcement; Microphones; Amplifiers; Consoles; Signal Processors; Stage Lighting Equip.
- SSL Industries Inc.**, P.O. Box 3410, Camarillo, CA, 93011 (805-482-9884) AZ, CA, HI, NV, OR, Amplifiers; Consoles, Recording & Reinforcement; Equalizers; Microphones; Noise Reduction; Tape; Loudspeakers, Studio & Reinforcement; Tape Duplication; Time Code; Test Equip.
- Stanislaus Audio Visual**, 1431 Kansas Ave., Modesto, CA, 95351 (209-529-2700; 800-341-1441) CA, Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Tape Machines, Analog; Tape Duplication; Amplifiers
- Suntronics**, P.O. Box 734, Upland, CA, 91786 (714-985-0701) So.-CA, Remote Controls
- Tele-MIDI**, 30 N. Raymond Ave., Suite 612, Pasadena, CA, 91103 (818-584-5814; 800-888-MIDI) USA & Canada, MIDI Services & Sound Samplers; MIDI Software & Peripherals
- Thrifty Electronic Supply Co.**, 13643 Burbank Blvd., Van Nuys, CA, 91401 (818-786-1610) CA, Amplifiers; Equalizers; Loudspeakers, Studio Monitoring & Acces.; Recording Tape; Tape Machines, Analog & Digital; Full Repair Facility Audio/Video
- T.M.B. Associates**, 3416 W. Burbank, Burbank, CA, 91505 (818-842-9651) USA, Cable & Connectors; Cases; Lighting Equip.; Microphones, Studio; Patchbay & Jack Panels; Peripheral & Miscellaneous Acces.
- Brian Trankle & Associates**, 1504 Industrial Way, Suite 4, Belmont, CA, 94002 (415-595-4004) CA, HI, NV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers
- VIF International**, P.O. Box 1555, Mountain View, CA, 94502 (408-739-9740; 800-848-4428; Fax 408-739-0809) Worldwide, Recording Tape; Spare Parts for Professional Audio Recorders; Motor Remanufacturing
- WAH Systems Corp.**, 915 Fee Drive, Sacramento, CA, 95815 (916-924-9911) AZ, AR, CA, HI, ID, NV, OR, WA, Complete auditorium systems recording, video, audio, lighting, & controls, sound reinforcement; Major nightclub systems
- West LA Music**, 11345 Santa Monica Blvd., Los Angeles, CA, 90025 (213-477-1945) Nationwide, mostly-CA, Music & Studio Related Software; Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring, Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
- Westlake Audio**, 7265 Santa Monica Blvd., Los Angeles, CA, 90046 (213-851-9800) USA, Pro Audio Equip.
- Westwood Musical Instruments, Inc.**, 2301 Purdue Ave., Los Angeles, CA, 90064 (213-478-4251) USA & Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Studio Monitoring & Sound Reinforcement; Microphones & Acces.; MIDI Devices & Sound Samplers; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines; Time Code Synchronizers; MIDI Guitar Systems; Acoustic & Electric Guitars; Electronic Service; Guitar Repair; Software
- Zack Electronics**, 1380 Howard St., San Francisco, CA, 94105 (415-626-1444) NO.-CA, Amplifiers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Test & Measurement Equip.; Wire & Cable; Audio/RF Connectors; Chemicals; Batteries; Racks, Chassis; Electronic Hardware; UPS/Power Filters & Conditioners; Tools

COLORADO

H.P. Marketing Co., 2530 W. Church Ave., Littleton, CO, 80120 (303-794-8367; 602-946-5282) AZ, CO, MT, NM, UT, WY, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Reinforcement & Studio Monitoring; Signal Processors

Jackson Sound Productions Ltd., 3897 S. Jason St., Englewood, CO, 80110 (303-761-7940) CO, Recording Tape; Tape Duplication

Kart Kair, 9445 West 52nd Ave., Denver, CO, 80002 (303-422-7219) Worldwide, Recording Tape & Cartridges; Broadcast Carts & Products; Cartridge Remanufacturing

Mirromere Audio, 7150 West 38th Ave., Wheatridge, CO, 80033 (303-431-2348) CO, CA, ID, KS, MT, NE, NJ, NM, NY, UT, WY, Amplifiers; Consoles, Sound Reinforcement & Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers; Recone Facility; Acoustical Consultants

Research Associates Inc., 230 S. Sierra Madre, Colorado Springs, CO, 80903 (719-594-9464) Western States, Rocky Mountain Region, Tape Recorders; Speakers; Noise Reduction Systems; Microphones; Audio Control Consoles; Antennas; Transmitters; Cart Machines; Turntables; AM/FM Monitors; Peripheral Audio Equip.; Complete Broadcast & Recording Lines

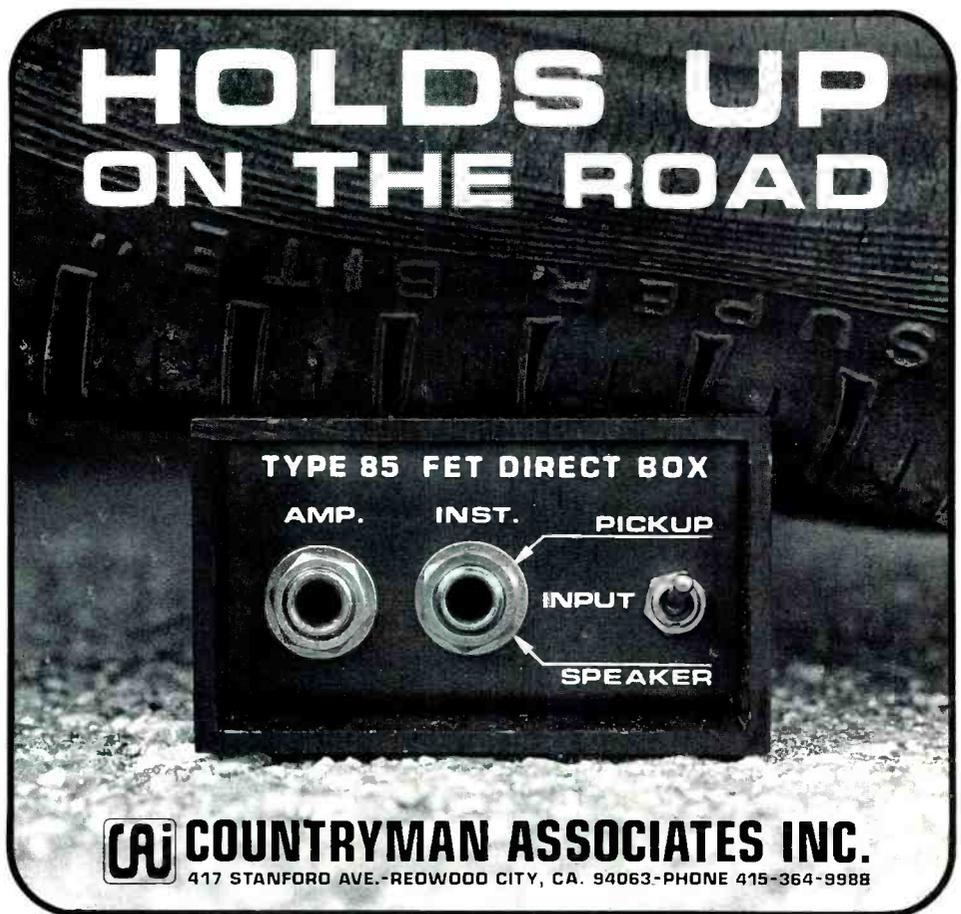
Wind Over The Earth, Inc., 1688 Redwood Ave., Boulder, CO, 80304 (303-443-9822) CO, Amplifiers; Equalizers; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers; Studio Loudspeakers, Accessories; Sound Reinforcement; Equip. Racks, Mounting Brackets, Cables

CONNECTICUT

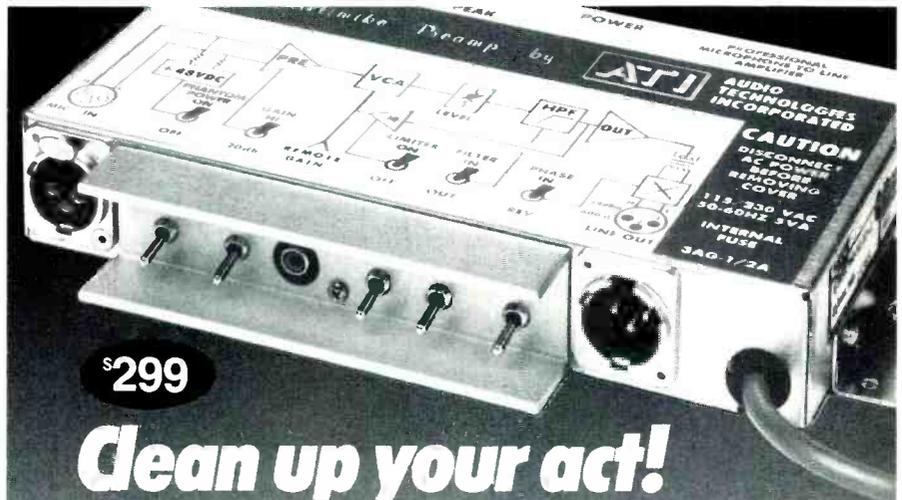
Cassette Tek, Inc., 1605 Thomaston Ave., Waterbury, CT, 06704 (203-757-4848) CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VA, VT, Cassette Duplication & Equip.

The Music People, Inc., P.O. Box 648, West Hartford, CT, 06107 (203-236-7134) USA, Signal

HOLDS UP ON THE ROAD



Circle (44) on Rapid Facts Card



\$299

Clean up your act!

M100 *Ultimate* Microphone Amplifier

Eliminate dimmer noise, RF pickup, hum and rolloffs due to long mike cable runs by mounting this small, rugged, full featured preamp right at the source.

Features: • switchable gain • low cut filter • 48 volt phantom power • phase reverse switch • output limiter • DC remote gain trimmer.

The unusually quiet, servo controlled, instrumentation amplifier input has excellent hum and RF rejection and accepts up to +20dBu. A unique output driver provides distortion free transformer isolation, absolutely necessary for driving long lines.

Self contained power supply, Dual rack mounting.

Free Detailed Brochure & Full Specifications Available

AUDIO TECHNOLOGIES, INC.
328 W. Maple Ave., Horsham, PA 19044
(215) 443-0330 • FAX (215) 443-0394



Circle (45) on Rapid Facts Card

Processors; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Headphones; Stereo Mixers

North Star Audio, 1367 High Ridge Road, Stamford, CT, 06903-4908 (203-968-2323; Fax 203-322-4993) CT, ME, NH, NJ, NY, PA, VT, Amplifiers; Consoles-Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplicators; Tape Machines, Analog, Digital; Test Equip.; Cable; Connectors

FLORIDA

AMP Services, 224 Datura St., Suite 614, West Palm Beach, FL, 33401 (407-659-4805; 800-826-0601) Worldwide, Parts for: Tape Duplication & Tape Machines, Analog; Relapping Audio Heads; Rebuilt Capstan Motors

Computers & Music, 19470 N.W. 59th Ave., Miami, FL, 33015 (305-620-4483) Miami, Caribbean, MIDI & Recording Studio Consultant; Recording Studio; Monitoring; Computer Sequencing

Harris Audio Systems, Inc., 1962 N.E. 149th St., N. Miami, FL, 33181 (305-944-4448) FL, PR, VI, Caribbean, Amplifiers; Consoles, Recording, Production & Sound Reinforcement, Editing Systems, Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers; Microphones & Access.; Digital Workstations

Omni Technology, Inc., 120 S.W. 21st Terrace, Suite C-104, Fort Lauderdale, FL, 33312-1462 (305-583-0626; Fax 305-791-8986) AL, FL, GA, MS, NC, SC, TN, TX, Amplifiers; Consoles-Sound Reinforcement, Recording & Production; Loudspeakers-Studio Monitoring & Sound Reinforcement; Recording Tape & Access.; Tape Machines, Analog & Digital

On Stage Audio, 773 Kirkman Road, Unit 120, Orlando, FL, 32811 (407-292-0012) USA, Industrial Show Consoles. Sound Reinforcement

Southeast Audio Services, 1791 Blount, Suite 206, Pompano Beach, FL, 33069 (305-974-1500) FL, Amplifiers; Consoles, Recording & Production; Editing Systems; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones &

Access.; Noise Reduction Systems; Tape; Synthesizers & Keyboards; Time Code Synchronizers; Tape Machines, Analog & Digital

Stereo Sales & Audio Repair Service, 637 W. Tennessee St., Tallahassee, FL, 32304 (904-224-2635) So.-AL, No.-FL, So.-GA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog & Digital

GEORGIA

Baker Audio, Inc., 2195 Norcross Tucker Road, Norcross, GA, 30071 (404-441-2000) AL, DC, FL, GA, KY, MS, NC, PR, SC, TN, VA, WV, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors; Tape Machines, Analog

Contractors Electronic Supply, 4451 N. Log Cabin Drive, Suite 132, Smyrna, GA, 30080 (404-436-7605; 800-423-8859) USA, Microphones & Access.; Equalizers; Amplifiers; Compact Disk & Phono Reproduction Equip.; Rack Mount Access.; Projection & Big Screen Video; Cable & Connectors; Lighting Products

Victor Duncan, Inc.-Atlanta, 1575 Northside Drive N.W., Suite 355, Atlanta, GA, 30318 (404-355-3001; Fax 404-355-5720) USA & Canada, Audio, Film, Video, Lighting Production Equipment; Test Equip.; Tape; Vans & Acces. Service & Repair; Over 100 Lines of Pro Equip.

Integrity Audio, 2759 Skyland Drive N.E., Atlanta, GA, 30319 (404-636-2601; 800-366-4811) AL, FL, GA, MS, NC, SC, TN, Consoles, Recording; Microphones; Signal Processors

William J. Ray & Associates, 4451 Log Cabin Drive, Suite 132, Smyrna, GA, 30080 (800-423-8859; 404-436-7233) AL, GA, MS, NC, SC, TN, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones; Noise Reduction; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers

Sound Investment Co., Inc., 3586 Pierce Drive, Chamblee, GA, 30341 (404-458-1679) So.east USA,

Shipping Nationwide, Recording Tape; Equalizers; Loudspeakers-Studio Monitoring; Microphones & Acces.; Signal Routing & Patching Equip.; Cables; Studio Editing & Production; Studio D-Mag & Erase Products; Tape Reels & Boxes; Duplication Services, Audio, Video; Remote Recording

Storeel Corp., 3337 W. Hospital Ave., Atlanta, GA, 30341 (404-458-3280) USA, Canada, Europe, Asia, High Density Tape Storage Systems

IDAHO

Sun Valley Audio, P.O. Box 285, Sun Valley, ID, 83353 (208-726-3476) ID, MT, WY, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog, Digital; Test & Measurement Equip.; Time Code Synchronizers

ILLINOIS

AAA Swing City Music, 1312 Vandalia, Collinsville, IL, 62234 (618-345-6700; 314-421-1558) IL, MO, Amplifiers; Consoles; Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processing; Synthesizers & Keyboards; Tape Machines, Analog; Time Code Synchronizers

Audio Resources, Inc., 778 Burr Oak Drive, Westmont, IL, 60559 (312-665-1180) IL, IN, KY, WI, Amplifiers; Consoles, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.; MIDI Devices & Sound Samplers; Wire & Cable

Bridgewater Custom Sound, P.O. Box 135, South Holland, IL, 60473 (312-596-0309) IL, IN, MI, WI, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Misc. & Accessories; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape

Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers

Columbia Audio/Video, 1741 Second St., Highland Park, IL, 60035 (313-433-6010) IL, IN, IA, MO, WI, Consoles; Editing Systems; Microphones & Acces.; Recording Tape

Computer Musician Coalition, 3010 N. Sterling Ave., Peoria, IL, 61604 (309-685-4843) Worldwide, Software & Access. for Computers Used in Music Application

Conquest Sound Inc., RR2 Box 1AB, Monee, IL, 60449 (800-323-7671; 708-534-0390; Fax 708-534-0398) Worldwide, Wire; Audio Connectors; Audio Wiring Systems; Splitting Systems; Audio Cables; Stage Boxes; Direct Boxes; Cue Boxes; Cable Testers; Video & Computer Wiring Systems

Victor Duncan, Inc., 661 N. Lasalle St., Chicago, IL, 60610-3770 (312-943-7300; Fax 312-943-9043) USA & Canada, Audio, Film, Video, Lighting Production Equipment; Test Equip.; Tape; Vans & Acces.; Service & Repair; Over 100 Lines of Pro Equip.

Flores Music & Electronics, 922 E. War Memorial, Peoria, IL, 61614 (309-682-4553) IL, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.

Gand Music & Sound, 780 Frontage Road, Northfield, IL, 60093 (708-446-4263) IL, IN, WI, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines-Analog & Digital; Time Code Synchronizers

See advertisement page 107

Halls Music, 204 N. Logan Ave., Danville, IL, 61832 (217-446-7450) IL, IN, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Recording Tape; Signal Processors; Synthesizers & Keyboards

Milam Audio Co., 1470 Valle Vista Blvd., Pekin, IL, 61554 (309-346-3161; Fax 309-346-6431) USA, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers;

Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; SignalProcessors; Synthesizers & Keyboards; Tape Duplication; Tape Machines. Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; DAT Systems; Studio Design & PA Installations; Consulting

New Horizons Electronic Marketing, 2211 Lakeside Drive, Bannockburn, IL, 60015 (312-234-6500) Upper half-IL, Minneapolis & St. Paul-MN, So-WI, Amplifiers; Consoles; Equalizers; Loudspeakers; Microphones; Signal Processors; Stage Lighting; Wireless Microphones; Cables/Connectors & Bulk Cables; Fiber-optic Cable for Lighting; Phone Cartridges

On Stage Audio, 2380 Brickvale Drive, Elk Grove, IL, 60007 (312-595-4941) USA, Industrial Show Consoles, Sound Reinforcement

OPUS Recording & Equipment Co., 4262 Grand Ave., Gurnee, IL, 60031 (312-336-6787; Fax 312-336-6895) Worldwide, Amplifiers; Consoles-Recording, Production & Sound Reinforcement;

Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape;Signal Processors; Tape Duplication; Tape Machines-Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Video Equip. & Access.

Douglas Ordon & Co., Inc., 211 E. Ohio St., Suite 1116, Chicago, IL, 60611 (312-527-4569) IL, IN, IA, MI, MN, MO, OH, WI, Amplifiers; Consoles, Recording, Production & Sound Reinforcement, Loudspeakers, Studio Monitoring; Noise Reduction Systems; Signal Processors; Test & Measurement Equip., Time Code Synchronizers; Disk Based Digital Recorder/Editor; Editing Systems

Pyramid Audio Inc., 450 W. Taft Drive, South Holland, IL, 60473 (312-339-8014) AR, IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, OH, SO, WI, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitors; Microphones, MIDI; Noise Reduction; Recording Tape;

Signal Processors;Synthesizers & Keyboards; Tape Duplication; Tape Machines Analog & Digital; Time Code Synchronizers

Roselle Music Inc., 217 E. Irving Park, Roselle, IL, 60172 (312-529-2031) IL, Amplifiers, Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.;MIDI Devices & Sound Samplers; Recording Tape; Noise Reduction Systems; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog & Digital

Rowe Marketing, 727 N. Hudson, Suite 201, Chicago, IL, 60610 (312-664-3755) IL, IN, MN, WI, MIDI Devices & Sound Samplers; Time Code Synchronizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Editing Systems (DAT); Microphones

SG Audio, 445 W. Erie, Suite 201, Chicago, IL, 60610 (312-266-1901; Fax 312-266-1904) IL IN, IA, KS, KY, MI, MD, NE, ND, OH, SD, TN, WI, Amplifiers; Consoles-Recording, Production & Soundreinforcement; Editing Systems; Equalizers; Loudspeakers-Sound

Reinforcement & Studio Monitoring; Microphones & Access.; Recording Tape; Signal Processors; Tape Machines-Analog & Digital; Time Code Synchronizers; Digital Workstations

Sound Core Music, 122 S. Illinois, Carbondale, IL, 62901 (618-457-5641) IL, IN, MO, KY, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; SignalProcessors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test Measurement Equip.; Time Code Synchronizers

Technical Projects Inc., P.O. Box 3247, Barrington, IL, 60010 (312-381-5350; 800-562-5872; Fax 312-381-4360) USA, Canada, Australia, Loudspeakers, Sound Reinforcement, Studio Monitoring; Full line of Wired Intercom; Headsets for Communication; Headphones

Tek Media Supply Co., 4700 W. Chase Ave., Lincolnwood, IL, 60646 (312-677-3000; 800-323-

THE FIRST...

and still the best... midrange for your 3-way system

It's true... the **M4** was the first, and it's still the only logical choice, when it comes to mid-range performance in any 3-way system. We can continue to make this bold claim because the **M4** is a one-of-a-kind device which was designed exclusively for the midrange

frequencies between 200 and 2,000 Hz. While other midranges fall flat in this bandwidth, the **M4** excels with high output, efficiency, power handling capacity, low distortion, and smooth response.

Enclosed in a rugged, weatherproof fiberglass case, the **M4** is capable of producing average power levels



The M4 Midrange Driver

The **M4** can be found in countless 3-way systems around the world where high quality sound and high output levels with low distortion are required. If you're contemplating your own 3-way design and haven't experienced what an **M4** can do, the time has come.

in excess of 100 acoustical watts. Other features include:

- 4.5 inch edgewound aluminum voice coil
- 4-inch diameter exit throat
- 6¼-inch extremely rigid, ultralight diaphragm
- Complementing fiberglass pattern control horns

Community

PROFESSIONAL SOUND SYSTEMS

333 East Fifth Street • Chester, PA 19013 • Tel. (215) 876-3400 • FAX (215) 874-0190

Circle (46) on Rapid Facts Card

December 1989 *Recording Engineer/Producer* 95

www.americanradiohistory.com

7520) National, Video/Film Supplies & Acces.; Storage Systems

Video Basics, Inc., 1220 Richards St., Joliet, IL, 60433 (815-726-6411) IL, IN, WI, Editing Systems; Microphones & Acces.; Video Production Equipment Sales; Cases

INDIANA

Allied Broadcast Equipment, 3712 National Road W., Richmond, IN, 47375 (317-962-8596; Fax 317-962-8961) USA & Canada, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equipment; Time Code Synchronizers

Fox Electronics Co. Inc., 3209 Union Pike, Richmond, IN, 47374 (317-935-7343) IN, OH, Amplifiers; Consoles, Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.

IRC Audio Inc., 8112 Castleway Court W., Indianapolis, IN, 46250 (317-849-6887) IL, IN, KY, MI, OH, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers Sound Reinforcement & Studio Monitoring; Microphones & Acces., MIDI; Noise Reduction Systems, Recording Tape; Signal Processors; Tape Machines Analog; Test & Measurement Equip.; Time Code Synchronizers

Starin Marketing, 56 E. Oak Hill Road, Chesterton, IN, 46304 (219-929-4127) IL, IN, KY, MN, ND, SD, WI, Equalizers; Tape Machines, Analog & Digital; Consoles; Microphones & Acces.; Tape Duplication; Amplifiers; Loudspeakers; Noise Reduction Systems; Signal Processors; Test & Measurement Equip.; Time Code Synchronizers

Tipton Sound & Lighting, 950 S. White River Parkway W. Drive, Indianapolis, IN, 46221 (317-631-2703) IL, IN, KY, MI, OH, Amplifiers; Consoles, Sound Reinforcement & Recording; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Signal Processors; Stage Lighting Equip.; Road Cases; Disco Lighting Equip.

IOWA

Audiovisual, Inc., 415 S.W. Eighth St., Des Moines, IA, 50309 (515-

282-4800) IA, MT, NE, ND, SD, WI, Amplifiers; Consoles; Editing Systems, Equalizers; Loudspeakers; Microphones & Acces.; Tape Machines, Analog

Rondinelli Music/Audio, 3270 Dodge St., Dubuque, IA, 52001 (319-583-8271) IL, IA, WI, Ship anywhere by mail order, Amplifiers; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Consoles, Recording & Sound Reinforcement; Equalizers; Loudspeakers Sound Reinforcement & Studio; Microphones & Acces.; MIDI Devices & Sound Samplers

KANSAS

McClelland Sound, Inc., 345 N. Ohio, Wichita, KS, 67214 (316-265-8686) KS, OK, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Signal Processors; Test & Measurement Equip.

Mission Electronics Inc., 9301 West 74th St., Shawnee Mission, KS, 66204 (913-362-1485) KS, MO, NE, Amplifiers; Consoles; Editing Systems, Loudspeakers; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers

KENTUCKY

Denny Heglin Music Inc., 734 Madison Ave., Covington, KY, 41011 (606-491-6600) IN, KY, OH, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Noise Reduction Systems; Signal Processors

Willcutt Guitar Shoppe, Inc., 419 Rosemont Garden, Lexington, KY, 40503 (606-276-2713) KY, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog

LOUISIANA

Music City, 515 S. College, Suite 201, Lafayette, LA, 70503 (800-673-0565) Worldwide, Amplifiers; Consoles-Recording, Production &

Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines-Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Guitars

Propaganda Production Ltd., 5609-A Crawford St., Harahan, LA, 71023 (504-733-8211; Fax 504-733-4532) FL, LA, MS, TX, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Recording Tape; Signal Processors

Shreveport Music Co. Inc., 1610 E. Bert Kouns, Shreveport, LA, 71105 (318-798-6000; 318-797-MIDI) AR, LA, TX, Amplifiers; Consoles Recording & Sound Reinforcement; Equalizers; Loudspeaker, Sound Reinforcement & Studio; Microphones; MIDI Devices; Noise Reduction Systems; Signal Processors; Synthesizers

MARYLAND

Audio Maintenance Services, P.O. Box 2072, Montgomery Village, Gaithersburg, MD, 20879 (301-540-6656) DC, MD, VA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.

Gordon Miller Music Inc., 8805 Orchard Tree Lane, Towson, MD, 21204 (301-825-2558) MD, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Samplers; Noise Reduction; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog

Washington Professional Systems, 11157 Veirs Mill Road, Wheaton, MD, 20902 (301-942-6800; Fax 301-946-3241) DC, DE, MD, NJ, PA, VA, WV, Digital Production Centers; Hard-disk Recorders; Noise Reduction Systems; Mixing Console & Track Recorders; Audio Editing Machines

MASSACHUSETTS

Audio Video Research, 106 Main St., Watertown, MA, 02172 (617-924-0660; Fax 617-924-0497)

North & South America, Amplifiers; Consoles; Equalizers; Loudspeakers, Reinforcement, Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog, Digital; Time Code Systems

Barnstorm Music, 167 Main St., Milford, MA, 01757 (508-473-9802) MA, Amplifiers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; MIDI Devices; Signal Processors; Synthesizers & Keyboards

Boston Light & Sound Inc., 124 Brighton Ave., Allston, MA, 02134 (617-787-3131) CT, ME, MA, NH, RI, VT, Amplifiers; Consoles-Recording & Production, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitors; Microphones & Acces.; Signal Processors

CYNC Corp., 1482 Beacon St., Brookline, MA, 02146 (617-277-4317) CT, ME, MA, NY, VT, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices; Noise Reduction; Tape; Signal Processing; Synthesizers; Tape Duping; Tape Machines, Analog & Digital; Test Equip.; Time Code Equip.; Television Location Equip.; TV Studio Equip.



db Engineering, 214 Lincoln St., Suite 103-C, Allston, MA, 02134 (617-782-4838; Fax 617-782-4935) Worldwide, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines-Analog & Digital; Time Code Synchronizers

Dr. T's Music Software, 220 Boylston St., Suite 206, Chestnut Hill, MA, 02167 (617-244-6954) USA, Canada, MIDI Devices & Sound Samplers; Time Code Synchronizers

Downtown Sounds, Inc., 21 Pleasant St., Northampton, MA, 01060 (413-586-0998) MA, Amplifiers; Microphones; MIDI Devices; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog

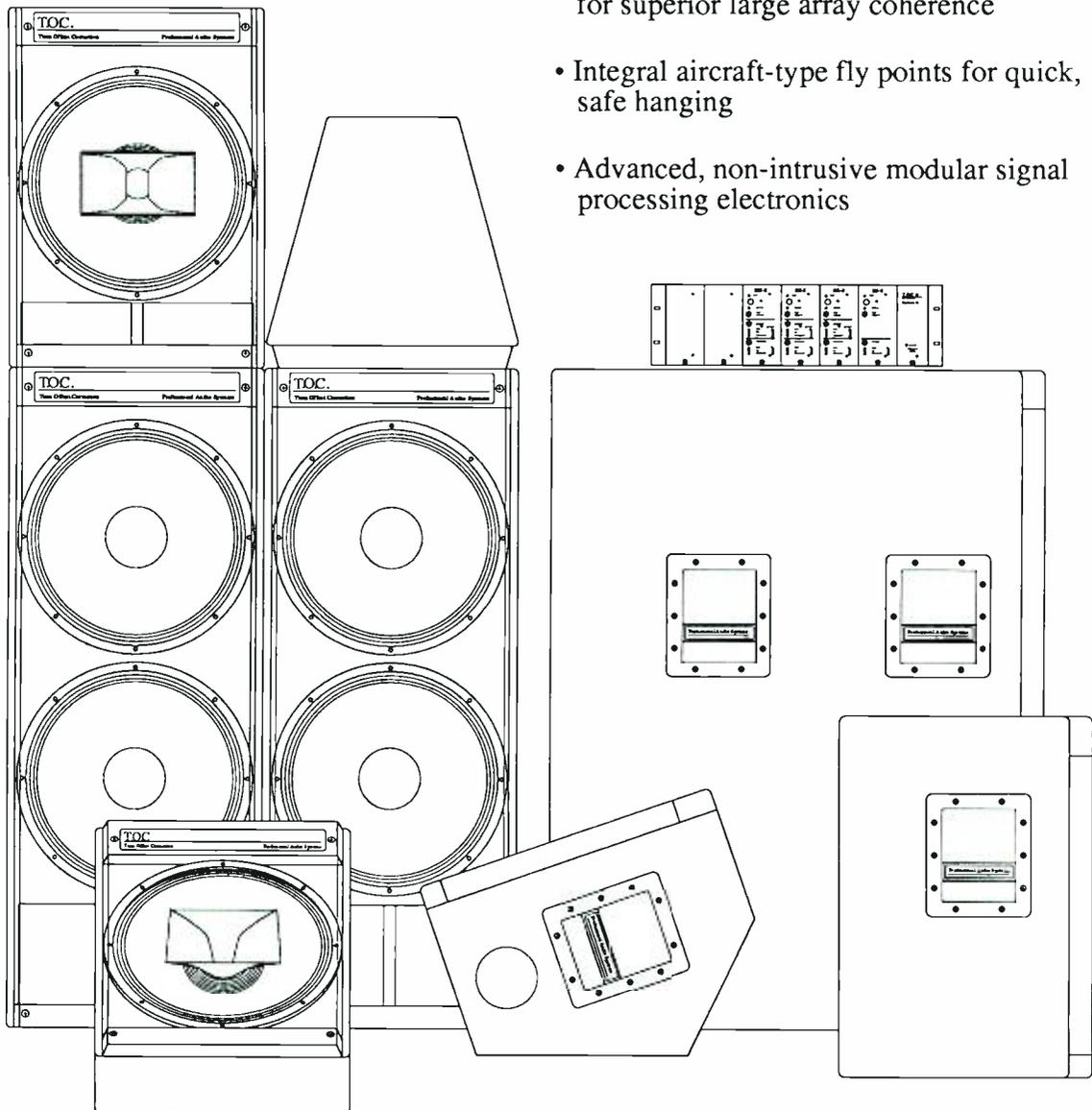
T.O.C.™

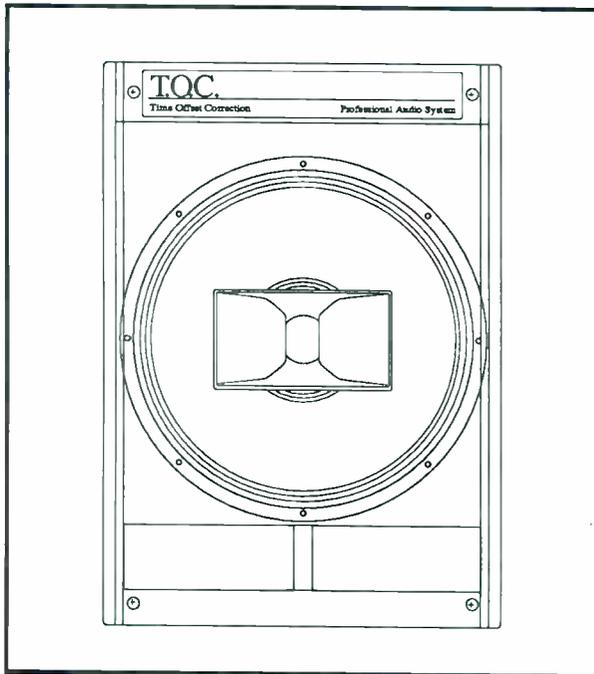
SYSTEM-2 REINFORCEMENT

Time Offset Correction

Professional Audio Systems

- Smooth, phase coherent response with Time Offset Correction (T.O.C.™)
- Coaxial design for precise imaging and compact, high performance arrays
- Trapezoidal shape, minimal-size enclosures for superior large array coherence
- Integral aircraft-type fly points for quick, safe hanging
- Advanced, non-intrusive modular signal processing electronics





Introduction

The T.O.C.[™] System 2 is comprised of three electronically controlled loudspeaker systems and a modular electronic signal processing system with a host of advanced features and unique capabilities. Designed to serve in high-quality, high-level sound reinforcement, System 2 loudspeaker systems include a compact, full range Reinforcement System, model RS-2, a versatile high-output monitor, the SW-2 Stage Wedge, and a modular system for Extended Bass, model EB-2.

High quality sound reinforcement demands accurate, uncompromising loudspeaker performance, whether the loudspeakers serve as individuals, or components of high-power arrays for large audience events. This takes transducers that are reliable and capable of sustained high output levels with high resolution and dynamic linearity. This also requires that the loudspeakers radiate coherent acoustic energy—that they speak with a single voice.

Coherence

Coherent performance is widely claimed, but true coherence requires coincident transducers.

Loudspeaker components that are physically non-coincident can only deliver coherent sound pressure along one axis. (Signal delay can change the axis of coherent pressure summation in these systems, but non-coherent energy radiated by offset transducers cannot be corrected.)

Coaxial loudspeaker systems have one axis of radiation for all frequencies, and are the only two-way sources that can be completely time-corrected for offset acoustic centers. With PAS-developed Time Offset Correction, coaxial loudspeakers offer the compelling advantage of point-source, time-coherent alignment of the low and high frequency components.

RS-2 and SW-2

The high-power demands of sound reinforcement are beyond the capabilities of conventional coaxial transducers. These demands are met in System 2 models RS-2 and SW-2 by a very un-conventional coaxial transducer system, the CXL-2580C. Low frequencies are handled by a high-power, 4-inch voice coil, 15-inch bass transducer. The coaxially mounted constant-coverage 2-inch throat high frequency horn carries the large-format JBL model 2450J Neodymium 4-inch diaphragm compression driver for high frequencies.

This unique combination of acoustic elements enables very high overall acoustic output, smooth, coherent mid-frequency pressure and power response, low distortion and outstanding system reliability.

RS-2 Reinforcement Systems deliver versatility and performance unsurpassed in compact sound reinforcement loudspeakers. The RS-2 is housed in a trapezoidal cabinet, allowing arrays to wrap around a point, thereby reducing overall array dimensions to maximize coherence and minimize interference.

With the RS-2 electronics module, the system response is usable to 50 Hz, and ± 2 dB, from the boundary-dependent region to beyond 15 kHz.

The SW-2 Stage Wedge uses the identical coaxial transducer to the RS-2 housed in a ultra-compact enclosure. The unique cabinet shape allows the monitor to be angled at 20°, 45° or 90° to the stage surface.

The constant coverage horn design used in both systems provides 30 by 60 degree distribution, with a smooth, interference-free transition from (wide angle) low frequency radiation to controlled distribution at high frequencies. The throat geometry results in constant angular radiation to beyond the audible frequency range.

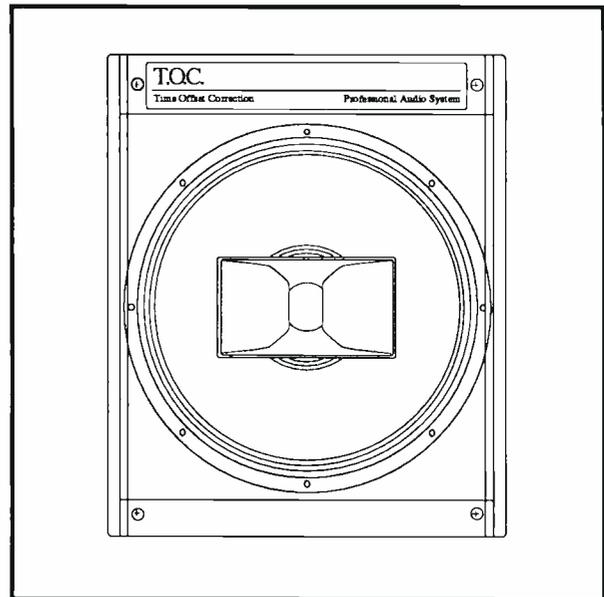
EB-2

The EB-2 Extended Bass subwoofer system consists of dual fifteen-inch high-power transducers for extended bass response to 25 Hz. The enclosure design minimizes frontal area for improved low frequency coupling when used in arrays and is identical in width to the RS-2 for stacking or hanging array applications.

S-2 Electronics

S-2 electronics are highly-advanced loudspeaker signal processing systems housed in a modular cardframe chassis with a common power supply. S-2 insert modules provide signal processing appropriate to each System 2 loudspeaker model. Each chassis will house up to six insert modules (one module per System 2 loudspeaker model is required for each mix channel).

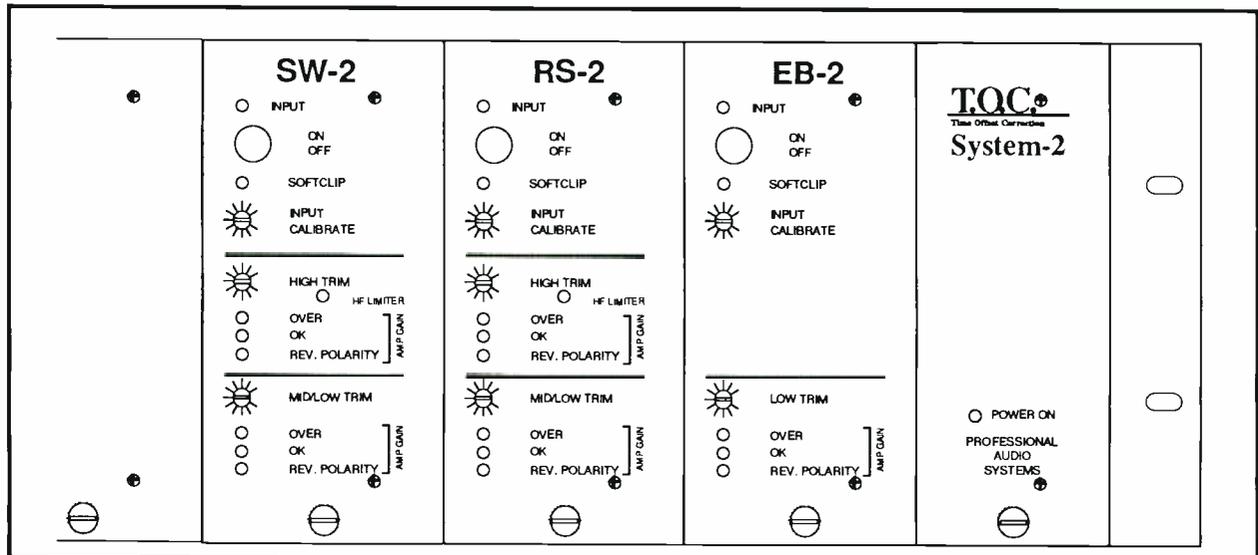
Unlike other electronically controlled products, System 2 loudspeakers require very little equalization. Consequently, there is no need to



protect the transducers from excessive EQ at high levels. System 2 doesn't use conventional compression or limiting for transducer protection which can damage musical dynamics. Instead, a 'soft clipper' circuit and an optically-coupled high frequency protect circuit are used.

Adjustment of system gains sets the threshold of the soft-clipping circuit. The soft clipper doesn't prevent power amplifier clipping, but 'softens' the clipped waveform, reducing the audible high frequency distortion products.

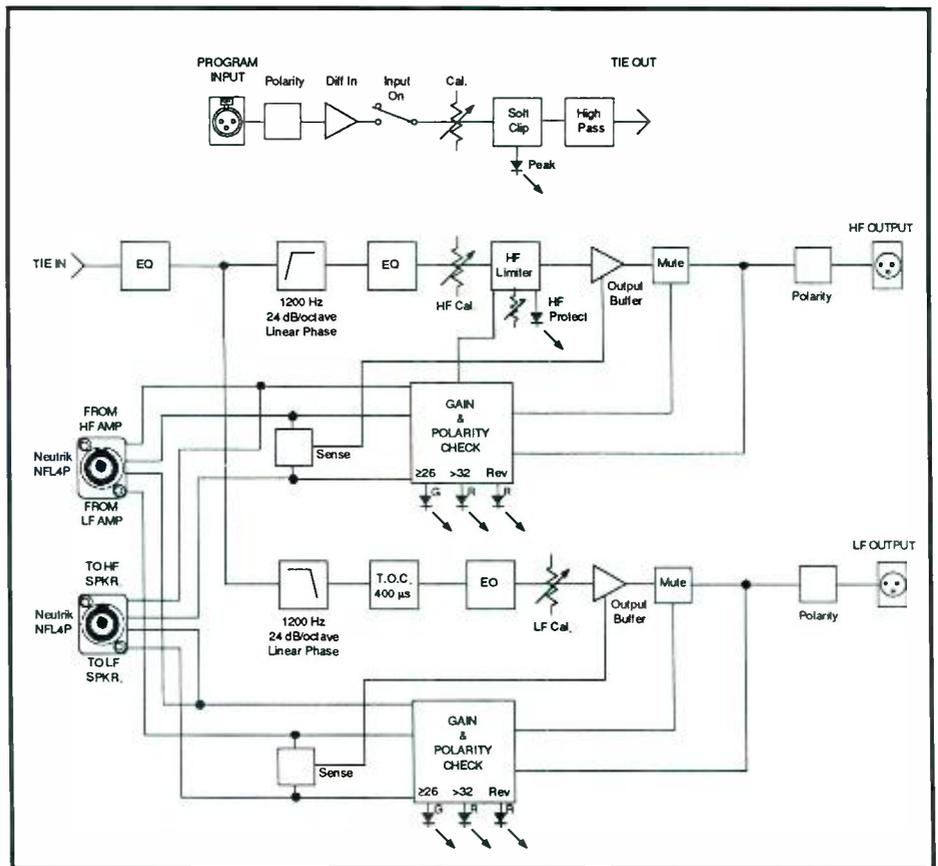
The HF protect circuit provides protection from high average power, resulting from acoustic feedback, ground-loop oscillations or sustained abuse. Because of the relatively long threshold



integration time (greater than 100 ms.), the circuit allows the passage of musical transients, while maintaining long-term high frequency exposure to under 30 watts.

Electronic monitoring of amplifier gains and signal polarities make setup and adjustments easy and foolproof.

The electronics include Active Parameter Modification, a high-pass filter that acts with the transducers and cabinets to approximate a sixth-order maximally flat delay (Bessel) high pass response for superior low frequency transients and protection from infrasonic program energy.



The frequency dividing Filters are symmetrical, 4-pole linear phase filters normalized to be 0° apart 5 dB below passband. This configuration achieves minimal polar tilting, with rapid transition from low to high frequency transducers, and greatly superior transient characteristics.

Signal flow for the RS-2 control module is shown at right, above. The SW-2 module is identical in functions and features, differing only in cabinet-specific bandpass processing. Each module has a balanced differential input with an XLR connector.

The gain and polarity check circuit provides LED indication for setup of system levels and detection of a reverse polarity condition. Amplifier and loudspeaker connections loop through the insert module on Neutrik NFL4P connectors to enable continuous monitoring of the amplifier outputs and Active Parameter Modification.

The EB-2 module is similar in input configuration, but with a single balanced output and 100 Hz 4-pole linear phase high pass and low pass filters. The high pass filter connects to the RS-2 insert module TIE IN for three-way system operation.

System-2 products configure reliable, high-output, high-resolution transducers for maximum acoustic output in minimal-sized enclosures. The unique packaging of System-2 loudspeakers affords the ability to construct high output sound reinforcement arrays in a fraction of the space required for conventional systems. This increases the bandwidth of coherent energy radiation, resulting in greater overall acoustic output and reduced temporal distortion.

Coherent sound radiation is controlled by wavelength of the sounds and the physical displacement of sound sources. System-2 products are unique and incomparable—the only true, time- and energy-coherent, high-resolution, loudspeaker systems for high-level sound reinforcement.

LISTEN

"It would be hard for the producers to imagine maintaining as refined and transparent a sound on the latest Little Feat album, "Let it Roll", without B&K microphones."

George Massenburg
Engineer, Producer
and founder of
GML



BRUEL & KJÆR
PRO AUDIO
THE INTERNATIONAL
STANDARD
IN MICROPHONES

1-800-445-1218, ID-04000#

Circle (47) on Rapid Facts Card

E.A.R.S., Inc., 90 Windom St., Boston, MA, 02134 (617-783-5229; Fax 617-254-8781) USA, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Signal Processors; Time Code Synchronizers; Transformers

G.M.I. New England Inc., 65 Maguire Ave., Avon, MA, 02322 (508-588-8043) CT, ME, MA, NH, RI, VT, Amplifiers; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitors; Microphones; MIDI Devices & Sound Samplers; Signal Processing; Synthesizers & Keyboards; Recording Equip.; Consoles-Reinforcement & PA

Lake Systems Corp., 287 Grove St., Newton, MA, 02166 (617-244-6881) CT, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Studio Monitoring & Sound Reinforcement; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; TapeMachines, Analog & Digital; Time Code Synchronizers

Parsons Audio, 192 Worcester St., Wellesley Hills, MA, 02181 CT, ME, MA, NH, RI, VT, Amplifiers; Consoles-Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; SignalProcessors; Synthesizers & Keyboards; Tape Duplication; Tape Machines-Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Professional Audio Associates Inc., 170 Cambridge St., Burlington, MA, 01803 (617-229-6050) New England States; Upstate NY, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors;Tape Duplication; Tape Machines, Analog & Digital

MICHIGAN

Advanced Lighting & Sound, 40375 Dequindre Road, Troy, MI, 48098 (313-528-3113) MI, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones; Signal Processing

AIM Marketing Group, Inc., 4329 Pine Ridge Court, Ann Arbor, MI, 48105 313-662-6101 313-662-6216, MI, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; MIDI Devices & Sound-Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Time Code Synchronizers

The Audio Broadcast Group, Inc., 2342 S. Division Ave., Grand Rapids, MI, 49507 (616-452-1596) USA, Amplifiers; Consoles, Recording & Production; Equalizers; Loudspeakers, Studio Monitoring; Microphones; Noise Reduction;Tape Machines, Analog; Studio Furniture

Communications System Group, 13355 Capitol Ave., Oak Park, MI, 48237 (313-399-2000) MI, OH, Amplifiers; Consoles, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Studio Monitoring; Microphones & Access.;Recording Tape; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers

Cooks Music, 615 N. Mission, Mount Pleasant, MI, 48858 (517-772-2455) MI, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement, & Studio Monitoring; Microphones & Acces., MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape;Signal Processors; Synthesizers & Keyboards; Tape Duplication, Tape Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers

Victor Duncan, Inc., 23801 Industrial Park Drive, Suite 100, Farmington Hills, MI, 48024-1132 (313-471-1600; Fax 313-471-1940) USA & Canada, Audio Film, Video, Lighting Production Equipment; Test Equipment; Tape; Vans & Acces.; Service & Repair; Over 100 Lines of Pro Equip.

ElectroMedia Services, Inc., 24166 Haggerty Road, Farmington Hills, MI, 48024 (313-477-6502) IN, MI, OH, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring;Noise Reduction Systems; Signal Processors; Tape Duplicators; Tape Machines, Analog & Digital

FiFe-Pearce Electric Co., 17141 Ryan Road, Detroit, MI, 48212 (800-521-1062) Nationwide, Tape Eraser Equip. Video/Audio

Hy James - The Audio Professionals, 24166 Haggerty, Farmington Hills,

MI, 48024 (313-471-0027) IL, IN, MI, OH, WI, Consoles; Tape Recorders; Cartridge Machines; CD Players; Microphones; Direct Boxes; Speakers; Amplifiers; Reverberation; Signal Processing; Equalization; Noise Reduction; TT & Cartridges; Intercoms; Telephone Interfaces; Headphones; Recording Tape; Film & Video; Clock Systems; SMPTE Time Code/MIDI; Test Equip.; RF; Accessories

Key Marketing, Inc., 11395 Aspen Drive, Plymouth, MI, 48170 (313-459-6040) MI, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices; Signal Processing; Tape Machines, Analog; Time Code Synchronizers

Milms Copier Products, 12009 N. Saginaw St., Mount Morris, MI, 48458 (313-686-8120; 313-686-1866) USA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Recording Tape; Tape Duplication; Tape Machines, Analog

The Music Castle, Inc., 34 S. Telegraph, Pontiac, MI, 48053 (313-682-0544) MI-primarily metro Detroit & surrounding area, Amplifiers; Consoles, Sound Reinforcement; Loudspeakers, Sound Reinforcement; Equalizers; Microphones & Access.; Noise Reduction Systems; Signal Processors; Tape Machines, Analog

The Music Castle, Inc., 1418 N. Woodward, Royal Oak, MI, 48067

(313-543-5070) MI-primarily metro Detroit & surrounding area, Amplifiers; Consoles, Sound Reinforcement; Loudspeakers, Sound Reinforcement; Equalizers; Microphones, Access.; Noise Reduction Systems.; Signal Processors; Tape Machines, Analog

Pro Co Sound, Inc., 135 E. Kalamazoo Ave., Kalamazoo, MI, 49007 (800-253-7360; Fax 616-388-9681) USA, Connectors; Adapters; Floor Pockets; Cabling; Audio Accessories, Patchbays & Harnessing

Sound Good Audio, Inc., 2222 Spikes Lane, Lansing, MI, 48906 (517-372-5278; Fax 517-372-1871) USA & Canada, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processing; Tape Machines, Analog; Video Wall

Synder Systems, 16640 E. Warren Ave., Detroit, MI, 48224 (313-881-5167) MI, Amplifiers; Consoles (Live & Studio); Equalizers; Speakers (Studio & Live); Microphones & Access.; MIDI Devices & Checkers; Noise Reduction; Tape; Signal Processors; Synthesizers & Keyboards; Tape, Analog; Studio Lighting; Rentals, Stage, Rehearsal Studios

Tatum Labs, Inc., 3917 Research Park Drive, Suite B-1, Ann Arbor, MI, 48108 (313-663-8810) Worldwide, Test & Measurement Equip. (simulation software)

AVC Systems Div. of Vaughn Communications Group, 7901 Computer Ave. S., Minneapolis, MN, 55435 (612-832-3232) IL, IA, MI, MN, ND, SD, WI, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Video-tape Duplication

Eclipse Concert Systems, Inc., 153 E. Thompson Ave., West St. Paul, MN, 55118 (612-451-8878) IA, MN, MT, ND, SD, WI, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog; Time Code Synchronizers; Cable; Rigging; Musical Instruments; Lighting

Garceau Music & Radio Shack, 24 W. Main St., Crosby, MN, 56441 (218-546-5523) MN, MIDI Hardware, Software & Consulting; Computers; Keyboards

Marguerite's Music, 2409 10th St. S., Moorhead, MN, 56560 (218-233-7546) MN, MT, ND, SD, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; MIDI Devices & Sound Samplers; Noise

Reduction Systems; Recording Tape; Synthesizers & Keyboards; Tape Machines, Digital; Guitars; Computers, Music Software; Keyboards, Manual, Electronic; Percussion, Electronic & Acoustic

North Star Sound, Inc., 1406 First Ave. S., Minneapolis, MN, 55403 (612-871-6016) MN, WI, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors; Wireless Microphones; Stage Intercom.

Southern Thunder Sound, Inc., 2814 Washington Ave. N., Minneapolis, MN, 55411 (612-521-2356; Fax 612-521-2258) IA, MN, ND, SD, WI, Loudspeakers, Sound Reinforcement; Signal Processors; Rigging; Amplifiers; Equalizers; Acoustic Design & Construction; Microphones & Access.; Amplifiers; Consoles, Sound Reinforcement

Yore Co., 3564 Rolling View Drive, White Bear Lake, MN, 55110 (612-770-9760) MN, ND, SD, West-WI, Amplifiers; Consoles, Recording, Production, & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Wireless Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.; Wireless Intercoms; Telco Equip.

MINNESOTA

MISSOURI

What you see is what you get...

The MRL Calibration Graph is your proof of the quality control that goes into every MRL Reproducer Calibration Tape. We guarantee each one to exceed the performance requirements of IEC, NAB, AES, and EIA Standards.

MRL Calibration Tapes are designed and supported by experts in magnetic recording and audio standardization... we helped write the standards. Each tape comes with detailed instructions and application notes.

The MRL catalog includes tapes for all studio applications. In addition to the usual spot-frequency tapes, we make single-tone tapes, rapid-swept frequency tapes, wideband or 1/3rd octave-band pink random noise tapes, and difference-method azimuth-setup tapes. Most are available from stock.

For a catalog and a list of over 60 dealers in the USA and Canada, contact

Magnetic Reference Laboratory, Inc.
229 Polaris Ave., Suite 4
Mountain View, CA 94043
(415) 965-8187

Tape Fluxivity Level vs. Value in Table (over 100 dB)

Circle (48) on Rapid Facts Card

Antech Labs, Inc., 11118 Olive St. Road, St. Louis, MO, 63141 (314-997-5666; 800-325-1960; Fax 314-997-0158) AR, IL, IA, KS, MO, NE, OK, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Noise Reduction Systems; Recording Tape; Tape Duplication; Tape Machines, Analog; Time Code Synchronizers

Paradise Sight & Sound, 3718 Oxford Blvd., Maplewood, MO, 63143 (314-421-1211) FL, GA, IL, MA, MO, VI, Amplifiers; Consoles, Recording & Production; Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Recording Microphones & Access.; Noise Reduction; Recording Tape-Signal Processors; Tape Machines, Analog; Time Code Synchronizers

NEBRASKA

Midwest Sound & Lighting, Inc., 2324 O St., Lincoln, NE, 68510 (402-474-4918) IA, KS, MO, NE, SD, Amplifiers; Consoles, Recording, Production and Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.

Midwest Sound & Lighting, Inc., 308 South 72nd St., Omaha, NE, 68114 (402-399-8028) IA, KS, MO, NE, SD, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.

Steve's Microphones, 13203 Carpenter St., Omaha, NE, 68138 (402-895-6434) NE, Recording Tape; Microphones & Access.; Equip. Cases; Rental

NEW HAMPSHIRE

Promusica Sales, 82 Washington St., Keene, NH, 03431 (603-352-4831; Fax 603-352-8757) CT, ME, MA, NH, NJ, NY, RI, VT, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers, Loudspeakers; Microphones; MIDI De-

The essential MIDI troubleshooter. Because you can't afford to fumble.

It's 10 minutes to showtime and your setup isn't working.

Panic time? Not if you've got the Beacon™.

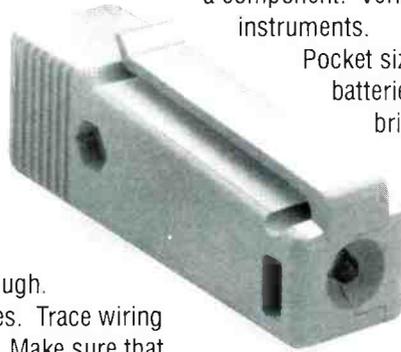
Plug any MIDI cable into it. If the green light flashes when you play, the signal's getting through.

Use it to test cables. Trace wiring in a complex setup. Make sure that patchers and THRU boxes are

working. Add a "receive" indicator to a component. Verify settings on your instruments.

Pocket size. Needs no batteries. "Unbreakable" bright-yellow housing with belt clip, plus hole for keychain or mounting screw. Made in U.S.A. Two-year warranty.

Order yours today. *You'll be damn glad you did!*



AVAILABLE ONLY THROUGH THIS FACTORY-DIRECT OFFER.

Check or money order: \$29.95 (plus \$3 shipping)*
VISA & M/C: call 800-888-0848 ext. 227R.

MUSONIX

2537 N. Ontario St.
Burbank, CA 91504

SPECIAL: 2 BEACONS for \$49.00

*Calif. residents add \$1.95 tax. Allow up to 4 weeks. 30-day money-back guarantee.

Circle (49) on Rapid Facts Card

New from White

DIGITALLY
CONTROLLED

Model 4700
1/3 OCTAVE
EQUALIZER

One or two channels in one rack space.

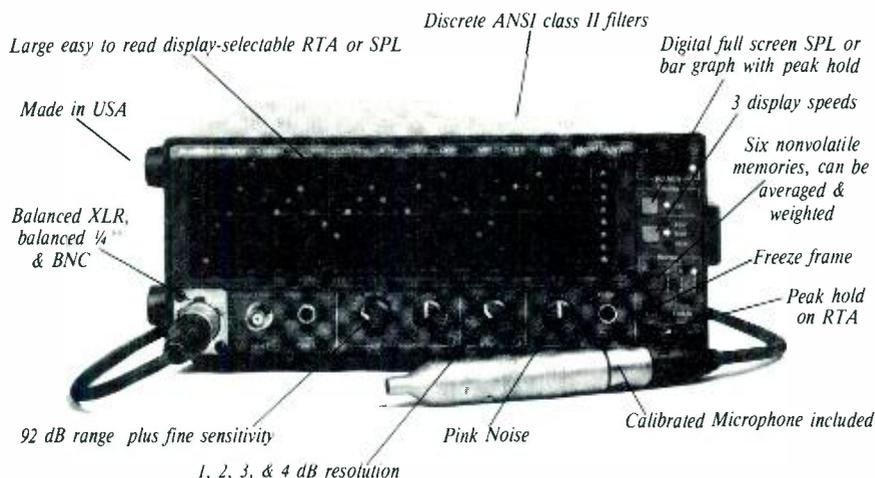
- 28 one-third octave filters from 31.5Hz through 16kHz. 0.5dB steps. High and low-pass filters. Output level adjustment. All functions digitally controlled.
- Ten non-volatile memories require no battery back-up. Ten presets with remote control access.
- Easy to setup. Instant and silent switching between memories and presets.
- Tamper-proof with PASSWORD SECURITY.
- Servo-balanced differential input and output. Great specifications. Affordable price.
- Output muting during power up and down.
- Hard wired by-pass switch.
- Optional RS232/EIA422 remote control

White
instruments
Division of C VAN R INC

P.O. Box 90099, Austin, TX 78709
Phone: (512) 892-0752
FAX: (512) 892-0855

Circle (50) on Rapid Facts Card

Affordable, 1/3 Octave, Real Time Analyzer With Memories & SPL Display Under \$1000.



Options: • Printer (parallel) interface • Internal, rechargeable battery pack
• Rack mount • Carry case

The SA-3050A from Audio Control Industrial
Call today for more information!

Audio Control Industrial™

22313 70th Ave. West Mountlake Terrace, WA 98043 (206) 775-8461

Circle (51) on Rapid Facts Card

Dealer/Distributor Directory

ices; Signal Processors; Test & Measurement Equip.; Software

Star Systems, 326 S. Broadway, Salem, NH, 03079 (603-894-6565) CT, ME, MA, NH, RI, VT, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers, Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces., MIDI Devices & Sound Samplers; Noise Reduction; Recording Tape; Signal Processors; Synthesizers, Analog Tape Machines, Time Code Synchronizers

NEW JERSEY

American International Audio Video, 127 Route 206, Trenton, NJ, 08610 (609-888-4414; Fax 609-888-2930) USA, Tape Machines, Digital

Audio International, 424 Grant Ave., Scotch Plains, NJ, 07076 (201-322-4466) NJ, NY, PA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones; Noise Reduction Systems; Signal Processors

Creative Audio Services, 126 W. Cliff St., Somerville, NJ, 08876 (201-685-0330) NJ, NY, PA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Signal Processors

Gabriel Sound, 400 Union Ave., Haskell, NJ, 07420 (201-835-5004) CT, NJ, NY, Amplifiers; Mikes; Stands; Speakers; Speaker Cabinets; Servo-Bass; Flight Cases; Processing; Consoles; Complete Tour Packaging; Custom Multi-Pin Work; Speaker Recong & Electronic Maintenance; Sound Systems & Backline Equip. Rentals

JRF Magnetic Sciences, 249 Kennedy Road, Greendell, NJ, 07839 (201-579-5773) USA, Magnetic Recording Heads; Sales & Service; Time Code Synchronizers

Noise Unlimited, Inc., 104 S. Bridge St., Somerville, NJ, 08889 (201-725-1700) CA, CT, DE, DC, IL, IN, ME, MD, MA, MI, MN, MO, NH, NJ, NY, NC, OH, OK, PA, TX, VT, VA, WA, Acoustical Testing, Consulting & Engineering

Pusecker Sales Inc., 131 Beaver Brook Road, Lincoln Park, NJ, 07035 (201-305-8331) CT, NJ, NY, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones; MIDI Devices; Signal Processors

Free Catalog of

Professional SOUND recording & duplicating SUPPLIES

POLYLINE™ EMPTY REELS & BOXES

BLANKLOADED CASSETTES

BOXES ALBUMS LABELS

AGFA AMPEX 3M Scotch TDK maxell tapes

now from **STOCK** in **CHICAGO** and **L.A.**

Call Polyline
312 / 298-5300
8:30 am - 5 pm Central Time

Polyline Corp.
1233 Rand Road
Des Plaines, IL 60016

Circle (52) on Rapid Facts Card

www.americanradiohistory.com

- 48 Inputs • 32 Bus
- 96 Inputs in Mix with EQ
- Fully Comprehensive Patch Bay
- Automation Ready



**THE NEW
IL4832**

SOUNDTRACS

"The most sensitive transparent EQ in the industry"

Visit Sam Ash Professional to audition a fully operational Soundtracs IL4832. See the rest of the Soundtracs Mixing Console line at any Sam Ash store. Prices start at under \$3000 to the \$100,000 range.



©1989 Sam Ash Music Corp.

Circle (53) on Rapid Facts Card

Russo Professional Systems, 1989
Arena Drive, Trenton, NJ, 08610
(609-888-1808; Fax 609-888-3492) USA, DAT Recorders

Sabre Sound, 175 Hornblower Ave.,
Belleville, NJ, 07109 (201-759-3080) CT, NJ, NY, PA, VA,
Amplifiers; Consoles-Production &
Sound Reinforcement; Equalizers;
Loudspeakers, Sound Reinforcement
& Studio Monitoring; Signal Proces-
sors; Flight Cases

Sim-O-Rama Sound, 572 Union Blvd.,
Totowa, NJ, 07512 (201-790-6772) NJ, NY, Amplifiers;
Consoles, Sound Reinforcement, Re-
cording & Production; Equalizers;
Loudspeakers, Sound Reinforcement
& Studio Monitoring; Microphones &
Access; Recording Tape; Signal
Processors; Tape Machines, Analog
& Digital; Disco Equip. Including
Turntables, Compact Disc Players,
Mixers, Console Cases & Equip.
Cases

NEW MEXICO

Dyma Engineering, Inc., P.O. Box
1535, Los Lunas, NM, 87031
(505-865-6700) AZ, CO, KS, NM,
OK, TX, UT, Amplifiers; Consoles,
Sound Reinforcement, Recording &
Production; Editing Systems; Equal-
izers; Loudspeakers, Sound Rein-
forcement & Studio Monitoring;
Microphones & Access; Noise Re-
duction Systems; Signal Proces-
sors; Tape Machines, Analog; Test &
Measurement Equip.; Time Code
Synchronizers; Compact Disc Play-
ers; AC Surge Protectors; Video
Equip.

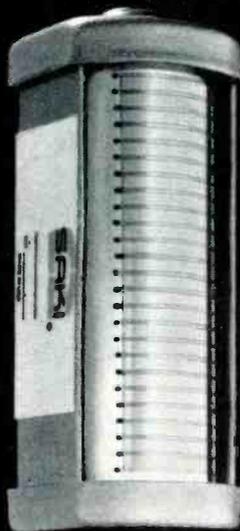
King Broadcasting Co., Inc., P.O. Box
2308, Roswell, NM, 88201
(505-623-9100) NM, Tape Ma-
chines, Analog; Amplifiers

NEW YORK

Acoustilog, Inc., 19 Mercer St., New
York, NY, 10013 (212-925-
1365) CT, NJ, NY, Consoles, Re-
cording & Production; Microphones
& Access.; Recording Tape; Signal
Processors

Alex Musical Instruments, Inc., 164
West 48th St., New York, NY,
10036 (212-819-0070) USA,
Amplifiers, Consoles, Recording,
Production & Sound Reinforcement;
Editing Systems, Equalizers, Loud-
speakers, Sound Reinforcement &
Studio Monitoring, Microphones &
Access., MIDI Devices & Sound Sam-
plers, Recording Tape; Signal
Processors, Synthesizers & Key-
boards, Tape Duplication, Tape Ma-
chines, Analog; Time Code
Synchronizers; Video, MIDI Com-
puter Software

SOUND VALUE



**Saki 24 Track
Replacement Heads
For Studer A-80 (A-800)**

Get the most out of your Studer with Saki Replacement heads. Fully compatible with original manufacturer's specifications. Precision made for long life and excellent sound. And now available at a fantastic price. Call now and order yours.



SAKI MAGNETICS, INC.

26600 Agoura Road, Calabasas, CA 91302

Phone (818) 880-4054 Telex 244 546 FAX (818) 880-6242

Circle (54) on Rapid Facts Card

- Applied Audio**, P.O. Box 24799, Rochester, NY, 14624 (716-436-8475) NY, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Lighting; Special Effects; Video; Dimmers
- Sam Ash Professional**, 723 Seventh Ave., 3rd Floor, New York, NY, 10019 (212-719-2640) CT, NJ, NY, Amplifiers; Consoles, Recording & Production Reinforcement; Editing Systems; Loudspeakers, Studio Monitoring; Microphone & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Keyboards; Tape Machines, Analog/Digital; Time Code Synchronizers; Computers
See advertisement page 101
- AST Sound**, 250 W. Broadway, New York, NY, 10013 (212-226-7781) CT, NJ, NY, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Sampling; Noise Reduction Systems; Signal Processors; Tape Machines, Analog; Loudspeaker Repairs
- Audio Classics**, P.O. Box 176, Walton, NY, 13856 (607-865-7200) Worldwide, We Buy, Sell & Trade all Brands of Audio Equip.; Amplifiers; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Test & Measurement Equip.
- Aura Sonic Ltd**, P.O. Box 791, Flushing, NY, 11352-0791 (718-886-6500; Fax 718-886-7214) USA, Cable, Connectors; Compressors; Crossovers & Frequency Dividers; Delays; Equalizers; Rentals; Limiters; Microphones; Noise Gates; Patch Bays; Recording Tape Audio & Video; Reverb Units; Signal Processors, Samplers
- AVS Systems (Audio Video Security Systems)**, 3773 Arthur Ave., Seaford Long Island, NY, 11783 (516-679-2105) CT, NJ, Metro-NY, Amplifiers; Loudspeakers; Equalizers; Tape Machines Analog & Digital; CCTV; Intercom Systems; Telephone Systems; Alarm Systems; Media Rooms; Small Studios; Security Systems, Burgler, Fire, Smoke
- Bi-Tronics**, P.O. Box 125, Tuckahoe, NY, 10707 (800-666-0966; 914-961-2004) North America, Connectors; Cable; Cable Assemblies; Adaptors for Audio; Video & Data Applications
- BJM Electronics Ltd.**, 2008 Victory Blvd., Staten Island, NY, 10314 (718-442-0223; 800-342-5256) USA, Microphones & Access.; Recording Tape; Test & Measurement Equip.; Cables & Connectors; Patching Systems; Cleaning & Maintenance Supplies
- Brighton Sound, Inc.**, P.O. Box 60977, Lyell Station, Rochester, NY, 14606 (716-328-1220) NY, PA, Amplifiers; Consoles, Recording Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Recording Tape; Signal Processor; Synthesizers & Keyboards, Tape Machines, Analog; Time Code Synchronizers
- Burlington Audio/Video Tapes, Inc.**, 106 Mott St., Oceanside, NY, 11572 (516-678-4414; 800-331-3191) Worldwide, Recording Tape & Accessories (Audio & Video)
- Camera Mart Inc.**, 456 West 55th St., New York, NY, 10019 (212-757-6977) CA, CT, DE, IN, MD, MA, NV, NJ, NY, OR, PA, RI, VT, WA, Amplifiers; Editing Systems; Equalizers; Loudspeakers & Studio Monitoring; Microphones & Acces.; Recording Tape; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers
- CSE Audio**, 1200-A Scottsville Road, Rochester, NY, 14624 (716-436-9830) CT, ME, MD, NH, NY, OH, PA, VT, VA, WV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
- Dalbec Audiolab**, Red Mill Road, Rensselaer, NY, 12144 (518-477-7873) CT, ME, MA, NJ, NY, PA, VT, Amplifiers; Consoles-Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Test & Measurement Equip.; Signal Processors; MIDI Devices; Noise Reduction Systems; Tape Machines-Analog & Digital
- Erskine-Shapiro Theatre Technology Inc.**, 37 West 20th St., Suite 703, New York, NY, 10011 (212-929-5380) USA, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; Signal Processors; Tape Duplication; Tape Machines, Analog; Intercom
- Glenart Audio & Video**, 9 Melony Ave., Plainview, NY, 11803 (516-937-0583; 212-847-8057) CT, NJ, NY, PA, Consoles; Amplifiers; Equalizers; Loudspeakers, Reinforcement; Microphones & Access.; Recording Tape; Signal Processors; Tape Machines, Analog; Time Code-Generators & Readers; Motion Picture Resolvers; Video Tape Recording For Use With Film; Video Frame Matching For Film
- Gotham Audio Corp.**, 1790 Broadway, New York, NY, 10019-1412 (212-765-3410) North America, Consoles, Recording & Production; Equalizers; Loudspeakers, Studio Monitoring; Microphones & Access.; Signal Processors; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
- HAVE, Inc.**, 309 Power Ave., Hudson, NY, 12534-2448 (518-828-2000) Worldwide, Amplifiers; Consoles, Recording & Production, Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement, Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog, Digital; Test & Measurement Equip.; Time Code Synchronizers
- Hot House Professional Audio**, 275 Martin Ave., Highland, NY, 12528 (914-691-6077; Fax 914-691-6822) National, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Device & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines-Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
- Manny's Music/Professional Audio Div.**, 156 West 48th St., New York City, NY, 10036 (212-819-0576) CT, MA, NJ, NY, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers
- Markertek Video Supply**, 145 Ulster Ave., Saugerties, NY, 12477 (800-522-2025; 914-246-3036) USA & Canada, Amplifiers; Microphones & Access.; Recording Tape; Acoustic Foam; Cables; Connectors; Labels; Test Equip.; Tools
- Martin Audio Video Corp.**, 423 West 55th St., New York, NY, 10019 (212-541-5900) CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Accessories; MIDI Devices & Sound Samplers, Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards, Tape Duplication; Tape Machines, Analog & Digital; Test Equip.; Time Code Synchronizers
- L. Matthew Miller Associates Ltd.**, 48 West 21st St., New York, NY, 10010 (212-741-8011) Worldwide, Video Recording; Video Editing Systems; Microphones, Video Tape, Video Tape Duplication Machines; Test & Measurement Equip. For Video, Video Time Code Machines
- Mineroff Electronics, Inc.**, 574 Meacham Ave., Elmont, NY, 11003 (516-775-1370) Nationwide, Amplifiers; Recording; Equalizers; Loudspeakers; Microphones & Acces.; Recording Tape; Tape Duplication; Tape Machines
- Multi-Sonus Inc.**, 87 N. Clinton Ave., Suite 412, Rochester, NY, 14604 (716-325-3006) IL, ME, MD, MA, NH, NJ, NY, PA, RI, VT, Canada, Loudspeakers, Sound Reinforcement & Studio Monitors
- Posthorn Recordings**, 142 West 26th St., New York, NY, 10001 (212-242-3737) CT, DC, ME, MD, MA, NH, NJ, NY, PA, RI, VT, Amplifiers; Consoles; Recording & Production; Equalizers; Microphones; Record-Tape; Signal Processors; Test & Measurement
- Radio Systems, Inc.**, 110 High Hill Road, Bridgeport, NY, 08014-0458 (609-467-8000; 800-523-2133) USA & Canada, Consoles, Recording & Production; Digital Audio Tape (DAT) Machines; Equalizers; Loudspeakers, Studio Monitoring; Microphones & Access.; Recording Tape; Signal Processor; Tape Machines, Analog; Custom Studio Cabinetry
- Rock City Sound**, P.O. Box 33, Annandal-On-Hudson, NY, 12504 (914-758-2928; Fax 914-758-2932) National, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement

soundmaster

Integrated Audio Editing

Random Access Digital Editing
Sophisticated Machine Control
Disk Based Digital Recording
"EDL" Based Electronic Editing
Smart Sync® Time Correction

*Digital.... Analog....Random Access....Film/Tape
Soundmaster....The Complete Audio Editing Solution*

Soundmaster International Inc.	Tel: 416-479-8101	Fax: 416-479-8105
Soundmaster USA Inc.	Tel: 805-494-4545	Fax: 805-494-4936
Soundmaster USA Inc.	Tel: 212-787-5832	Fax: 212-787-8888
Soundmaster Europe Ltd.	Tel: 494-670281	Fax: 494-670466

Circle (55) on Rapid Facts Card

& Studio Monitoring; Microphones & Access.; Signal Processors

Studio Consultants, Inc., 321 West 44th St., New York, NY, 10036 (212-586-7376) CT, DE, DC, ME, MD, MA, NH, NJ, NY, PA, PR, RI, VT, Amplifiers, Consoles, Recording & Production; Equalizers; Loudspeakers, Studio Monitoring; Sound Samplers; Recording Tape, Signal Processors, Time Code Synchronizers; Hard Disk Based Digital Recording & Editing Systems; Microphones & Access.

Success Specialty Sales Corp., P.O. Box 77, Rockville Centre, NY, 11570 (516-798-2311) USA, Splicing Tapes; Packaging Products Audio & Video; Gaffers Tapes

Unistage, Inc., 330 Genesee St., Buffalo, NY, 14204 (716-853-6500) West-NY, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Time Code Synchronizers

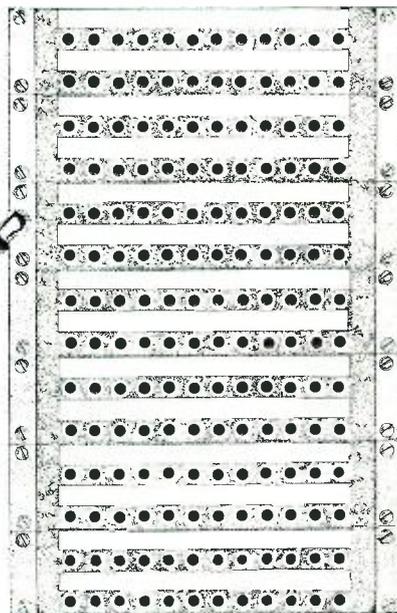
Whirlwind Audio Inc., 100 Boxart St., Rochester, NY, 14612 (716-865-4415) West-NY, Amplifiers; Consoles-Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers-Studio Monitoring & Sound Reinforcement; Microphones; Noise Reduction Systems; Signal Processors; Tape Machines-Analog & Digital; Synthesizers & Keyboards; Test & Measurement Equip.; Time Code Synchronizers

NORTH CAROLINA

Applied Audio Marketing-Manufacturers' Representatives, 9 Elk Mountain Road, Asheville, NC, 28804-2105 (704-252-9313; Fax 704-252-9332) AL, GA, MS, NC, SC, TN, Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers

Associated Sound Products Inc., 3900 Tarheel Drive, Raleigh, NC, 27609 (919-878-0044) GA, MD, NC, SC, VA, Consoles, Sound Reinforcement, Recording & Production; Equalizers; Amplifiers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Noise Reduction Systems; Microphones & Access.; Signal Processors; Tape

**WHEN YOU'RE
CONSIDERING
PATCH PANELS
THINK AUDIO-LINE**



Long-Frame & MINI:

- Jack Panels with Jacks
- Pre-Wired Audio Patch Panels
- Audio Patch Cords
- Custom Wired Audio Patch Panels
- Video Panels & Accessories

*Call or write for information on these and
other Audio-Line products.*

audio accessories
audio line

AUDIO ACCESSORIES, INC., MILL STREET, MARLOW, NH 03456 (603) 446-3335

Circle (56) on Rapid Facts Card

Machines, Analog; Time Code Synchronizers; Tape Machines, Digital

Concept Design Electronics & Mfg., Inc., 1105-A Pomeroy St., Graham, NC, 27253 (919-229-6500; Fax 919-229-0063) USA and Abroad, Tape Duplication; Tape Machines, Digital; Test & Measurement Equip.; Cassette Duplication & Loading Equip.

Reliable Music, 650 E. Stonewall St., Charlotte, NC, 28202 (704-375-8662) FL, GA, NC, SC, VA, WV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards, Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Studioworks Recording & Broadcast Equipment, 1018 Central Ave., Charlotte, NC, 28204 (704-375-1053; 800-438-5921) CA, FL, GA, LA, MA, MO, NJ, NY, NC, OH, SC, TN, TX, VA, WA, Recording Tape; Microphones & Access.; Equalizers; Consoles, Recording & Production; Tape Duplication; Tape Machines, Analog & Digital; Loudspeakers, Studio Monitoring; Noise Reduction Systems; Signal Processors; Test & Measurement Equip.

Tri-Tronics Professional Electronics, P.O. Box 1055, Lillington, NC, 27546 (919-893-4183; 800-669-3204) NC, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement, Studio Reinforcement; Microphones & Access.; Signal Processors; Wireless Microphones

Wyco Sales, P.O. Box 887, Cary, NC, 27512 (919-467-8113; 800-334-2484; NC-800-672-2802) Nationwide, Headphones & Access.; Recording Tape - Video & Audio; Storage Systems & Carrying Cases

OHIO

Avstar/Audio Image, Inc., 909 King Ave., Columbus, OH, 43212 (614-299-2321) IN, KY, MI, OH, PA, WV, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Test

Measurement Equip.; Time Code Synchronizers

Central Music Exchange, 11504 Lorain Ave., Cleveland, OH, 44111 (216-671-0093) IN, MI, OH, PA, WV, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound, Loudspeakers, Studio; Microphones & Access.; MIDI Devices; Noise Reduction; Signal Processors; Synthesizers & Keyboards; Electronic Percussion; Consoles, Recording; Tape Machines Analog

Hood Industries Inc., 5700 Superior Ave., Cleveland, OH, 44103 (216-431-4663) OH, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Tape Machines, Analog

ICB Audio Co., 2036 Reading Road, Cincinnati, OH, 45202 (513-651-0800) IL, IN, KY, OH, PA, TN, WV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers

The Little Warehouse, Inc., 5505 Valley Belt Road, Suite F, Independence, OH, 44131 (216-398-0022; 800-445-8273; Fax 216-398-9980) National, Microphones & Access.; Recording Tape; Tape Duplication

Ohio Sound Systems, 1399 East 17th St., Cleveland, OH, 44114 (216-781-1234) OH, Amplifiers, Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Access.; Noise Reduction Systems

Pi Keyboards & Audio, 2121 Brookpark Road, Cleveland, OH, 44134 (216-741-1400) IN, KY, MI, OH, PA, Amplifiers; Consoles; Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Keyboards, Software, Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

C.L. Pugh & Associates, Inc., 21510 Drake Road, Cleveland, OH, 44136 (216-238-1777) OH, West-PA, WV, Amplifiers; Loudspeakers, Sound Reinforcement & Studio

Monitoring; Microphones & Acces.

Phil Reddish Supply, Inc. dba Phil Reddish Sound, 11725 Royalton Road, North Royalton, OH, 44133 (216-582-4333) OH, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems, Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers; Wireless Microphones & Intercoms; Production Intercoms; Theatre Sound Systems

Roadshow Sound, 3671 Karl Road, Columbus, OH, 43224 (614-263-3720) IN, OH, MI, PA, WV, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers; Studio Monitors; Microphones & Access.; MIDI Devices & Sound Samplers; Synthesizers & Keyboards, Tape Machines, Analog; Time Code Synchronizers

Sound Com Corp., 227 Depot St., Berea, OH, 44017 (216-234-2604; Fax 216-234-2614) N.East-OH, Amplifiers; Consoles Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Tape Machines Analog; Wireless Microphone, Intercom & Monitoring Systems; Cable, Equip. Cabinets, Permanent Installation & Portable; Master Clock Systems

Speakers Unlimited, 3138 N. Main St., Dayton, OH, 45405 (513-275-7417) IN, KY, OH, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers; Loudspeakers; Studio Monitors; Microphones & Access.; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Time Code Synchronizers

Bob White Associates, P.O. Box 39104, Solon, OH, 44139 (216-248-1317; 517-592-5138) IN, KY, OH, MI, West-PA, WV, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers; Loudspeakers; Studio Monitoring & Sound Reinforcement; Microphones; Sound Samplers; Synthesizers; Cases, Lighting Equip.; Wire; CCTV

OKLAHOMA

Ford Audio-Video Systems Inc., 4800 West I-40, Oklahoma City, OK, 73128 (800-654-6744) AR, KS, LA, MO, NM, OK, TX, Amplifiers, Consoles, Recording & Sound Rein-

forcement, Editing Systems, Equalizers, Loudspeakers, Sound Reinforcement & Studio Monitoring; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machine, Analog & Digital, Time Code Synchronizers

OREGON

Brownell Sound & Hi Fi, Inc., 2500 S.E. Hawthorne Blvd., Portland, OR, 97214 (503-231-7866) OR, Amplifiers; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Inner Sound, 1818 S.E. Division, Portland, OR, 97202 (503-238-1955) OR, WA, Service/Repair of Amplifiers; MIDI Devices; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Tape Duplication

Northwestern, Inc., 1224 S.W. Broadway, Portland, OR, 97205 (503-226-0170; 800-547-2252) AZ, CA, CO, KS, MT, NE, ND, NV, NM, OK, OR, SD, TX, UT, WA, Recording Tape; Tape Duplication; Tape Machine Parts

PENNSYLVANIA

Audio Innovators, Inc. dba Pro Com Systems, 5001 Baum Blvd., Pittsburgh, PA, 15213 (412-621-1950) USA for service & consultation; OH, PA, WV for sales, Amplifiers; Consoles, Recording & Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.; Tape Machines, Digital

Crown Magnetics, Inc., 1223 Bittner Blvd., Lebanon, PA, 17042 (717-274-2812) USA, Pro Audio Equip. Sales & Service; Blank Audio Cassette Loading; Audio Cassette Duplication & Packaging

The Daveland Co., Inc., 905 Harrison St., Allentown, PA, 18103 (215-439-8701) DE, NJ, PA, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal

ULTRA LIFE

TAPE HEADS

This may be the last tape head
you will ever have to buy.

SUPERIOR QUALITY ♦ COMPETITIVE PRICING

Processors; Tape Duplication; Tape
Machines, Analog; Video, Screens,
Projectors

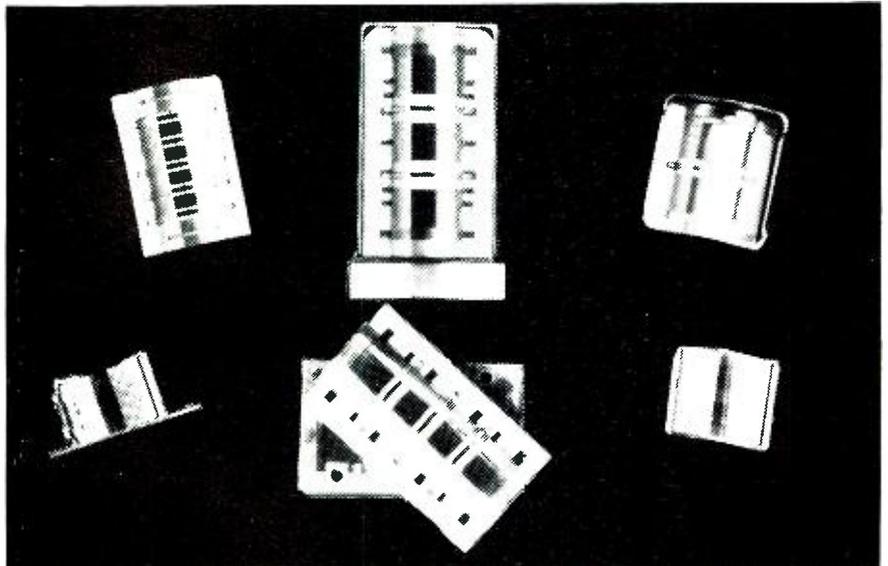
**Galaxy Audio & Entertainment Ser-
vices**, 703 Grant Ave., Altoona, PA,
16602 (814-944-4596) DE, NJ,
NY, OH, PA, VA, WV, Amplifiers;
Consoles, Recording, Production &
Sound Reinforcement; Equalizers;
Loudspeakers, Sound Reinforcement
& Studio Monitoring; Microphones &
Access.; Custom configurations for
road & studio systems

ICE* Associates, Inc., Suite LL-40,
One Bala Plaza, Bala Cynwyd, PA,
19004-1401 (215-668-0714;
Fax 215-668-0768) USA, Am-
plifiers; Consoles, Sound Reinforce-
ment, Recording & Production;
Editing Systems; Equalizers; Loud-
speakers, Sound Reinforcement &
Studio Monitoring; Microphones &
Access.; MIDI Devices & Sound Sam-
plers; Noise Reduction Systems; Re-
cording Tape; Signal Processors;
Synthesizers & Keyboards; Tape Du-
plication; Tape Machines, Analog &
Digital; Test & Measurement Equip.;
Time Code Synchronizers

Medley Music Corp., 1041 Lancaster
Ave., Bryn Mawr, PA, 19010
(215-527-3090) DE, NJ, PA, Am-
plifiers; Consoles, Recording &
Sound Reinforcement; Equalizers;
Loudspeakers, Sound Reinforcement
& Studio Monitoring; Microphones &
Access.; MIDI Devices & Samplers;
Noise Reduction Systems; Recording
Tape; Signal Processors; Synthesiz-
ers & Keyboards; Tape Machines,
Analog

Midwest Communications Corp., 535
Rochester Road, Pittsburgh, PA,
15237 (412-364-6780) PA,
Amplifiers; Consoles, Sound Rein-
forcement, Recording & Production;
Editing Systems; Equalizers; Loud-
speakers, Sound Reinforcement &
Studio Monitoring; Microphones &
Access.; MIDI Devices & Sound Sam-
plers; Noise Reduction Systems; Re-
cording Tape; Signal Processors;
Tape Duplication; Tape Machines,
Analog & Digital; Test & Measure-
ment Equip.; Time Code Synchroniz-
ers

Peirce-Phelps, Inc., 2000 North 59th
St., Philadelphia, PA, 19131
(215-879-7171) USA, in Cana-
da-Ont. & Que., Amplifiers; Con-
soles, Sound Reinforcement &
Recording & Production; Editing
Systems; Equalizers; Loudspeakers,
Studio Monitoring & Sound Rein-
forcement; Microphones & Access.-
; Noise Reduction Systems;
Recording Tape; Signal Processors;
Tape Duplication; Tape Machines,
Analog & Digital; Test & Measure-
ment Equip.; Time Code Synchroniz-
ers



CORPORATE OFFICE:
15720 Stagg Street
Van Nuys, CA 91406
Ph 818 994-6602
Fax 818-994-2153
Telex 754239

NEW YORK OFFICE:
Ph 516-731-5711
Fax 516-731-5943
TEXAS OFFICE:
Ph 713 946-1102
Fax 713-946-0443



SPRAGUE
MAGNETICS, INC.

(Toll Free) **1-800-553-8712** (Phone) **818-994-6602**

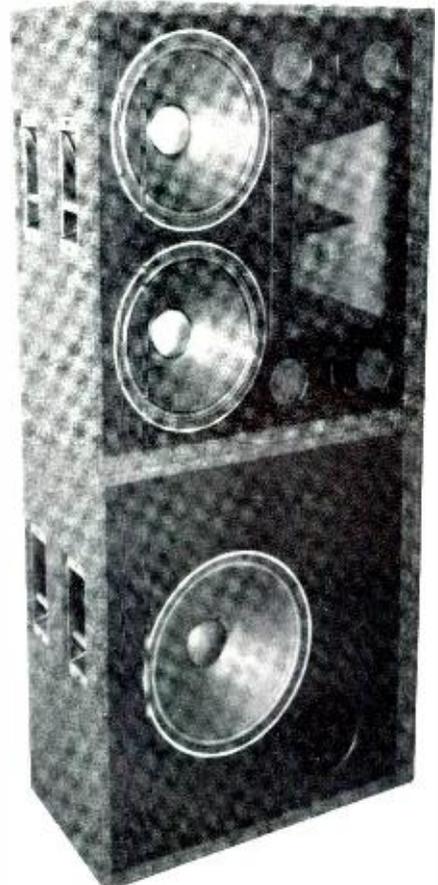
Circle (57) on Rapid Facts Card



Stand
and
Deliver

4400
Series

Formula Audio, Inc.
Rt. 5 Box 440-3
Zebulon, N.C. 27597
919-269-6441



Circle (58) on Rapid Facts Card

Sigmat Corp., P.O. Box 995, Valley Forge, PA, 19481 (215-783-6666) DE, DC, MD, NJ, NY, PA, VA, Amplifiers; Consoles, Recording, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices; Signal Processors; Tape Machines, Analog; Test & Measurement Equip.; Time Code Synchronizers

Tekom Corp., 1020 N. Delaware Ave., Philadelphia, PA, 19125 (215-426-6700) DE, DC, MD, NJ, NY, PA, VA, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines-Analog & Digital; Time Code Synchronizers

Zeus Light & Sound, 2702 Pricetown Road, Temple, PA, 19560-9799 (215-921-0520) USA, Amplifiers; Cable & Connectors; Cases; Compressors; Consoles, Recording,

Production & Sound Reinforcement; Delays; Equalizers; Headphones & Headsets; Lighting Equip.; Limiters; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Noise Reduction Systems; Signal Processors; Transformers

TENNESSEE

Blevin's Audio Exchange, 1717 Elm Hill Pike, Suite B-8, Nashville, TN, 37210 (615-391-0429; Fax 615-391-0456) National, Consoles-Automation Systems, Digital, Recording & Production; Microphone Booms, Stands & Access.; Noise Gates & Expanders; Noise Reduction Systems; Racks & Stands; Signal Processors; Synchronizer Systems; Tape Machines-Analog & Other; Video Equip.

Evans Sales & Marketing, 509-A Ligon Drive, Nashville, TN, 37204 (615-256-4675) AL, GA, MS, NC, SC, TN, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Loudspeakers, Sound Reinforcement; Studio Monitoring; Microphones & Acces.; Signal Processors

Memphis Communications Corp., 1381 Madison Ave., Memphis, TN, 38174-1735 (901-725-9271) USA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Audio Duplication

Songbird Digital, Inc., 2816 Columbine Place, Nashville, TN, 37204 (615-297-8766; Fax 615-297-8806) FL, GA, IL, IN, IA, KS, KY, LA, MI, MN, MS, MO, NE, NC, ND, OH, OK, SC, SD, TN, TX, WV, Synclavier & Direct-to-Disk

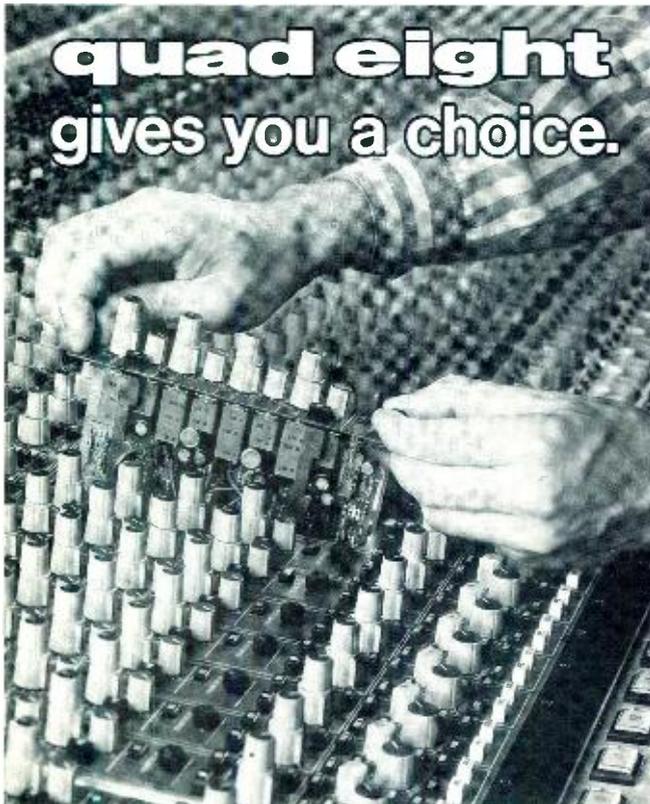
Studio Supply Co., 1717 Elm Hill Pike, Suite B-9, Nashville, TN, 37210 (615-391-0050; Fax 615-391-4092) AL, AR, GA, IN, KY, LA, MS, MO, NC, OH, OK, SC, TN, TX, VA, WV, Amplifiers; Consoles, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement

& Studio; Microphones & Acces.; MIDI Devices & Samplers; Noise Reduction Systems; Recording Tape-Digital; Signal Processors; Tape Machines; Analog & Digital; Time Code Synchronizers

Technical Support Systems, Inc., 1415 Madison Ave., Memphis, TN, 38104 (901-725-9122) AL, AR, CO, CT, FL, GA, KY, LA, MS, MO, NC, SC, TN, WY, Amplifiers; Consoles, Recording & Sound Reinforcement; Editing; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Broadcast, Entertainment Video Lighting Systems

TEXAS

Audio Specialties Co., 13416 Brookgreen, Dallas, TX, 75240 (214-239-2230) TX, Amplifiers; Consoles, Recording; Equalizers; Loudspeakers; Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog & Digital; Time Code Synchronizers; Editing & Head Cleaning Items for Recording Equip.



quad eight electronics, inc.

225 Parkside Drive, San Fernando, CA, 91340 U.S.A.
PHONE: 818-898-2341 FAX: 818-365-8310 TELEX: 311 786

Circle (59) on Rapid Facts Card

TIMECODE EDITING... LIVING DANGEROUSLY?



Not if you have the new ADx-02 Timecode Analyzer. This is a sophisticated test instrument, as well as a fully functional reader-generator with video Key and L.E.D. displays. It can save you time and money. Finding timecode errors on tape before an edit is attempted, or matching color frames and ScH phase, or tracking on a Betacam is easy. For the engineer, it can be the quickest way to set tape speed, realign video play-back heads or check an audio synchronizer for wow. Each timecode bit is displayed graphically.

The ADx-02 is being used around the world in a variety of environments and applications. But the diagnostics function is not the end of the story, the ADx-02 is a very versatile timecode reader-generator-insertor, with multiple screen displays, selectable fonts, three jam-sync modes, stable code generation, full speed range read and much more. So why buy just a timecode reader-generator?

The ADx-02.

The only timecode unit that can safely save you money.

ADx Systems Inc.

274 Madison Avenue, New York, NY 10016
The World Leader in Timecode.

For more information contact your local dealer or call us at 1-800-444-4-A-D-X.

Circle (60) on Rapid Facts Card

Core Systems, Inc., 10440 Westpark, Houston, TX, 77042 (713-977-9500) AR, LA, OK, TX, Mexico, Consoles, Recording & Production; Signal Processors; Tape Machines, Analog & Digital; MIDI Devices & Samplers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Time Code Synchronizers; Microphones

Crossroads Audio, Inc., 2623 Myrtle Springs Ave., Dallas, TX, 75220 (214-358-2623; Fax 214-358-0185) LA, OK, TX, Amplifiers; Consoles, Sound Reinforcement; Equalizers, Sound Reinforcement & Studio; Microphones & Access.; Noise Reduction; Signal Processors; Tape Machines, Analog; Wireless Microphones, Intercommunications Equip.

The Digital Center, 2003 N. Henderson, Dallas, TX, 75206 (214-826-8700 TX, Amplifiers; Loudspeakers; Studio Monitoring; Recording Tape; Tape Machines, Analog; Microphones & Access.

Digital Technology Group, 5635 E. Rosedale, Fort Worth, TX, 76112 (817-429-9761) AR, LA, NM, OK, TX, Amplifiers; Consoles, Sound Reinforcement, Recording & Pro-

duction; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Victor Duncan, Inc.-Dallas, 6305 N. O'Connor, Building 4, Irving, TX, 75039-3510 (214-869-0200; Fax 214-869-9810) USA & Canada, Audio, Film, Video, Lighting Production Equipment; Test Equip.; Tape; Vans & Access.; Service & Repair; Over 100 Lines of Pro Equip.

HRC Magnetics, 1611 Herring, Waco, TX, 76708 (817-756-5303; 800-443-8457) USA and Canada, Recording Tape; Tape Duplication; Video Tape; Broadcast Video Tape; Video Tape Duplication; Microphones & Access.

Judon Enterprises, P.O. Box 763041, Dallas, TX, 75376-3041 (214-372-3088) 250 mile radius of Dallas, Amplifiers; Consoles, Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio

Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Recording Tape; Signal Processors

LD Systems, Inc., 467 West 38th St., Houston, TX, 77018 (713-695-9400; FAX 713-695-8015) AR, LA, OK, TX, Amplifiers; Consoles; Recording, Production & Sound Reinforcement; Loudspeakers, Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Time Code Synchronizers; Equalizers

Parker Music, 9941 N. Freeway, Houston, TX, 77037 (713-820-0031) TX, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Tape Machines, Analog; Microphones & Access.; MIDI & Sound Samplers; Noise Reduction; Recording Tape; Signal Processing; Synthesizers & Keyboards; Time Code Synchronizers

P.A.S. (Professional Audio Supply), 5700 East Loop 820 South, Fort Worth, TX, 76119-7050

(800-443-7668; 817-483-9952) USA, Amplifiers, Consoles; Equalizers; Loudspeakers; Microphones & Access.; Noise Reduction Equipment; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog; Test & Measurement Equip.

The Pressing Plant, 111 Oak Lawn, Dallas, TX, 75207 (214-748-6622) USA, Compac Disc; Cassettes; Albums; Jackets & Boxes

Rockin' Robin Guitars & Music, 3619 S. Shepherd, Houston, TX, 77098 (713-529-5442) AK, LA, NM, OK, TX, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Monitoring & Sound Reinforcement; Microphones & Access.; MIDI; Noise Reduction; Recording Tape; Signal Processors; Synthesizers & Samplers; Keyboards; Tape Machines, Analog; Time Code; Keyboards

Studio Supply Co. Dallas, 9978 Monroe Drive, Suite 304, Dallas, TX, 75220 (214-358-0050) AR, LA, OK, TX, Amplifiers; Consoles, Recording & Production, Equalizers; Loudspeakers, Studio; Microphones, MIDI-Sound Samplers; Noise Reduc-



Tom Hannaford, Dixieland Productions, Atlanta, GA

SONEX kills background noise beautifully.

SONEX is a special acoustic foam that absorbs noise four times better than acoustic tile or carpeting. It makes you sound like a pro — inexpensively — because your voice comes across clear, clean, and intelligible. Use SONEX for video, remote conferencing, voice-overs, radio communications, audio production, or anywhere else you need to sound crystal clear. Kill background noise beautifully — and save the true sound — with SONEX. Send for all the facts. SONEX is manufactured by Illbruck and distributed exclusively to the pro sound market by Alpha Audio.

Alpha Audio.
Acoustics

2049 West Broad Street Richmond, Virginia 23220 USA
(804) 358-3852 FAX: (804) 358-9496

Acoustic Products for the Audio Industry

Circle (61) on Rapid Facts Card



A familiar Name in Music Equipment is now THE NEW NAME in Pro Audio...

From 2 to 24 Tracks!





Authorized Dealer





























Sales & Service for your Pro Audio Needs

GAND

A division of
GAND MUSIC & SOUND
780 Frontage Rd.
Northfield, Ill. 60093

PRO AUDIO 708/446/4263

Circle (62) on Rapid Facts Card

tion; Tape Machines, Analog & Digital; Time Code Synchronizers

Texsound Audio Visual Services, Inc., 16138 W. Hardy Road, Houston, TX, 77060 (713-876-1063) LA, OK, TX, Amplifiers; Consoles, Sound Reinforcement; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; Tape Duplication; Rental of Projection, Audio, Video & Lighting Equip.

UTAH

Performance Audio, 2358 S. Main, Salt Lake City, UT, 84115 (801-466-3196) USA, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones; Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers; Installations

Trax Audio, 332 Martin Lane, Salt Lake City, UT, 84107 (801-262-3601) AZ, CO, ID, NV, NM, UT, WY, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines; Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

VERMONT

Advance Music Center, Inc., 61 Main St., Burlington, VT, 05401 (802-863-8652) USA, Amplifiers; Consoles, Recording & Sound Reinforcement; Equalizers; Editing Systems; Loudspeakers, Studio & Reinforcement, Microphones; MIDI; Noise Reduction; Recording Tape; Signal Processing; Synthesizers; Tape Duplication; Tape Machines; Time Code Synchronizers

VIRGINIA

Linden Inc., 229 N. Henry St., Alexandria, VA, 22314-2400 (703-549-4424) DC, MD, VA, Amplifiers; Consoles, Sound Reinforcement; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Tape Duplication; Loudspeakers, Studio Monitoring

Lion Recording Services, Inc., 7532 Fullerton Court, Springfield, VA, 22153 (703-569-3200) USA, Recording Tape

WASHINGTON

Broadcast Supply West, 7012 27th St. W., Tacoma, WA, 98466 (206-565-2301; 800-426-8434) USA & Canada, Amplifiers, Consoles, Sound Reinforcement & Recording & Production; Equalizers; Loudspeakers; Microphones & Acces.; Noise Reduction; Recording Tape; Signal Processors; Tape Machines, Digital

Northmar, Inc., 1011 N.E. 69th, Seattle, WA, 98115 (206-524-5170) AK, ID, MT, OR, WA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Signal Processors

Pacnor Marketing, Inc., 21026 67th Ave. W., Suite E, Lynnwood, WA, 98036 (206-771-6016) AK, ID, MT, OR, WA, Amplifiers; Consoles, Sound Reinforcement; Loudspeakers, Sound Reinforcement & Studio Monitoring; Signal Processors; Wire & Cable; Time Code Synchronizers

PNTA (Pacific Northwest Theatre Associates, Inc.), 333 Westlake Ave. N., Seattle, WA, 98109-5282 (206-622-7850; 800-622-7850) AK, ID, MT, OR, WA, Amplifiers; Consoles; Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Specialize in sound reinforcement systems for stage & theatre use

Repronics Northwest, 911 Western Ave., Suite 334, Seattle, WA, 98104 (206-624-2790) AK, No.-ID, West-MT, OR, WA, Consoles, Recording, Production & Sound Reinforcement; Equalizers; Microphones & Acces.; Noise Reduction Systems; Tape Duplication; Tape Machines, Analog; Time Code Synchronizers

WISCONSIN

American Audio Systems, 5277 W. Beaver Creek Parkway, Milwaukee, WI, 53223 (414-354-2440) Nationwide, Amplifiers, Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

AudioLine, Inc., 2323-J Bluemound

Road, Waukesha, WI, 53186 (414-785-9166) CO, IL, IN, IA, KS, KY, MI, MN, MO, NE, ND, OH, SD, WI, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Studio Monitoring & Sound Reinforcement; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Machines, Analog & Digital; TimeCode Synchronizers; Editing Systems; Tape Duplication

Callan's Skogmo Store, dba Bear Creek Sound, 113-115 W. Main St., Durand, WI, 54736 (715-672-8750) MN, WI, Amplifiers; Loudspeakers-Sound Reinforcement; Microphones & Acces.; Projection TVs

Full Compass Systems, Ltd., 5618 Odana Road, Madison, WI, 53719-1208 (608-271-1100) USA, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Video Equip.; Lighting Equip.

Lewis Sound, Inc., 210 S. Second St., Milwaukee, WI, 53204 (414-273-6969) USA, Amplifiers; Consoles; Equalizers; Loudspeakers; Microphones; Signal Processors

Regenberg Music/Pro-Audio, 6615 University Ave., Middleton, WI, 53562 (608-836-1501) IL, IA, MN, WI, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitors; Microphones & Acces.; MIDI Devices & Samples; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog & Digital; Time Code Synchronizers; Cases & Racks; Cable-Custom Fabrication; Music Software

CANADA

Adamson Acoustic Design Corp., 817 Brock Road, Suite 9, Pickering, Ont., Canada, L1W 3L9 (416-420-6279; Fax 416-420-0813) Canada, Loudspeaker Products

Commercial Electronics Ltd., 1335 Burrard St., Vancouver, BC, Canada, V6Z 1Z7 (604-669-5525) Canada, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Recording Tape; Signal Processors;

Synthesizers; Tape Duplication; Tape Machines, Analog & Digital; Time Code Synchronizers

Erikson Music Reg'd., A Div. of JAM Industries Ltd., 111 Granton Drive, Richmond Hill, Ont., Canada (416-764-6350) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Microphones & Acces.; MIDI Devices & Sound Samplers; Tape Machines, Analog; Signal Processors; Synthesizers & Keyboards; Time Code Synchronizers

Erikson Music Reg'd., A Div. of JAM Industries Ltd., 378 Isabay, St. Laurent, Que., Canada H4T 1W1 (514-738-3000) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Microphones & Acces.; MIDI Devices & Sound Samplers; Tape Machines, Analog; Signal Processors; Synthesizers & Keyboards; Time Code Synchronizers

Erikson Music Reg'd., A Div. of JAM Industries Ltd., 3496 Vanness Ave., Vancouver, BC, Canada V5R 5A9 (604-438-9212) Canada, Amplifiers, Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Microphones & Acces.; MIDI Devices & Sound Samplers; Tape Machines, Analog; Signal Processors; Synthesizers & Keyboard; Time Code Synchronizers

Gerr Electro Acoustics Ltd., 363 Adelaide Street E., Toronto, Ont., Canada, M5A 1N3 (416-868-0528) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; Noise Reduction Systems; Signal Processors; Synthesizers; Keyboards; Test & Measurement Equip.; Time Code Synchronizers

Gerraudio Distribution Inc., 363 Adelaide Street E., Toronto, Ont., Canada, M5A 1N3 (416-361-1667) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Microphones & Acces.; Signal Processors; MIDI Devices & Sound Samplers; Loudspeakers, Sound Reinforcement

The Imaginative Marketing Group (A Soundcraft Canada Subsidiary), 1444 Hymus Blvd., Dorval, Que., Canada, H9P 1J6 (514-685-2046) Canada, Consoles, Recording, Production & Sound Reinforcement; Amplifiers; Equalizers; MIDI Devices & Sound Samplers; Signal Processors

J.L. Sound Systems Ltd., 250 King St. E., Hamilton, Ont., Canada, L8N 1B7 (416-527-6863) Ont., Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Time Code Synchronizers

J-Mar Electronics Ltd., 6 Banigan Drive, Toronto, Ont., Canada, M4H 1E9 (416-421-9080) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces. & Wireless Mics; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers

Mediatech Inc., 1010 E. La Gauchetiere St., Montreal, Que., Canada, H2L 2N5 (514-499-0331)

Canada, Character Generators; Test Equipment, Vectorscopes; Wave Form Monitors; Battery Belts; Tripods; Fluid Heads

M.E.S.-Music Equipment Sales Ltd., 34 Parkdale Avenue N., Hamilton, Ont., Canada, L8H 5W8 (416-545-0404) Ont., Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Acces.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Time Code Synchronizers

The Music Plant, 619 11th Ave., Campbell River, BC, Canada, V9W 4G5 (604-287-7790) North Vancouver island and outlying area of BC, Amplifiers; Consoles, Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement; Microphones & Acces.; Noise Reduction Systems; Signal Processors; Synthesizers & Keyboards; Tape Machines, Analog; Consoles, Recording & Production; Loudspeakers, Studio Monitoring; MIDI Devices & Sound Samplers; Recording Tape

Oakwood Audio Labs, 652 King Edward St., Winnipeg, Man., Canada, R3H 0P2 (204-786-6715) Canada, Amplifiers; Consoles, Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitors; Microphones; Recording Tape; Signal Processors; Tape Machines

P.A. Plus, Inc., 353 Eastern Ave., Toronto, Ont., Canada, M4M 1B7 (416-466-4420; Fax 416-466-4699) Worldwide, Amplifiers; Consoles-Recording, Production & Sound Reinforcement; Equalizers; Loudspeakers-Sound Reinforcement & Studio Monitoring; Microphones & Access.; Signal Processors; Test & Measurement Equip.

Richard Audio Inc., 5703 Ferrier St., Montreal, Que., Canada, H4P 1N3 (514-733-5131; Fax 514-733-7960) Eastern Canada, Amplifiers; Consoles, Sound Reinforcement, Recording & Production; Editing Systems; Equalizers; Loudspeakers, Sound Reinforcement & Studio Monitoring; Microphones & Access.; MIDI Devices & Sound Samplers; Noise Reduction Systems; Recording Tape; Signal Processors;

Synthesizers & Keyboards; Tape Duplication; Tape Machines, Analog & Digital; Test & Measurement Equip.; Time Code Synchronizers; Audio Access.

Soundcraft Electronics Canada Inc., 1444 Hymus Blvd., Dorval, Que., Canada, H9P 1J6 (514-685-1610) Canada, Consoles, Recording, Production & Sound Reinforcement; Editing Systems; Tape Machines, Analog; Equalizers; MIDI Devices; Noise Reduction Systems; Recording Tape; Signal Processors

Video Telecom International Inc., 533 Deslauriers St., St. Laurent, Que., Canada, H4N 1W2 (514-333-1401; Fax 514-333-1380) Que., Amplifiers, Consoles, Recording & Production; Audio Editing Systems; Equalizers; Loudspeakers; Microphones; Signal Processors; Digital Recording Tape; Tape Machines, Analog & Digital; Time Code Synchronizers; Time Code Generators/-Readers; Video Projectors & Access.; Audio Workstation

REP

**CD-LIKE
QUALITY
ON CASSETTES!!**

Clarity

REAL-TIME
CASSETTE DUPLICATION

**"THE
ULTIMATE
RESPONSE"**

... Find Out How ...

Post Office Square
Waterville, ME 04901
1-800-458-6405
207-873-3911

Circle (64) on Rapid Facts Card

**"The new Hollywood Edge
Sound Effects Library...
The best without a doubt!"**

Oliver Stone, Director
(Born on the Fourth of July, Platoon)

HOLLYWOOD

SOUND EFFECTS LIBRARY

The first sound effects library recorded, edited and mastered by award winning Hollywood sound editing and recording engineers.

If you buy sound effects for your company, call us today and we will send you a CD demo at no charge.

Call 800-292-3755 In CA 213-466-6723
7060 Hollywood Boulevard, Suite 711R, Hollywood, CA 90028

Circle (63) on Rapid Facts Card

RECORDABLE DAT'S IN STOCK NOW

HOME D.A.T.		PORTABLE D.A.T.	
AIWA XD-999	995	SONY TCD-D10	2250
SONY DTC-M100	1400	Includes all factory accessories	
SONY DTC-300ES	1650		
SONY DTC-500ES	1750	PROFESSIONAL D.A.T.	
SONY DTC-1000ES	1950	PANASONIC SV-3500	CALL
JVC XD-2700	1750	PANASONIC SV-250	CALL
JVC XD-21100	1850	FOSTEX D-20	CALL
JVC XD-2900	2250	SHARP SX-D100	CALL
AKAI D-9000	1800	SONY PCM-2500	CALL
PIONEER D-900	1800	SONY PCM-2000	CALL

BLANK TAPE - ALWAYS IN STOCK

Maxell, TDK, Fuji, Panasonic

COMPLETE INVENTORY OF ACCESSORIES

FULL WRITTEN WARRANTY PLUS FREE LOANERS
IMMEDIATE DELIVERY

NO DEPOSITS REQUIRED

ENGLISH OWNERS MANUALS

A/C ADAPTORS INCLUDED

9 A.M. - 7 P.M. 7 DAYS

AMEX • VISA • MC

SHIP VIA UPS/FED-EX

(213) 828-6487

FAX (213) 470-6176



2624 Wilshire Blvd. Santa Monica CA 90403

Circle (66) on Rapid Facts Card

DISC *MAKERS

Complete manufacturing for the audio industry.

COMPLETE PACKAGES FOR:

- Cassette Duplication
- Record Pressing
- Compact Disc Replication

In-house art department for design, typesetting, film work, and printing. In-house mastering department for a great sounding product

SAVE MONEY
Deal Directly With The Manufacturer



CALL FOR OUR
FREE FULL COLOR
CATALOG.

1-800-468-9353

(In PA: 215-232-4140)

DISC *MAKERS

1650 Broadway, Suite 1010

New York, NY 10019

(212) 265-6662

Circle (87) on Rapid Facts Card

STUDIO UPDATE

Northeast

39th Street Music Productions (New York) has installed a 56-input SSL G-Series console with Total Recall. A Studer A827 24 track tape machine, Lexicon 480L, Yamaha SPX 1000, TC Electronic 2290 and Publison :20 update also have been added. 260 W. 39th St., 17th floor, New York, NY 10018; 212-840-3285.

Howard Schwartz Recording (New York) has installed two Sony MXP 3000 consoles in Studios 7 and 8. The consoles will increase all interlock, satellite and communications functions. 185 West End Ave., Suite 22C, New York, NY 10023-5539; 212-877-5560.

Greene Street Recording (New York) has added an Eventide H3000 Ultra-Harmonizer and the additional broadcast software updates. A Studer 827 multitrack recorder will be installed in Studio B to link to the existing A-820, and a Studer A-800 will be installed in the Trident TSM-equipped Studio A. 112 Greene St., New York, NY 10012; 212-226-4278.

Effanel Music (New York) has installed a Solid State Logic console, becoming the first independent mobile audio facility in the United States. The 46 channel SL 4000E Series features the G Series computer. It is installed in a 45-foot air-ride van trailer with a dual Otari MTR-90 24-track tape machines, 48 tracks of Dolby SR noise reduction and three Lexicon reverbs. 340 W. 22nd St., New York, NY 10011; 212-807-1100.

Editel Sound (Boston) was named a National Winner and National Finalist of four categories in the 1989 Silver Microphone Awards. The competition selects the year's best radio commercials created by advertising agencies and production companies. 651 Beacon St., Kenmore, MA 02215-3278; 617-267-6400.

Southwest

Studio in the Country (Bogalusa, LA) has completed the redesign of its facilities to include a 56-input, 48-bus Neve V Series console with Necam 96 automation and moving faders, and a Studer A-820 multitrack recorder with Dolby SR. Box 490, Highway 436, Bogalusa, LA 70429-0490; 504-735-8224.

Ultrasonic Studios (New Orleans) has added David Farrell, a Grammy Award-winning engineer, to its staff as a recording engineer. 7210 Washington Ave., New Orleans, LA 70125; 504-486-4873.

Polymusic Inc. and Concept Company have merged to form the **Airwave Production Group**. The company will provide professional audio production and audio recording. 225 Oxmoor Circle, Suite 811, Birmingham, AL 35209; 205-942-3222.

Hot Spots Creative Services (Houston) is offering custom audio production services for small and medium market radio stations on a market-exclusive basis. The client stations can work day-to-day with the studio's staff, with costs varying according to market ranking. 510 Seventh St., Sugar Land, TX 77478; 713-242-4171.

Midwest

Pandemic Music (Grand Rapids, MI) has purchased Steele Productions and is operating under the name Pandemic Recording Studios. The purchase will allow Pandemic to offer 8-track production along with the 24-track studio for producing original music for video. The studio is now located in the Steele Productions facility at 161 Ottawa Ave., N.W., Grand Rapids, MI 49505.

General Television Network (Oak Park, MI) is said to be the first video production facility in the United States with a Lexicon Opus. 400 Renaissance Center, Suite 600, Detroit, MI 48243.

Smith/Lee Productions (St. Louis) has added the following equipment: an AKG "The Tube" microphone, two Klark Teknik DN 410 parametric equalizers, a Lexicon PCM-70 and LXP-5, a Pound SPS-1 Quad microphone pre-amp, a Valley International Gatex noise gate, a pair of B&W DM 550 monitors and a Star ATA flight case. All the equipment is wired with Canare and Monster cable. 7420 Manchester Road, St. Louis, MO 63143; 314-647-3900.

Harpo Studios (Chicago) has an agreement with Universal Recording to provide audio services for "The Oprah Winfrey Show" and other film and television projects to be produced by Harpo. Universal Recording will be responsible for the audio equipment and personnel for the

Studios' complex. It also will support the state-of-the-art 45-seat screening room, which features twin 35mm projectors with Dolby Stereo Spectral reproduction equipment. *35 E. Wacker Drive, Suite 1782, Chicago, IL 60601; 312-580-1950.*

Televue Productions, Roger Francisco Productions, DeYoung Video Productions and Pro-Cam Video have joined to form **The Prairie Production Group**. The group will concentrate on industrial, business, educational, institutional and advertising clients. *110 W. Main St., Urbana, IL 61801; 217-344-4675.*

Southern California

Craig Harris Music (Studio City) has added a Synclavier system, a Yamaha DMP-7 digital mixer/processor, a Sony TCD-D10 DHT and an Oberheim Matrix 1000. *11285 Laurie Dr., Studio City, CA 91604; 818-508-8000.*

Buena Vista Sound (Burbank) has named Steve Boze chief engineer and Tracey Riker manager of sound transfer. *500 S. Buena Vista St., Burbank, CA 91521; 818-560-0044.*

Soundworks West (Los Angeles) has announced a multi-million dollar renovation project for its recording studio complex purchased from Gordy Company. Two studios already have been reconfigured and are open for business. *7317 Romaine St., W. Hollywood, CA 90046; 213-850-1510.*

The sound department at **The Post Group** (Los Angeles) won three out of four finalist nominations for best audio mixing and design at the Monitor Awards Ceremony. The Post Group also won a daytime Emmy this year. *6335 Homewood Ave., Los Angeles, CA 90028; 213-462-2300.*

The Record Plant (Hollywood) has promoted David Ellman to chief operating officer and executive vice-president. *1032 N. Sycamore Ave., Hollywood, CA 90038; 213-653-0240.*

Northern California

Soma Sync Studios (San Francisco) has acquired a Yamaha C-3 6-foot baby grand piano fitted with Yamaha's fiber-optic MIDI interface. The piano can operate as a full-function MIDI controller without affecting the sound or action of the acoustic piano.

372 Brannan St., San Francisco, CA 94107; 415-546-1433.

Canada

Digital Music (Toronto) is a new recording studio, equipped with a Fairlight Series III music computer, synthesizers and modules, tapelock, a sound-effects library, and Macintosh and Atari computers. *119 Spadina Ave., Suite 747, Toronto, Ontario M5V 2L1; 416-345-9067.*

Kate Anthony has joined **Comfort Sound** (Toronto) as office manager. *26 Soho St., Suite 390, Toronto, Ontario M5T 1Z7; 416-593-7992.*

Master's Workshop (Rexdale, Ontario) has purchased two Fostex D-20 R-DAT recorders. The machines will be used for post-production functions under control of the Soundmaster editing systems. *306 Rexdale Blvd., #7, Rexdale, Ontario, Canada; 416-741-1312.*

Manufacturer and dealer announcements

Digital Audio Research received an order from Pinnacle Production House for a SoundStation II.

Neve has installed its VR console in the following locations: Studio in the Country (Bogalusa, LA), George Tobin Productions (N. Hollywood, CA) and Cornerstone Recorders (Chatsworth, CA).

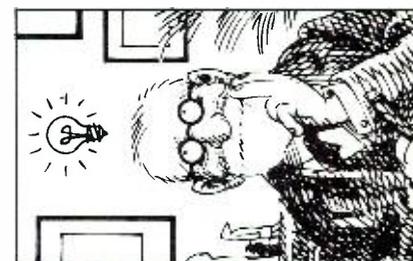
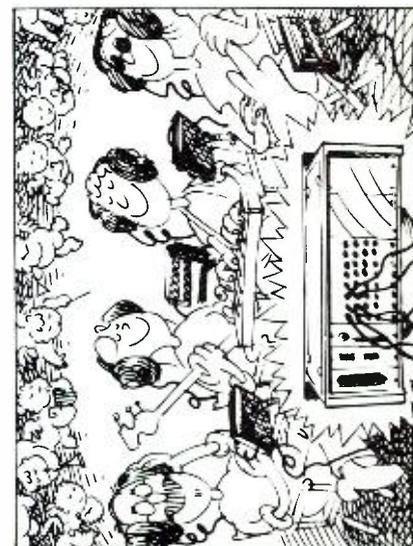
Sony has announced the following installations: Bryan Adams' home recording facility (Vancouver, British Columbia), PCM-3348 48-channel recorder, PCM-3342A 24-channel recorder and a PCM 3402 2-channel recorder; OMI Studios (Atlanta), APR-24 analog audio multitrack recorder; CMS Digital (Pasadena, CA), PCM-3324A digital multitrack recorder; Mass Cassettes (Latin America), PCM-3324A, MXP-3036VF, PCM-3402 Dash 2-channel recorder and PCM-2500 DAT studio recorder; and Grupo Pypsa's recording studio (Monterey, Mexico), MXP-3036 and APR-24.

S.G. Audio has installed the first Audio Kinetics Reflex Automation System in the Midwest for the Moore Music Group. S.G. Audio also installed an Otari MTR121 1/2-inch 4-track recorder at Intuition Music.

REP



Solve your monitoring problems with
THE STUDIO PSYCHOLOGIST
Remote Control Headphones or Stage Mixing System
from
intelix™
(608) 273-6333 • 5618 Odana Rd. • Madison, WI 53719



Circle (73) on Rapid Facts Card

NEW PRODUCTS

MotionWorks Motionworker

This unit is a multi-capable systems interface that permits the integration of console automation, MIDI equipment and machine controllers/synchronizers. Motionworker's ES 1.11 interface enables the synchronization and control facilities of the ES 1.11 to be integrated with the SSL Master Studio Computer, providing access to machine control functions.

Circle (126) on Rapid Facts Card

Gentner Digital Hybrid II

The Digital Hybrid II digitally processed telephone hybrid features a 16-bit Motorola digital signal processor to isolate send and receive signals. In broadcast applications, the unit allows users to talk to callers off and on air, switching between the console's mix-minus and mic preamp outputs. In audio conferencing applications, the Digital Hybrid II replaces conventional speakerphones for simultaneous 2-way conversation. Suggested list price is \$1,795.

Circle (127) on Rapid Facts Card

SP-1 Spatial Sound Processor

Spatial Sound has introduced the SP-1, a real-time MIDI processor for sound spatialization. The processor allows sound localization, sound movement simulation, spatial pattern generation and multi-dimensional spatialization. The SP-1 can process any live or recorded audio signal, and it can handle up to eight speakers in arbitrary positions. Extensive MIDI implementation is featured.

Circle (139) on Rapid Facts Card

Sennheiser MKH 50-P48

The MKH 50-P48 condenser microphone provides a highly frequency-independent supercardioid polar pattern for lessening sound pick-up from the sides and rear of the microphone. The microphone's capsule is part of a tuned circuit in a radio frequency system, providing high immunity to humidity and low-noise performance. The MKH 50-P48 features a 40Hz to 20kHz frequency response, a switchable 10dB pad and an approximity effect compensation filter.

Circle (133) on Rapid Facts Card

Sennheiser HD 25

The 5 oz. HD 25 studio monitoring headphone features dynamic drivers in a closed

supraural design, an adjustable split headband for optimum fit and a single side audio cable. Also, the HD 25 allows one driver to rotate off the ear and onto the user's temple. Frequency response for the headphone is 30Hz to 16kHz.

Circle (134) on Rapid Facts Card



VDP Generic Designer Series

Video Design Pro has introduced its Generic Designer Series of 2-D design productivity libraries (available in DOS or MAC Generic CADD, and AutoCAD release 9 or 10). Each library includes dimensional and system diagram views of

each model; the CableDOC cable documentation program; PathROUTER signal path tracer and a Jack Layout program. Generic Designer libraries are available for broadcast video, industrial video, broadcast audio, sound system and A/V design industries. Each library is \$300.

Circle (130) on Rapid Facts Card

Sidewinder I

Sidewinder Marketing's multi-purpose reels for the broadcast industry are lightweight, non-conductive, non-corrosive and totally enclosed. The Sidewinder I and II will accommodate A/V cable, speaker wires and mic cable; they can also be used to supply temporary power and lighting to remote locations.

Circle (129) on Rapid Facts Card

Emax II Digital Sound System

The Emax II Digital Sound System, a professional 16-bit sampler and synthesizer from E-mu Systems, is available in rack-mount and keyboard form. The system incorporates E-mu's Spectrum Interpolation Digital Synthesis, an additive synthesis

Publications

"The Studio Business Book"

First House Press has released "The Studio Business Book," a guide to the daily operations of commercial recording studios. The book is being marketed as a textbook for universities and trade schools that offer music business and audio production courses. It also is available on an individual basis. Written by Jim Mandell, owner of Interlok Studios, the book covers studio management and a series of interviews with top studio owners.

Circle (149) on Rapid Facts Card

"Microphones"

An expanded and updated edition of "Microphones," written by Dr. Gerhart Boré and published by Georg Neumann GmbH, has been released by Gotham Audio Corporation. It gives basic information about microphones, their operating principles, and then more specific information about condenser and dynamic microphones. There also is a section on recording applications.

Circle (150) on Rapid Facts Card

APRS "Business Brief"

The Association of Professional Recording Studios (APRS) has published "Business Brief," which covers the United Kingdom withholding tax rules for overseas recording artists. The brief explains how the WHT rules work and their relevance to recording studios in the United States. APRS is distributing the brief, which was prepared by Arthur Young, a consulting firm.

Circle (151) on Rapid Facts Card

Media One instructional video

"Basic Multitrack Recording Tips With Rick Shaw," available from Media One Productions, is an instructional video to assist those entering the home recording scene. This first tape in an on-going series covers basic multitrack techniques, from how to hook up instruments to overdubbing and the final mix. The tapes are recorded at Shaw's personal MIDI studio and mastered on 1-inch professional video format with dbx-encoded stereo audio tracks.

Circle (152) on Rapid Facts Card

Hardware and software updates

Coda's Finale 2.0

The Finale music notation software from Coda Music Software has been upgraded to a 2.0 version that eliminates numerous dialogue boxes and replaces them with menu-driven options and commands. Finale 2.0 also includes a MIDI tool for visual editing. Suggested retail price is \$749.

Circle (141) on Rapid Facts Card

Archie 2.0

Archie, the recording studio management program from Words & Deeds, has been upgraded to version 2.0. Enhancements include additional reports, indexes, forms, tracksheets, expanded report formats, expanded room capacity, a rewritten manual and compatibility with MultiFinder. Among the user-suggested enhancements is a maintenance scheduling section to issue a maintenance request form, tracksheets for 24 and 48 track with new fields for speed and alignment, an artist title index showing artist, client, producer and engineer relationships and an expanded master tape entry to accommodate an unlimited amount of titles.

Circle (142) on Rapid Facts Card

Audio Kinetics interfaces

Two synchronization and machine control interfaces are available for the AK ES1.11 ESbus synchronizer and the Q.Lock synchronizer. The ES1.11 is for Akai's DR1200 digital multi-track recorder; combined, lock-up time is improved by 85%. The Q.Lock synchronizer is for the D-20 SMPTE/RDAT master recorder.

Circle (143) on Rapid Facts Card

AMS Audiofile software for EDLs

AMS Industries has introduced EDL translator software that enables CMX and Sony to be prepared and transferred to its AudioFile via a PC. The software creates program record events from the EDL and includes a CMX format EDL editor.

Circle (148) on Rapid Facts Card

Adams-Smith Level K software

The Level K software for the Adams-Smith model 2600 SY Synchronizer module includes the ability to jog and shuttle VCR's

and VTR's and bi-phase driven transports using either pushbuttons or motion control knobs supported by a jog/shuttle cueing routine and smart cueing. An expanded slow re-lock mode, 3-digit selection of specific transport control parameters from a transport library, non-volatile storage of multiple sets of user-customized constants in NV memory and setting time code standard via serial protocols are also featured in the software.

Circle (144) on Rapid Facts Card

E-mu Proteus XR

The Proteus XR, a 16-bit, 32 voice polyphonic digital sound module, has 4x the number of user presets as the standard Proteus: from 64 to 256. The Proteus XR uses E-mu VLSI technology to combine true 16-bit Emulator III sound. The 32-voice polyphony allows access to its layering capabilities and its ability to respond multi-timbrally to all 16 MIDI channels simultaneously. Suggested list price is \$995.

Circle (145) on Rapid Facts Card

Performer Version 3.2

The Performer Version 3.2 MIDI-sequencing software from Mark of the Unicorn introduces a graphic sequence chaining feature known as chunking. Chunking shows sequences and songs on a Song Grid as icons that can be arranged in any order and stacked for consecutive and simultaneous playback. A remote control feature lets the user access the performers transport controls directly from the MIDI keyboard or controller. Additional features include event chasing, simultaneous event list, graphic editing windows and hard disk installation. Suggested price is \$495; the update is being sent free of charge to all registered Version 3.00 users.

Circle (146) on Rapid Facts Card

Sennheiser ME 80/K3U update

The ME 80/K3U Supercardioid/lobe microphone is now available in a non-reflective black finish. This makes the microphone unobtrusive for overhead miking of a drum kit, use in theatres, recordings at a distance and film/video applications.

Circle (147) on Rapid Facts Card

that allows a variety of dynamically evolving timbres. The Emax II provides 32 audio channels, 32 custom digital lowpass filters, 18-bit D/A converters, Macintosh compatible storage devices and a SCSI port. Suggested U.S. list price is \$3,495 for the standard version, \$6,495 for the Turbo version.

Circle (131) on Rapid Facts Card

EV S-1202ER speakers

The S-1202ER full-range, 12-inch 2-way speaker from Electro-Voice features a DH2010A titanium-diaphragm, high-frequency compression driver coupled to a 90°x40° constant-directivity horn. The speaker also has a 300W EVM-12S Pro-Line woofer capable of 1,200W peaks and a maximum SPL of 125.5dB.

Circle (137) on Rapid Facts Card



ASC 11-inch Super Trap

The 11-inch Super Trap from Acoustic Sciences Corporation is a high-efficiency broadband sound absorber, specified for rooms with an 8-foot ceiling to control fundamental floor-to-ceiling resonances. The unit features extended bass response, damping of standing waves into the 70Hz range, a patented Sound Diffusion Panel and an internal reactive acoustic circuitry. The Super Traps are available in 3- and 4-foot standard or custom lengths, and are covered with Guilford 701 commercial standard fire-resistant fabric in a range of colors.

Circle (132) on Rapid Facts Card

REP

*Just What You
Need to Hear...*

Read our insert in this
issue, page 96A.

PROFESSIONAL AUDIO SYSTEMS

1224 W. 52nd St.
Harbor City, CA 90710
(213) 534-3570
FAX:(213) 530-2384

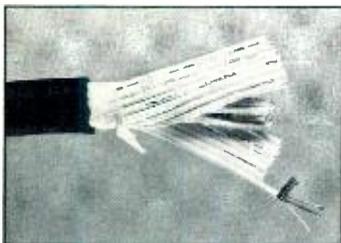
Circle (69) on Rapid Facts Card

Greater Wiring Efficiency
with
new easy identification

"Snake"

MULTI-PAIR CABLES
by
- mogami -

- * drain wire with each pair
- * color & number coding
- * 2,4,8,16,24 & 32 pairs
- * super flexible
- * neglex 2Sawg OFC
- * crosslink insulation



Marshall Electronics Inc.
P.O. Box 2027
Culver City, Calif. 90230
Phone 213/390-6608
Fax 213/391-8926

Circle (41) on Rapid Facts Card

CLASSIFIED

FOR SALE

MIDI Utility Package

Why should you spend hundreds of dollars on librarians for your synths, drum machines or special EFXs when one package can do it all? As a **Universal Librarian** the MIDI Utility (MU) can capture/restore banks of sounds from any MIDI based module and save/restore them to your computer disk. MU also allows you to look at and modify any MIDI data. Requires IBM PC or compatible with MPU-401. To order your copy please send \$59.95 to:

HED Productions
Dept. R1
P.O. Box 28820
San Diego, CA
92128

The Studio POP Filter

A Great Improvement on a Good Ideal



Open up the sound of your vocals and voice overs without annoying "POPS" ruining your best take!

- Standard mic stand adaptor with threaded brass insert
 - One piece plastic rims, 5" diameter—in sky blue or black
- ONE YEAR
GUARANTEE

Only
\$24.00

With optional
Clamp and
Gooseneck
\$44.95

AUDIO VISUAL ASSISTANCE
565 Sherwood Road,
Shoreview, MN 55126
Phone: 612-481-9715

Circle (75) on Rapid Facts Card

STUDIOWORKS

Recording & Broadcast Equipment

FACTORY DIRECT PRICES ON 3M & AMPEX TAPE

AKG	EVENTIDE	RAMSA
ART	JBL	OTARI
DBX	LEXICON	VALLEY INT'L
EV	NEUMANN	OTHERS

SONY

Professional Audio
(800)438-5921 / (704)375-1053

EQUIPMENT FOR SALE

Harrison MR3, Soundcraft 600, 24 Dolby A, Lxon224SL, Evntd SP2016, Otari MX505MKIII4, JVC 82503/4", Steinway M, Ecoplate II, UREI 539s, RX5, DPX1, LinnDrum/MIDI, Masterbeat, Sentry100As, David 9000s, JBL 4401s, D12E, RE20, 421s, PZM, Ampx 350/Inovonice 2 trk, Ashley SC66, Orange County comp/Imtrs, BelBD80 and more! (212) 362-7840

ACOUSTIC FOAM



GIANT
54" x 54"
\$19.99
Per Sheet!!

KILL NOISE QUICK! Soundproof studios, rehearsal spaces, vans, rooms with super-effective, E-Z mount, 2" thick studio gray or natural blue (specify color). Markerfoam offers outstanding sound absorption qualities. Immediate shipping. Add \$3.50 sheet shipping. NYS residents add 7% tax. MC, Visa, Amex, COD, Check. Terms: 3-inch sheets also available at \$29.99.

800-522-2025 America's most unique
(In NY 914-246-3036) catalog for audio & video!

MARKERTEK™
145 Ulster Ave. Saugerties
New York 12477 USA
VIDEO SUPPLY

Circle (77) on Rapid Facts Card

- Fostex B-16 16 tk recorder, \$3.5K
- Seck (JBL) model 1882 mixer, \$3K with full meter bridge 18x16x8x2, liquidating demo studio, much more.

Guitar World Music Center
412-646-1061

USED EQUIPMENT Bought & Sold



Summit
Audio
Inc.

P.O. Box 1678
Los Galos, CA 95031
408-395-2448
FAX: (408) 395-1403

Pyramid Audio

New Digital Workstation & Recorder/Editors Serious Consoles: *Soundcraft 3200*, DDA, Neotek. Synchronizer specialists: Lynx & Zeta. Otari: DTR900... et al, Tannoy, KT Gates, Dynacord, dbx(?), Lexidon, Panasonic DATs... and used stuff too.

(708) 339-8014

MILAM AUDIO

1470 VALLE VISTA BLVD. PEKIN, IL 61554
309/346-3161

FOR SALE (CONT.)

**NEW, USED,
DEMO EQUIPMENT**

Trident Consoles, Akai Adam, TAC Scorpion II, Drawmer, 3/4" Umatic Recorders, MX70 16TK, Panasonic SV-3500, SV-255, Lexicon 480L, Eventide H3000, Dyaxis 320Meg, Opcode Vision, Tascam 8/16 TK Recorders, Toshiba Video Monitors, Dolby 363SR

Equipment Leasing Specialists
Experienced Staff/Unequaled Service

EAR Professional Audio-Video
(602) 267-0600

**HIGHEST Quality
Polypropylene Capacitors
LOWEST DCR Inductors**

Speakers from:
Dynaudio Focal

Eton Audax



Call for a free catalog
Madisound Speaker Components
3608 University Green
Box 4283 Madison WI 53711
Phone: 608-431-3433
Fax: 608-431-3771

**Brand New 19" ADC
tt Patchbay Panels**

Balanced/normalled, 144 points each.
Cost \$300—Sell \$175 each, 2 for \$300 or
3 for \$400.

Call Roger Cordell
(818) 763-8301

HOUSE SPEAKER SYSTEM

8 Hill M-3 Speaker Enclosures System
comes w/8 Hill TX-1000 Tri-amps, Racks,
Speaker Cable, Crossover & Flying Hard-
ware. System will cover 5,000 people. Cost
\$22,000.

1 MSI 32x12 monitor console, \$4,500. 1
Soundcraft 500 40x12 monitor console
with 2 PSUs, \$14,500.

Seriously Sound 404-872-0346

MONITORS & SYNCHRONIZER

- Audio Kinetics Pacer synchronizer w/pad \$1850.00
- Tannoy SGM-15B reference monitors \$2500.00
- Tannoy SGM-1000 15" super gold monitors \$2600.00
- Meyer 833 studio reference monitor system with processor (call)

TekCom Corporation

1020 N. Delaware Ave., Philadelphia, PA 19125
215-426-6700

FOR SALE

THE PRO AUDIO SOURCE

AKAI ADAM	DOLBY	NAKAMICHI	T.C. ELECTRONICS
ALPHA AUDIO	DRAWMER	NEEMANN	TIMELINE-LYNX
AMEK/TAC	DYAXIS BY STUDER	OTARI	YAMAHA PM-3000
APHEX	EVENTIDE	RAMSA	
BROOKE-SIREN	JBL/UREI/SOUNDCRAFT	SONY PRO AUDIO	
BRUEL KJAER	KLARK-TEKNIK	SOUNDTRACS	
BRYSTON	LEXICON	SUMMIT	
CROWN	MEYER SOUND	TANNOY	



**Washington
Professional
Systems**

11157 VEIRS MILL RD
WHEATON, MD 20902

TEL: 301-942-6800
FAX: 301-946-3241

Circle (76) on Rapid Facts Card

POP FILTERS

*An absolute necessity
for every studio*

**\$49.95 includes screen,
clamp, gooseneck and shipping**

Call or Write for Free Brochure
Outside CA (800) 446-7677
Inside CA (818) 788-3635

POPPER STOPPERS
P.O. Box 6010—658, Sherman Oaks, CA 91413

DEALER INQUIRIES WELCOME
SATISFACTION GUARANTEED

CFS Century Financial
Services Group, Ltd.

LEASE FINANCING

Specializing in Professional
Audio Equipment.
New and Used.

Transactions Approved Nationally.
Ask us about our Mini-lease.

Tom Roche
1-800-826-6639
or
314-537-0330
Fax 314-537-4026

Circle (78) on Rapid Facts Card

**SINGERS!
REMOVE VOCALS
FROM RECORDS AND CDS!**

SING WITH THE WORLD'S BEST BANDS!

An Unlimited supply of Backgrounds from standard stereo records! Record with your voice or perform live with the backgrounds. Used in Professional Performance yet connects easily to a home component stereo. This unique product is manufactured and sold Exclusively by LT Sound - Not sold through dealers. Call or write for a Free Brochure and Demo Record.

**LT Sound, Dept. RP-9, 7980 LT Parkway
Lithonia, GA 30058 (404) 482-4724**
Manufactured and Sold Exclusively by LT Sound
24 HOUR PHONE DEMO LINE: (404) 482-2485

**WE CAN'T FIND ENOUGH
USED 24 TRACKS!!!**

If you are considering trading up, now is the time!! Your clean Otari, MCI or Studer 24 has never been worth more in cash or trade. Other decks needed, too.

dbEngineering 617/782-4838

FOR SALE

FOR SALE CON'T.

FOR SALE CON'T.

AVR

AUDIO VIDEO RESEARCH THE STUDIO STORE (617) 924-0660

The Only Call You Have To Make For:

- | | | | |
|-----------------|---------------|----------------|------------------------|
| ADAMS-SMITH | DIC DAT Tape | MARK OF THE | SHURE |
| AKAI | EAW | UNICORN | SOUNDCRAFT |
| AKG | EVENTIDE | MOGAMI CABLE | STUDIOMASTER |
| ALLEN & HEATH | FOSTEX | MRL | SUMMIT AUDIO |
| AMPEX TAPE | FOUR DESIGN | MILAB | TANNOY |
| APHEX SYSTEMS | FURMAN | NADY | TC ELECTRONICS |
| ARIES | GOLDLINE | NAKAMICHI | TELEX |
| ART | HOSA | NAKAMICHI-DAT | THRESHOLD |
| ASHLY | HYBRID ARTS | NUMARK | TRIDENT AUDIO |
| ATARI COMPUTERS | HYBRID CASES | OPCODE SYSTEMS | TWELVE TONE |
| BBE | IMAGINE MUSIC | ORBAN | SYSTEMS |
| BEYER DYNAMIC | SOFTWARE | OTARI | US AUDIO |
| BOSE | JOSEPHSON | PANASONIC | ULTIMATE SUPPORT |
| BIAMP—LEGEND | ENGINEERING | PROCO | WHIRLWIND |
| CALZONE | KLARK-TEKNIK | RAMSA | ...and Many Others, |
| CANARE CABLE | KLIPSCH | SENNHEISSER | plus used equipment!!! |
| CROWN | LEXICON | | |

Studio and Control Room Design in Conjunction With: ACOUSTIC SCIENCES CORPORATION, manufacturer of TUBE TRAP tm.

Exclusivamente para o Brasil, oferecendo instalacao e assistencia tecnica:
 SSL JBL/UREI KURZWEIL LEXICON
 HARRISON OTARI TRIDENT

AUDIO VIDEO RESEARCH 106 Main Street Watertown, MA 02172
Telephone (617) 924-0660 Facsimile (617) 924-0497

Circle (79) on Rapid Facts Card

American Pro Audio



- Sony/MCI • Trident •
- Tannoy • Eventide •
- Yamaha • Tubetech •
- Fostex • Soundtracs •
- Beyer • Roland • Akai •
- Ramsa • Panasonic •

Mini Lease Program

New or used, trade-ins 24-60 months with buyout option \$5K-25K **no** financials required min. 2 yrs in business.

1-800-333-2172



PREMIUM QUALITY AUDIO CASSETTES

featuring

110 NAKAMICHI MR1-B/X DECKS
 ALL DIGITAL & ANALOG SOURCE MASTERS
 AUDIO PRECISION SYSTEM ONE TESTING

CALL or WRITE
 QUADIM CORPORATION
 31542 RUSTIC OAK DRIVE
 WESTLAKE VILLAGE, CA 91361
 TEL - (818)706-8843
 FAX - (818)706-8426

VELCRO CABLE WRAPS

Quick, safe, neat, never lost
 Use them in Studio, Remote & Mtce Shop
 Call or write for free sample
 VIDEO PARTS CO.

POB 1141
 PEEKSKILL, NY 10566-8141
 212-713-5757

AMS RMX 16 Digital Reverb-\$6,000 OBO
 Akai MG 1212 w/Anvil Case-\$3,700 OBO
 Lexicon 95 (Prime-time II)
 DDL - \$1,300 OBO
 ELCO Harness w/96 point TT patchbay in flight case \$1,500 OBO
Contact: Mike at 619-697-6557; leave message.

WE CAN'T FIND ENOUGH CLEAN USED 24 TRACKS db ENGINEERING (617) 782-4838

BLOWOUT: New Lexicon PCM-70, \$1.4K; AKG C-414BULS, mint \$625; Sony/MCI JH-110C 1/2" 2tr, 200 hr, \$4.1K; Neuman KM-84, mint, \$285; **ENGLISH SPECIALS:** SSL 4040E w/32 mono/st, recall, \$125K; SSL 4040E/G \$100k; NEVE 8068 MK-II w/Necam, \$95K; Trident 80B, 32x24, \$30k; Studer A800, \$40k; Studer A80 MKII, \$26k; Otari MTR-9011, \$30k; MCI JH-24, AL-III, \$22k; Otari MX5050B, \$1.4K; **PROCESSING SPECIALS:** NEVE 4-band, \$1.2K; ITI/Massenburg 3-band console parametrics, \$550. **LIST YOUR FOR SALE ITEMS W/US FREE!** The only broker w/OTARI & TASCAM authorized service. Add time code to your 2 track for under \$12k. Otari TC-50 kits, now for Studer, MCI & others.

214 Lincoln St., Ste. 103C
 Boston, MA 02134
 FAX (617) 782-4935
See our ad for new specials!

Inventory Clearance Sale

Too much stuff—too little time & space
 It's all got to go—must sell by Dec. 15
 MCIJH556C-561/O; MCIJH556C-481/O;
 MCIJH542B-321/O; MCIJH528B-281/O
 All types of tape machines & parts;
 2 AMS RMX16 Reverbs;
 UREI 529-539 EQs;
 mics & all kinds of outboard stuff.

Randy Blevins
B.A.E. Inc.
P.O. Box 101238
Nashville, TN 37224
615-391-0429
615-391-0456 Fax



The East Coast MIDI Bulletin Board System

You never get a second chance to make a first impression. At ECM we realize that's true. That's why we've assembled a huge assortment of MIDI/Production/Studio applications for all computer types. From Sequencers to SMPTE, it's all here. **Our Synth Patch and Sample Libraries are stocked with over 5,000 killer sounds with more being added regularly.** Give us a call, at speeds up to 38,400 baud (HST), 24 hours a day. We think you'll agree...a second chance won't be necessary.

East Coast MIDI 516-928-4986 (data)
516-928-8986 (24 hour voice info)

Custom Cases	Acoustic Foam	Custom Stands	Studio Furniture
Request Catalogue 800-343-1433, 516-563-0633 Island Cases, 1121-20 Lincoln Ave., Holbrook NY 11741			

FOR SALE (CONT.)

dbENGINEERING

The oldest used broker on the East Coast now offers new specials!

db is your source for:

Adams-Smith, AKG, Aphex, Beyer, Eventide, Klipsch, Sennheiser, Studio-master & many more.

db wants to sell more TANNOY

PBMs, NFM-8s, LGM 10s & 12s than any other dealer this year! Call for quote!

Boston, MA (617) 782-4838

NEW & USED EQUIPMENT

FREE R-DAT RECORDER
(Sony 300E)

With purchase of:

1. Amek/TAC 36x24 w/P-bays \$26,500
2. Trident 36x24 w/P-bays \$26,500
3. A-DAM 24 trk digital recorder . . . \$47,500

FREE AKG 240M HEADPHONES

With purchase of:

- APHEX 612 Dual Gate \$700
APHEX 300 Stereo Compellor . . . \$999

USED

- Ampex 440B Full trk
Ampex 440B 1/2 trk
Ampex 440B, 4 trk
Otari MTR-90II, 24 trk, 25,000 to 32,000
MCI JH-24 19,000 to 21,000
Call for a complete list of used audio and video equipment.

OPUS

RECORDING & EQUIPMENT CO.

4262 Grand Avenue, Gurnee, IL 60031

"The Midwest Recording Center"

(708) 336-6787 FAX (708) 336-6895

CD SAVER



The only CD Scratch Remover & Cleaner on the market today!

Restores discs to their original top, quality fidelity.

J.B.F. LABORATORIES

1201 N. Barsten Way
Anaheim, CA 92806
714-630-7733

SYNCLAVIER 32 Poly - 8 FM - 8 out, 16 meg RAM, 240 meg storable, clock module. 18 months old, release 0, \$180,000.00. Asking \$120,000.00 or best offer over \$100K. 516-669-1872.

Complete Recording Studio Packages Available in Nashville, TN Area

Equipment and buildings can be sold separately!

Complete 24 TK equipment packages starting at \$60K.

Packages include

MCI - Harrison - Studer - Neumann - Otari equipment.

Great package for \$80K and it's automated!

Randy Blevins

B.A.E. Inc.

P.O. Box 101238

Nashville, TN 37224

615-391-0429

615-391-0456

Stamp Out SCR Buzz. Forever.

Diff amps may work - when far from SCR dimmers and RF transmitters. When you're up close, you'll need a good transformer.

jensen transformers
INCORPORATED

10735 Burbank Blvd. • North Hollywood, CA 91601

FAX (818) 763-4574 Phone (213) 876-0059

TELEX 6502919207 MCI UW

(Mon-Thurs. 9am-5pm Pacific time)

Circle (82) on Rapid Facts Card

FOSTEX RECORDING EQUIPMENT

MACINTOSH & IBM Computers

& compatibles

MUSIC SOFTWARE

Monitors & Printers

DISCOUNT PRICES

DATAWARE, INC.

(we ship world wide)

P. O. Box 1122

Hollywood, CA 90078-1122

(818) 996-1161

1-800-759-7243—orders only—Pin #91643

Use the Rapid Facts Card in the back of this issue!

RENTAL EQUIPMENT

A TOTAL EFFECT

Eventide H-3000 SE

<New

T.C. 2290 (32 sec.)

T.C. 2290 (32 sec.)

Includes remote patchbay.

T.C. 1210 spatial ex.

Publison Infernal 90

24 hr. service

AMS S-DMX

AMS RMX-16

Eventide SP 2016

Lexicon 480L

7 days a week

480L Larc & Manuals

All for \$300 a day or \$1200 a week!
(That's \$171.43 a day!)

Call for advance bookings today

(818)345-4404

Encino, CA

Circle (80) on Rapid Facts Card

MANHATTAN NYC STUDIO SPACE AVAILABLE

Esthetically beautiful, acoustically accurate 24+ trk controlroom/studio, MIDI controlroom, office, lounge, shop, storage. Newly renovated. Wired for audio, phone and alarm systems. Central air-conditioning. With or without equipment. Convenient location. Great lease. (212) 362-7840

SERVICES

NARRATION \$195

YOU DIRECT BY PHONE PATCH

Talent

ASSOCIATES INC.
NARRATIONS NATIONWIDE™
(303) 830-2228

ALIGNED AUDIO, INC. SUPER QUALITY!

- Audiophile Record Pressing
 - CD Replication
 - Real Time and High Speed CASSETTE DUPLICATION - Direct on-shell imprint
- IN COLORS**

COMPLETE PACKAGES

CALL TODAY for your free catalogue:

1•800•865•6561 or

1•718•788•6969

fax: 1•718•499•0421

SERVICES

STUDER REVOX

FACTORY AUTHORIZED SERVICE CENTER
"SUPERLATIVE SERVICE"

Swiss trained in servicing all open reel and cassette tape recorders, CD players, and other Studer/Revox equipment. Over 12,000 units serviced Nationwide since 1978. Fast 48-72 hour service w/90 day warranty. Huge parts inventory. Capstan shaft resurfacing & head relapping service. New & used machines available w/warranty. Visa/MC.



STUDIO-SONICS CORP.
2246 N. Palmer Dr., #100
Schaumburg, IL 60173
Phone: (312) 843-7400
FAX: (312) 843-7493

MAGNETIC RECORDING HEADS—RELAP/REPLACE-MENT for Audio, Video, Time Code, Duplication. 29 years of head design experience. **IEM**, 350 N. Eric Dr., Palatine, IL 60067; tel. (312) 358-4622.

REAL TIME

Cassette duplication using
NAKAMICHI DECKS
DAT REPLICATION
Full Service Packaging
Blank cassettes & DATs
UNI-SETTE, INC.

(916) 485-9534 FAX (916) 485-9535

CASSETTE TEK, INC.

SPECIALISTS IN PROMOTIONAL CASSETTES FOR ARTISTS—PRODUCERS—AGENCIES

- Highest quality custom blanks audio and video VHS cassettes
- Duplication of audio and video
- **EMBOSSED** on-cassette printing using the **PRINT RITE** system
- Direct mail services
- Reasonable pricing
- Fast service

1605 THOMASTON AVE.
WATERBURY, CT 06704
TEL. (203) 757-4848

RCA MICROPHONES—Repair service on all models. Complete sound and cosmetic restoration. 35 yrs. experience with RCA. **ENAK** Microphone Repair, 420 Carew Avenue, Pitman, NJ 08071. (609) 589-6186.

LARSON/DAVIS ARCHITECTS

- Specialists in studio design & custom interiors
- CAD, 3D modeling & rendering on Sun Microsystems workstations
- New construction, renovation, residential & retail services
- Tel. 212-353-9005 Fax: 212-353-8444

Rack Attack™

∞ Audio Processing Systems ∞

Half Rack A \$280/day

- (1) AMS 1580S
- (1) AMS RMX-16
- (1) Eventide SP-2016
- (1) Eventide H-3000
- (1) Quantec XL
- (1) Quantec QRS

Track Rack \$165/day

- (2) API 550B (4 Band Eq)
- (2) API 560B (10 Band Graphic)
- (2) Drawmer DS-201 Dual Gate
- (1) GML 8200 Stereo EQ
- (1) Neve 33609 Stereo Limiter
- (2) Tube Tech CL-1A Tube Limiters

Half Rack B \$220/day

- (1) Lexicon 480L
- (1) Lexicon PCM-42
- (1) Lexicon PCM-70
- (1) Publison Inf. 90
- (1) T.C. Elec. 2290
- (1) Yamaha REV-5

Short Guy \$165/day

- (1) Eventide H-3000
- (1) Lexicon 480L/with Larc
- (1) T.C. Elec. 2290
- (1) Yamaha REV-5

Project Rates Available

**Outboard
Rentals**

(818)

998-1024

Hollywood, CA

**70%
Savings**

STUDIO ACCESSORIES

"The Milli-Chart"

A handsome, plastic coated, wall or table top reference chart measuring 11" x 17". Cross references the relationship between tempos and digital delay time settings. Designed to alleviate the tedious process of computing delay times with a stop watch and calculator.

Contains the following cross reference material:

- Beats per minute (from 60 to 250)
 - Seconds per beat
 - Milliseconds per quarter note,
 - eighth note,
 - sixteenth note,
 - eighth note triplet,
 - sixteenth note triplet.
- All millisecond references are rounded to the nearest tenth (or 10,000 of a second).

Send \$15.95 post paid to:
J.S. LoBianco Enterprises
36 Park Ave., Oyster Bay, NY 11771
Satisfaction Guaranteed

TRAINING

YOU SPEND A FORTUNE

on equipment and put your life into your music. Why shouldn't your recordings sound the way you want?

SHAPING YOUR SOUND

is the new videotape series that teaches you essential techniques for using microphones, reverbs, equalizers and more.

Don't you owe it to yourself to make the best recordings you possibly can?

To order or for more info.

Call Free: (800) 777-1576

First Light Video Publishing
374 N. Ridgewood Pl., L.A. CA 90004

IN OUR CONTINUING EFFORTS TO SERVE YOU...

From time to time, Intertec Publishing Corp. makes its subscriber lists available to carefully screened companies or organizations whose products, services, or information may be of interest to you. In every case, list users must submit their promotional material for approval. They may use the list only once.

No information other than name and address is ever divulged, although names may be selected by segments to which the particular offer might appeal.

We are confident that the majority of our readers appreciate this controlled use of our mailing lists. A few people may prefer their names not be used.

If you wish to have your name removed from any lists that we make available to others, please send your request, together with your mailing address label to:

Direct Mail Mgr.
Intertec Publishing Corp.
P.O. Box 12901,
Overland Park, KS 66212

EQUIPMENT WANTED

WANTED: PULTEC EQ's

We will pay \$1,000 for almost any Pultec program EQ models. Also wanted: Fairchild 670's and 660's any tube or ribbon microphones and limiting amps. Please call or write to:

Dan Alexander Audio
2944 San Pablo Ave.
Berkeley, CA 94702
(415) 644-2363
FAX: (415) 644-1848

MISCELLANEOUS



DO YOURSELF A FAVOR
CALL NOW!
(800) 673-0565

4416 Johnston St., Bldg., 9A
Lafayette, LA 70503

MISCELLANEOUS

**"World Class"
Tapes
& Duplicating**

Agfa

- Digital Audio Tape (D.A.T.) in Stock
- Analog Tape, Audio Accessories
- Phone In Order, Ship Same Day
- Great Quality — Great Price
- On-Shell Printing

Call us at

(800) 365-0669

for prices on tapes & duplicating

World Class Tapes

Audio Tape Distributors & Duplicators

670 Airport Blvd., Suite 1
P.O. Box 7611
Ann Arbor, Michigan 48107
(313) 662-0669 (within Michigan)

Circle (83) on Rapid Facts Card

1/2" and 1" 1 mil audio tape.

Please call or write to:

Independent Producers Corporation
1609 McGavock St.
Nashville, TN 37203
(615) 244-4236
Fax: (615) 256-4423

MISCELLANEOUS

AUDIO AFFECTS

STUDIO EQUIP. FOR HIRE
Technician on staff 7 a.m. - 1 a.m.
Open 7 days a week
Digital Tape Machines,
Synclavier Systems,
Effects Processors, Reverbs
(213) 871-1104 (818) 980-4006
Ask For Mark

ENDLESS WORD™
ADVERTISING PROMOTIONS
VOLUME IN STORE P.O.P. and TELEPHONE
ON HOLD MESSAGES
IDEAL FOR HI-SPEED or REAL-TIME
DUPLICATING



- Made in U.S.A. & Quality tested before shipping.
- Lengths from 20 sec. to 20 min.
- Special non-stretch tape.
- Plays vertical or horizontal.
- Clear case permits visual cuing.
- Ask about our new volume discount pricing & low cost endless cassette promotional players and new F.C.C. approved multi-line telephone adapter for messages on hold tape players.

MANN ENDLESS CASSETTE INDUSTRIES
P.O. Box 1347 • San Francisco, CA 94101
(415) 221-2000 Ext. 2
Fax: (415) 387-2425

**THE MOST COMPLETE
SELECTION OF**

**AUDIO TEST
TAPES**

All formats including cassettes
Write or phone for free catalog



STANDARD TAPE LABORATORY, INC.
26120 Eden Landing Road #5, Hayward, CA 94545
(415) 788-3548

Circle (81) on Rapid Facts Card

DISC **MAKERS
MONEY SAVING PACKAGES

COMPLETE MANUFACTURING

**CASSETTES
CD'S, LP'S
& VIDEOS**



PROFESSIONAL DESIGN DEPT.

CALL FOR CATALOG

1-800-468-9353

A U D I O

Cassettes

AS EASY AS...

- 1 REAL TIME DUPLICATION
- 2 HIGH SPEED DUPLICATION
- 3 CUSTOM BLANKS

ESP MEANS QUALITY FULL SERVICE
PRINTING AND PACKAGING, FRIENDLY
PROFESSIONAL SERVICE, COMPETITIVE
PRICES, FAST TURN-AROUND AND HIGHEST
QUALITY RAW MATERIALS.

ESP EASTERN STANDARD
PRODUCTIONS, INC.
26 Baxler St. Buffalo, NY 14207
1-716-876-1454

CALL TOLL FREE:
1-800-527-9225

V I D E O

ADVERTISER'S INDEX

SALES OFFICES

	Page Number	Rapid Facts Number	Advertiser Hotline
ADX Systems, Inc.	106	60	212/532-5576
Agfa Corporation	9	7	201/440-2500
Akai/MC Pro EMI	17	9	817/336-5114
Alesis Corp.	3	4	
Alpha Audio	107	61	804/358-3852
Ampex Magnetic Tape Div.	55	27	415/367-3809
Aphex Systems Ltd.	49	24	818/765-2212
Applied Research & Technology	43	21	716/436-2720
A Total Effect	117	80	818/345-4404
Audio Accessories, Inc.	103	56	603/446-3335
Audio Animation, Inc.	47	23	615/544-0458
Audio Control Industrial	100	51	206/775-8461
Audio Technologies, Inc.	93	45	215/443-0330
Audio Visual Assistance	114	75	612/481-9715
Audio Video Research	116	79	617/924-0660
Azonic, Inc.	75	33	800/842-9790
Bose Corporation	53	26	508/872-6541
Bruel & Kjaer-Denmark	97	47	
Bryston Vermont	90	40	215/628-4255
Carver	71		818/442-0782
Century Financial Services Group, Ltd.	115	78	800/826-6639
Cintas Vac.	65	31	904/445-5545
Clarity Cassette Duplications	109	64	800/458-6405
Community Light & Sound	95	46	215/876-3400
Countryman Associates	93	44	415/364-9988
Crown International	19	10	219/294-8222
D & R USA	81	37	409/588-3411
The DAT Store	110	66	213/828-6487
Denecke, Inc.	89	39	818/766-3525
DIC Digital Supply Corp.	37	19	800/DAT-1DIC
Digital Dynamics	7	6	516/271-5600
Disc Makers	110	67	212/265-6662
Dolby	11	8	415/558-0200
Electro-Voice, Inc.	21	11	616/695-6831
Everything Audio	61	29	818/842-4175
Formula Audio	105	58	919/269-6441
Gand Music & Sound	107	62	708/446-4263
Gauss	91	43	213/875-1900
GML	45	22	818/781-1022
Hardy Co.	77	35	708/864-8060
Hollywood Edge	109	63	800/292-3755
Hot House Pro Audio	32A-32B	70	914/691-6077
Intelix	111	73	800/356-5844
JBL Professional	BAC	3	
Jensen Transformers	117	82	213/876-0059
Kaba Research & Development	83	38	415/883-5041
Klark-Teknik Electronics, Inc.	51	25	516/249-3660
Magnetic Reference Laboratory, Inc.	98	48	415/965-8187
Marshall Electronics	114	41	213/390-6608
Markertek	114	77	800/522-2025
Musonix, Ltd.	99	49	
Nakamichi USA Corp.	31	16	
Neve, Inc.	29	15	203/744-6230
Otari Corp.	33	17	415/341-5900
Panasonic (Ramsa Div.)	27	14	714/895-7278
Peavey Electronics Corp.	35	18	601/483-5372
Polyline Corp.	100	52	312/298-5300
Professional Audio Systems	96A-96D,114	72,69	213/534-3570
Prosonus	77	34	800/999-6191
Quad Eight	64A-64B,106	71,59	818/898-2341
Radian Audio Engineering, Inc.	79	36	714/961-1213
Rane Corp.	4-5	5	206/774-7309
Saki Magnetics, Inc.	101	54	818/880-4054
Sam Ash Professional	101	53	212/719-2640
Solid Sound	119	83	800/365-0669
Solid State Logic	25		
Sony Pro Audio	15,69		800/635-SONY
Soundcraft USA	13		818/893-4351
Soundmaster U.S.A., Inc.	103	55	805/494-4545
Soundtracs Division/Samson Technologies	1	68	516/932-3810
Sprague Magnetics, Inc.	105	57	800/553-8712
Standard Tape Laboratory, Inc.	119	81	415/786-3546
Studer Revox/America	IFC	1	615/254-5651
Tannoy North America, Inc.	59	28	519/745-1158
Tascam Div./Teac Corp.	62-63	30	213/726-0303
Technical Audio Devices	IBC	2	213/816-0415
Trident USA, Inc.	73	32	213/533-8900
Valley International	39	20	615/383-4737
Washington Professional Systems	115	76	301/942-6800
White Instruments	99	50	512/892-0752
Yamaha Intl. Corp.	22-23	12	
3M/Magnetic Media Division	41	13	

CLASSIFIEDS

Renée Hambleton
913-888-4664
9221 Quivira Road
Shawnee Mission, KS 66215
Telefax: 913-541-6697

SANTA MONICA, CA

Herbert A. Schiff
213-393-9285
Jason Perlman
213-458-9987
Kelly Daugherty
213-451-8695
501 Santa Monica Blvd.
Santa Monica, CA 90401
Telefax: 213-393-2381

CHICAGO, IL

David Ruttenberg
312-435-2360
55 East Jackson Blvd.
Chicago, IL 60604
Telefax: 312-922-1408

NEW YORK, NY

Stan Kashine
212-702-3401
29th Floor
866 Third Ave.
New York, NY 10022
Telefax: 212-702-7802

OXFORD, ENGLAND

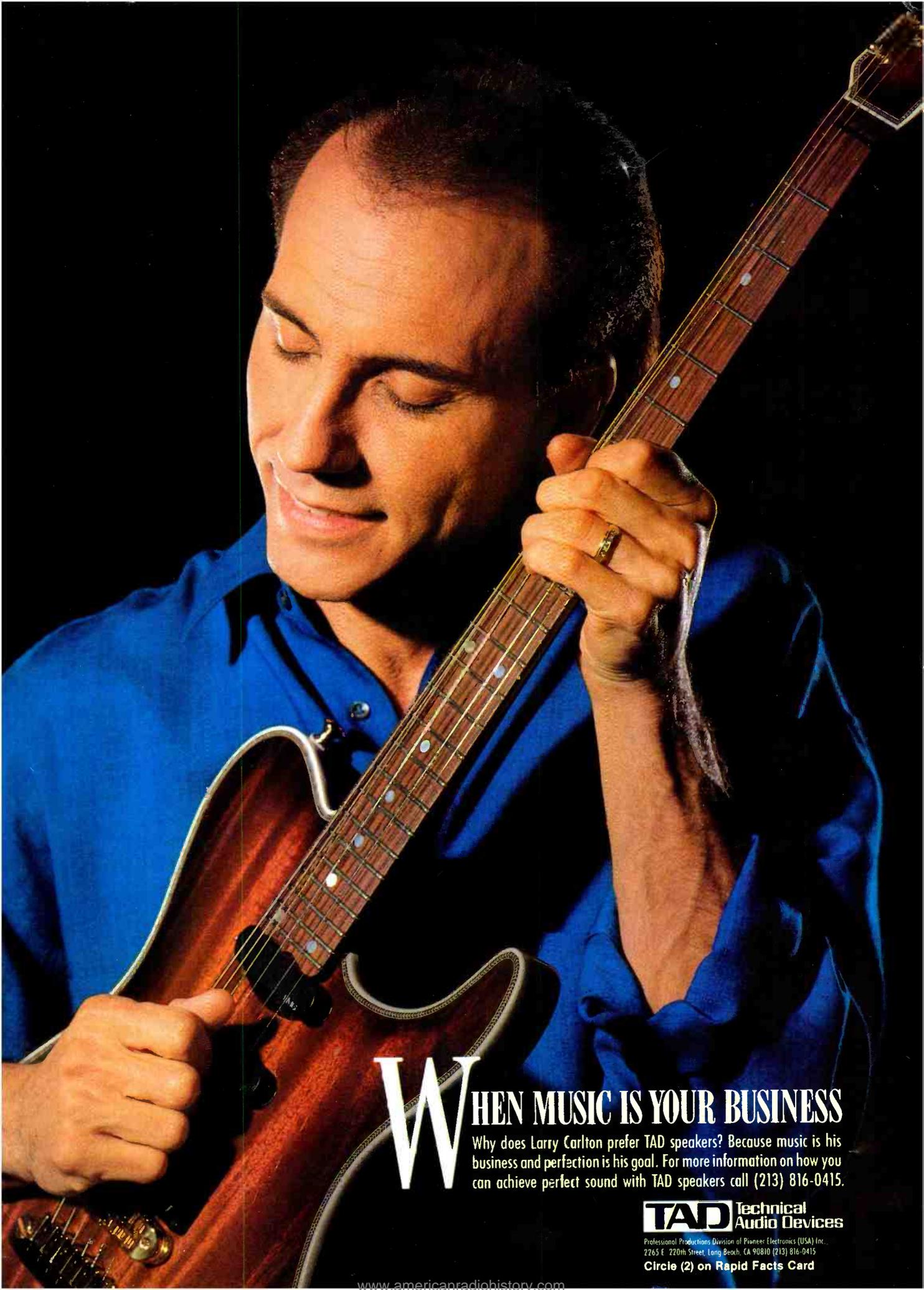
Nicholas McGeachin
Roseleigh House
New Street
Deddington, Oxford
OX5 45P England
Telefax: (0869) 38040
Telephone: (0869) 38794
Telex: 837469 BES G

FREWVILLE, SOUTH AUSTRALIA

John Williamson
Hastwell, Williamson, Rep.
Pty. Ltd.
109 Conyngham Street
Frewville 5063
South Australia
Phone: 799-522
Telefax: 08 79 9735
Telex: AA87113 HANDM

TOKYO, JAPAN

Masuyoshi Yoshikawa
Orient Echo, Inc.
1101 Grand Maison
Shimomiyabi-Cho, 2-18
Shinjuku-ku, Tokyo 162, Japan
Telephone: 03-235-5961
Telex: J-33376 MYORIENT



WHEN MUSIC IS YOUR BUSINESS

Why does Larry Carlton prefer TAD speakers? Because music is his business and perfection is his goal. For more information on how you can achieve perfect sound with TAD speakers call (213) 816-0415.

TAD Technical Audio Devices

Professional Productions Division of Pioneer Electronics (USA) Inc.,
2265 E. 220th Street, Long Beach, CA 90810 (213) 816-0415

Circle (2) on Rapid Facts Card

Power. Play.



Loudspeaker design: To achieve high power handling capability, sensitivity suffered. You could get more power, but you had to accept less play.

Another Advance From JBL.

Ever since Jim Lansing flattened voice coil wire in the early thirties, JBL has continually edged loudspeaker design closer and closer to perfection. The introduction of our new 2200 Series models marks another JBL advance in transducer technology.

Vented Gap Cooling.™

As a voice coil's temperature rises, so does its impedance, causing power compression. Every dB of power compression translates into one less dB of output.



To reduce power compression and gain overall sensitivity, JBL created vents from the voice coil, through the magnet structure, to the rear of the loudspeaker. As the cone travels, heat is dispersed and cool air returned to the voice coil.

The result, a true 600 watt loudspeaker with high sensitivity. You get twice the power handling plus greater output.



New SFG™ Magnet Structure.

Through computer modeling and simulation, the 2200 Series SFG magnet structure achieves optimum flux density and significantly lower distortion while realizing up to 20% weight reduction.

We Heard You Loud And Clear.

Whether you're looking for a mega-watt touring loudspeaker, or for a low distortion critical listening device, JBL has the model for you. All with the new SFG magnet structure with Vented Gap Cooling. The new 2200 Series models give you the best of both worlds. Power, and play.



JBL Professional
8500 Balboa Boulevard, Northridge, CA 91329 USA
A Harman International Company

Circle (3) on Rapid Facts Card