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THE RECORDING INDUSTRY MAGAZINE

Mix

Interview: Bones Howe

Spotlight: Concert Sound and Remote Recording



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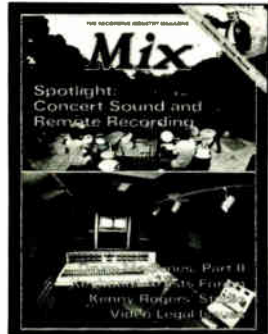
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JUNE 1982



Cover:

(Top) Grateful Dead captured live in San Francisco's Golden Gate Park.

Photo by:
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(Bottom) Full Sail's new 24 track "Dream Machine" remote unit, stationed in Altamont Springs (Orlando), Florida.

Photo by:
Theodore Flagg.

(Corner) Bones Howe

Photo by:
Michael Nadeau

VOLUME SIX, NUMBER SIX

The Mix is published at 2608 Ninth St., Berkeley, CA 94710 and is ©1982, by Mix Publications, Inc. This is Volume Six, Number Five, May, 1982. The Mix (ISSN 0164-9957) is published monthly. Subscriptions are available for \$24.00 per year. Single or back issue price is \$3.00. Subscriptions outside U.S.A. are \$28.00. Please address all correspondence and changes of address to the MIX, 2608 Ninth St., Berkeley, CA 94710 (415) 843-7901.

Controlled circulation postage paid at Berkeley, CA and additional mailing offices.

The Mix is distributed in recording studios, pro-audio stores, music stores, and other related businesses. If you have a recording or music related business and would like to distribute the Mix, please give us a call.

Display advertising rates, specs and closing dates are available upon request.

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INSIDE

Dr. Carolyn A. "Puddie" Rodgers died on Monday, May 3, 1982. Her credits and contributions to the field of acoustics are laudable and widely acknowledged. Her academic successes, her dedication to advancing the technology, and her comprehensive presentations to the Audio Engineering Society and other such bodies are only a part of her legacy.

Her most important contributions, to those of us who knew her and worked with her, were her indomitable spirit and her intense love of her work. She inspired those around her to question, to seek creative solutions, to innovate, to constantly reappraise our knowledge. She taught us how to listen. She taught us how to hear. She taught us how to retain a sense of wonder in this highly technological business.

Syn-Aud-Con is in the process of working with other people in the audio field to establish, in Puddie's name, a scholarship fund for women capable of making significant contributions to the field of acoustics. It is our hope that the future recipients of the benefits of this fund will carry on the high ideals and dedication which Puddie's life represented.

Puddie's gifts to this industry, during her brief life, have made it better; no finer tribute can be paid to anyone. She touched us with her courage and we will miss her tremendously. She will not soon be forgotten. —P.R.J.

TRACKS

Coming next month

SPOTLIGHT:
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World Radio History

CURRENT

CEO UPDATE: CEASE-FIRE NEGOTIATIONS

Progress has been made in the efforts by the California Entertainment Organization (CEO) to relieve the retroactive sales tax assessment burden placed on the state's independent recording engineers and producers (see May Current). The legal firm of Nossaman, Krueger and Knox has been retained to negotiate a cease-fire with the State Board of Equalization while Assembly Bill 2871 makes its way through the Legislature.

The bill introduced by Assemblyperson Gwen Moore, clarifies the content and intent of existing law and affects all proceedings currently pending in the matter. "It states that the section of the Revenue and Taxation Code that is being applied to the recording industry was never intended to affect engineers and producers," says a CEO spokesman. "There will have to be some

changes in the language of AB 2871 so that it will encompass all the areas where the industry is being hit, but we are making progress." The bill cleared the Revenue and Taxation subcommittee in April and was scheduled to be heard by the Assembly Ways and Means committee in early May. After passage by the committee, AB 2871 must then be approved by the entire Assembly and State Senate and then be signed into law by Governor Brown.

The spokesman also stressed the importance of making California residents, especially those involved with the music industry, aware and supportive of this bill by assisting CEO wherever possible. For further details, CEO headquarters can be contacted at 213/906-2080.

Harold W. Lindsay, Audio Pioneer, Dead at 72

Harold W. Lindsay, 72, whose development of the first practical audio recorder in America revolutionized the recording industry and established Ampex Corporation as a high technology leader, died April 1, 1982, at his Los Altos Hills, California home following a brief illness.

Mr. Lindsay played a major role in turning Ampex, a small subcontractor of electric motors during World War II, into a major high technology company after he became a full-time employee December 10, 1946.

Mr. Lindsay also directed the development of subsequent generations of audio recorders and was involved in the industrial design of the first practical videotape recorder during his 30-year career at Ampex. He retired in 1977 and became a consultant to the company.

He is survived by his wife, Margery, three children, and seven grandchildren.

Wayne Freeman, Sales and Marketing Director for **Soundcraft U.S.A.**, has announced that they will handle all dealer sales on a factory-direct basis after June 1, 1982. Send orders and service requests to Soundcraft U.S.A., 20610 Manhattan Place, Torrance, CA 90505... **Steve Hebrock**, formerly of **Caribou Ranch**, has joined the engineering staff of **BSR (USA)** in Blauvelt, N.Y., to work on the development of audio automation systems... **Henry Root**, president of **Hy James—The Audio Professionals**, has appointed **Tom Greenberg** as their new Sales Manager, to head their sales force and interface with equipment manufacturers... **UREI** has recently added a 3200 square foot addition to their facility, nearly doubled their stock area, and made more room for manufacturing and shipping operations. **Ray Combs**, UREI VP, says their business increase is due in part to the popularity of the new power amplifiers they introduced about a year ago... **Emilar Corp.**, has appointed **Harold F. "Bud" Mosier**, formerly of **Electro-Voice**, as General Manager and Vice-President. **Pat Everidge**, previously an engineer with **Altec** and **JBL**, has been named Vice-President of Engineering at Emilar... **Sony Broadcast Products** has established a new sales region to serve customers in the Southwest. **Charles Taylor** manages the new territory, with offices at 1320 Walnut Hill, Irving, TX... **MUSEXPO '82**, the eighth annual international record and music industry market exposition, will be held Sept. 30 - Oct. 4, 1982 at the Sheraton Bal Harbour in Bal Harbour, Florida (Miami area). This year's conference will also in-

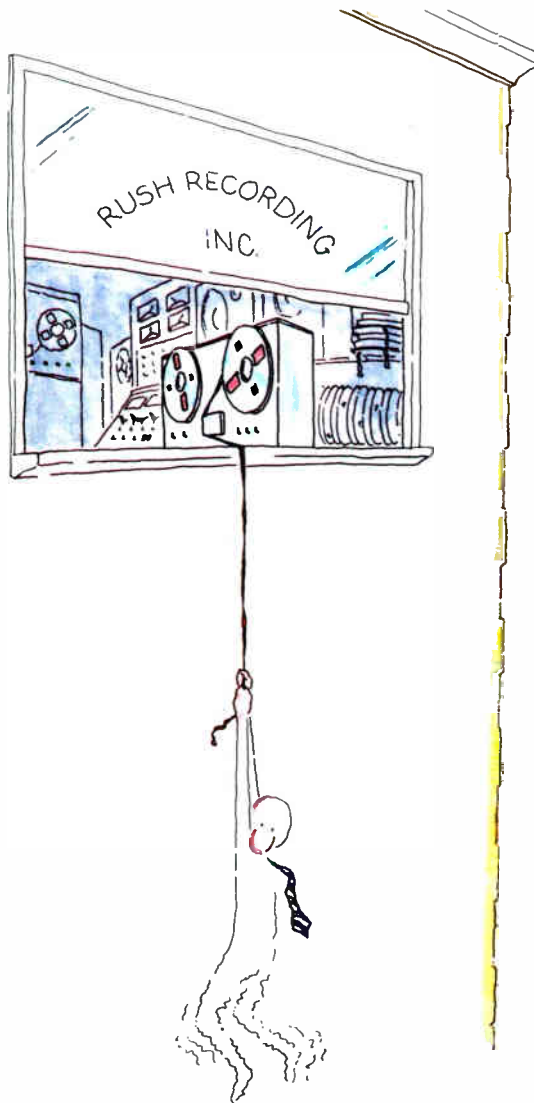
notes

clude a special video market exposition. For information, contact: **MUSEXPO '82**, 1414 Avenue of the Americas, New York, N.Y. 10019... A new award, the "Lyra," was presented to movie audio engineers for outstanding achievement in motion picture sound by **3M's** Magnetic Audio/Video Products Division. This year's recipients were the seventeen audio engineers who were nominated for Oscars by the Academy of Motion Picture Arts and Sciences... The **3M** Corporation has signed a multi-million dollar development agreement with **Optical Coating Laboratory, Inc.** to produce a proprietary thin magnetic recording product, production process and specialized manufacturing equipment... **Russell Farrell**, formerly **Altec's** New England District Manager, has been named OEM Sales Manager for the **Altec Lansing Industrial/Professional Sound** products line... **New World Audio, Inc.** has become the sole authorized dealer in San Diego County, CA, for **Fostex** Corporation of America, **Ramsa**, and **Otari** Corporation. In addition, **New World** has become the area's authorized distributor of **JBL Pro Line** speaker systems... **Great British Audio Inc.** of New Rochelle, N.Y., has appointed **Richard Craig Bullington** as National Marketing Manager for the complete line of **Canary** products... **Swordsmen Press**, of Sherman Oaks, CA, has announced that their music industry guidebook, "The Platinum Rainbow," should exceed year end sales totals of 36,000 copies, and are pursuing plans for a television show based on

the book...

Synergetic Audio Concepts will be offering a special financial and management workshop June 15-17 at their West Coast Seminar Center. Contact: **Syn-Aud-Con**, P.O. Box 669, San Juan Capistrano, CA 92693... **Audio & Design Recording, Inc.**, of Bremerton, Washington, has been named as the exclusive U.S. distributor of **Calrec** condenser and soundfield microphones... **Richard Sens**, President of **Matrix Studios**, New York City, has promoted **Robert Lieberman** to Vice President of Engineering... **Capron Lighting and Sound** (live event specialists) has merged with **New England Production Services**, (video and TV specialists), to form **Capron/NEPS**, of Needham, MA (Boston Area)... The **Association of Professional Recording Studios**, (APRS) will present an exhibition of professional recording equipment June 23-25, at the Kensington Exhibition Centre, Kensington, London. For details, contact APRS, 23 Chestnut Avenue, Chorleywood, Herts, U.K. **Nortronics**, has chosen **Elias Zinn's Entertainment Marketing Company** to distribute their Recorder Care replacement heads and maintenance products in the Texas, Oklahoma, Arkansas, and Louisiana areas...

Correction: In the March issue we inadvertently omitted Leonard J. Eisenberg's photo credit on the Artist Studio photo of Synchro Sound Studios. Our apologies.



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NORTHEAST

At **Syncro Sound Studios** in Boston, MA, **Slow Children** recorded a single for Ensign Records with producer **Jules Shear** and engineer **Thom Moore**.

Recently recording at **Blue Rock Studio**, Soho, New York City, **Joe Jackson** with producer **David Kershbaum** for A&M Records. **Michael Ewasko** engineering.

At **Kingdom Sound Studios**, Syosset, Long Island, **Donald Roesser** (Blue Oyster Cult) is producing "Buck Darma's" first solo effort for Portrait Records. **Ken Kessie** engineering, **Paul Mandl** assisting.

White Plains, N.Y. **Squires Productions** has just completed an album by The Frank Kohl Quartet, on Reform Records. Engineered by **Alain Van Achte**, assistant engineer **Jay Brown**.

At **Normandy Sound** in Warren, R.I., **Billy Cobham** has just completed a two-LP project. His band features **Tim Landers** (bass), **Gil Goldstein** (keyboards) and **Dean Brown** (guitar). The project was produced by Cobham and engineered by **Phil Greene** with **Tom Soares** assisting.

At **Jhana Sound Productions** in Newton, CT, the **Charlie Midnight Band** completed recording and mixing its debut album on CBS's Decent Records, engineered by **Ron Bacchiocchi** and produced by **Kash Monet**.

At **Queen Village Recording Studios**, Philadelphia, PA, the new **Karen Young** single produced by **Walter Kahn** debuting on Atlantic Records. Also completing a single is veteran artist **Davey Morris** for Beckett Records—he is co-producing with **Roger Meltzer**.

At **North Lake Sound**, in North White Plains, N.Y., current sessions include: **Ted Daryll** in the studio working with producer **Dwight McKee**, mixing **Wently Phipps** with gospel project for Polygram Records, **Chris Cassone** engineering.

At **Kajem Recording Studios** in Gladwyne, PA, cutting began on **Spaces** new LP, produced by **Skip Drinkwater**. Engineered by **Mitch Goldfarb**. **The Pedestrians**, one of WMMR's chosen few local bands mixed some new material for airplay on the radio station. **Joe Alexander** engineering.

At **Trod Nossel Recording Studios** in Wallingford, CT., sessions included **Sterling Glass** and

the **Metropolitans**, who recorded and mixed a gospel LP for release on the Glass Productions label. **Dave Watson** came in several times to work on another of his original tunes.

At **Spectrum Recorders**, Lanesboro, MA, **Cobble Mountain Band** has completed a new tune, which is their contribution to a benefit LP for the Cancer Fund promoted by WDLW Boston. In addition, **Jim Bayliss** has recorded and mixed four original tunes for future release.

The **Recording Center** of East Norwalk, CT, has recorded a radio spot for U.S. News and World Reports. The spot, produced by **Joel Weisman** of North Castle Partners, Greenwich, will be aired in the Detroit metropolitan area. **Pete Bastoni** engineered the session.

SOUTHEAST

At **Ardent Recording, Inc.**, Memphis, TN, **Keith Sykes** was in to mix a new single, "In Between Lies," for release on the Backstreet label. The single is from Sykes new album, "It Don't Hurt to Flirt." Producer for the session was **Jerene Sykes** while **Terry Manning** engineered.

At **The Soundshop** in Nashville, TN, **Eddie Mekka** of "Carmine" fame on the Laverne and Shirley sitcom was in the studio with **Lee Greenwood** ("It turns me inside out"; "Ring on her finger, time on her hands" fame) producing. **Buddy Killen** was in producing **Roger Miller** and **June Roberts**.

Recording at **Audio Media** in Nashville, **Ray Charles** with **Pat McMakin** engineering, **Ricky Scaggs** producing himself for CBS with **Marshall Morgan** engineering.

At **Woodland Sound**, Nashville, TN, **Jerry Lee Lewis** is working on an album for MCA Records with producer **Ron Chancey**. **Les Ladd** is engineering and **David McKinley** is assisting.

At **Cattfish Bay Sound Studios**, Clarksville, TN, **Billy Allen** and the **Mark V** have cut two Jimmy Clifton originals for their first single, **The Bailes Bros.**, veterans of The Grand Ol Opry and Columbia Records, have had masters edited for a re-release LP. **Chuck Emery** handling all the engineering.

At **Bullet Recording** in Nashville, TN, **Steve Ison** and **Randy Holland** producing a **Jon Coates** arrangement with a 32-piece orchestra for an as yet

unnamed video piece.

Bow Wow Wow, the group that emerged from the defunct Sex Pistols and now have the No. 1 hit in England, was at **Criteria Recording Studios**, Miami, FL, cutting tracks for a new LP on the RCA label. **Kenny Laguna** producing, with **Mark Dodson** engineering and **Bruce Hensal** as assistant engineer.

At the **Roxy Recording Theatre** in Nashville, TN **Jackie Frazier** was busy working on his soon to be released album. **Mark Jevicky** was also hard at work in full recording sessions.

At **Sound Emporium** in Nashville, TN, recent activity includes **Terri Gibbs**, who returned to the studio to overdub vocals on "Look At Us Now," the theme song for the film *Waltz Across Texas*. The song was written by **Milton Brown** and **Steve Dorff** and co-produced by Dorff and **Ed Penney**. **Jim Williamson** engineered the session.

The **Artisan Recorders' Mobile** out of Pompano Beach, FL, recorded RCA artists **Triumph** live in concert in Orlando and St. Petersburg, Florida. **Bruce Macomber** and **Peter Yianilos** engineered with assistants **Stan Johnson** and **John Catalano**.

International recording star **Julio Iglesias** at **Criteria Recording Studios**, Miami, FL, doing vocal overdubs for a new LP for CBS International. **Ramon Arcusa** is producing and engineering, with **Bob Castle** as assistant engineer.

NORTH CENTRAL

At **The Recording Connection** in Beachwood, Ohio, **Money**, formerly "The Muffs" from Columbus, Ohio is in Studio B, recording their second album for Eartone Records with **Dale Peters**, former bass player for "The James Gang" engineering.

At **Tantus Studio**, Detroit, MI, recent activity includes, **Sarabande** finishing work on their latest project for Platinum Riders entitled "Street Of Love," written and engineered by **Dr. Jack Kartush**.

Elektra artists **Shoes** from Zion, IL, have commenced work on their third album for the label at Alan Kubicka's **Chicago Recording Company** in Chicago. Chief engineer is **Hank Neuberger**.

At **Studio A**, Dearborn Heights, MI, Say Yes To

(continued on page 11)

The Mix welcomes press releases from all studios, large and small, for inclusion in the Sessions column. Send us the news on who's recording, new people, equipment updates, location changes, etc. The deadline for materials is 6 weeks prior to month of publication. Press releases are not held for more than one month so please keep updating the information.

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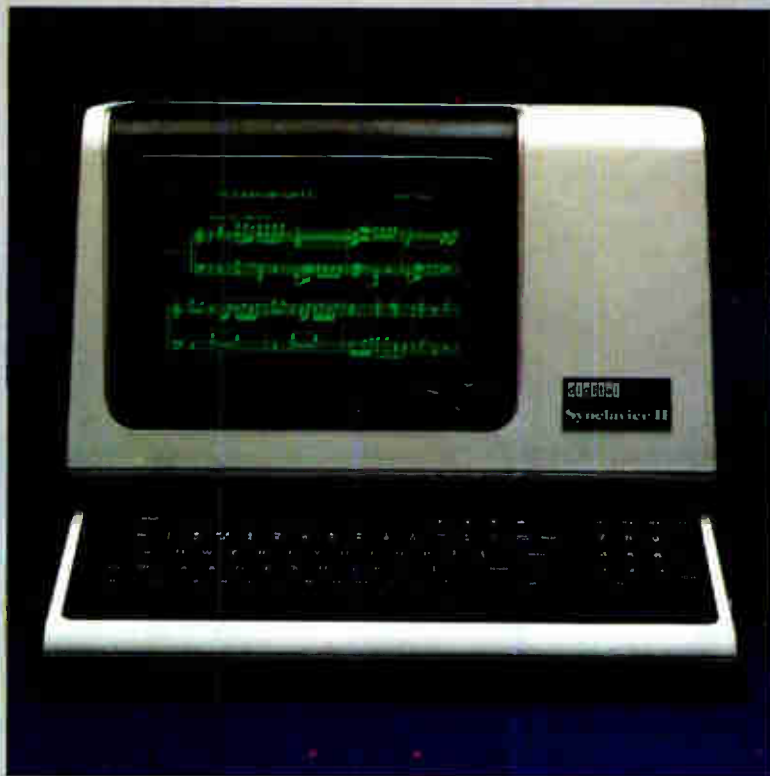
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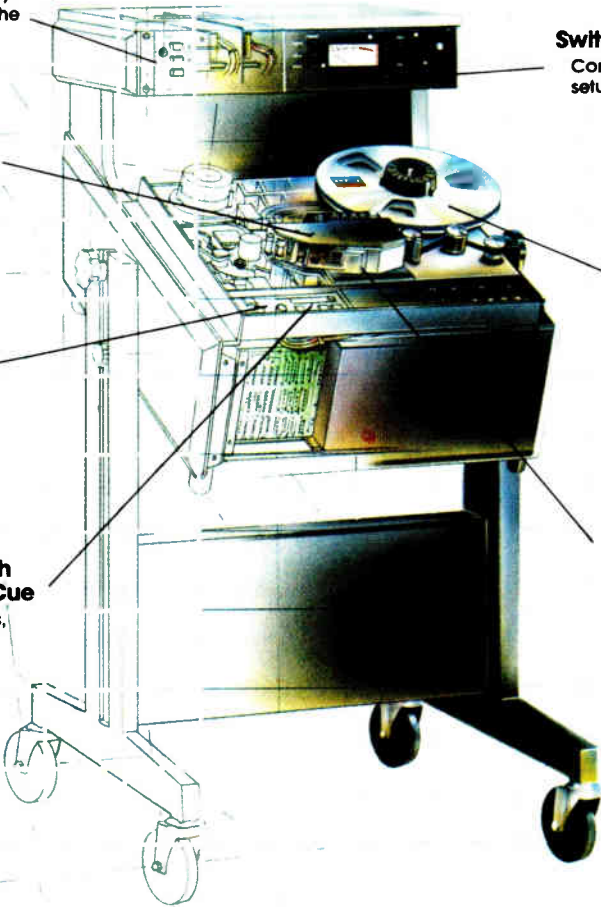
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World Radio History

(continued from page 8)

Michigan radio spot, produced by **Eric Morge-son** for The Road Company and performed by **Gabriel**, was recently completed for air play.

Recently at **A&R Recording Studios** in Ames, Iowa, final mixes were completed on **Allen/Carlson's** forthcoming single on Revolver Records. The sessions were engineered by **Jim Pfitzinger** and **David Kingland**.

SOUTHWEST

Rainbow Sound in Dallas, TX, had veteran Nashville producer **Charlie McCoy** at the studio in March producing a new album for The Shoppe. **David M. Boothe** did engineering duties.

Way, Truth, and Life Records has released a new album of gospel music featuring many of the Central Texas area's leading studio musicians and vocalists. Produced by **Bill Butler** and **Rick Dennis** at **Wink Tyler's Austin Recording Studio**, in Austin, TX, the album, "Destined," features the singing and songwriting of **Randy Ellis** of San Antonio.

Reelsound's 24 track remote bus out of Manchaca, TX, was recently in San Antonio recording **Johnny** and the **Distractions** for King Biscuit Flower Hour. **Paul Zullo** was producing with **Malcolm Harper**, **Mason Harlow** and **Lewis Valis** engineering.

NORTHWEST

At **Triad Studios** in Redmond, WA, completion of LP tracks for **Daryl and Renee Redeker** with **Paul Speer** producing, **Bill Angle**, executive producer.

Recent recording projects at **Dangerous Rhythm Recording Studios** in Lafayette, CA, featured San Francisco's own **B-Team**, who are currently working on songs for their first single. The sessions were engineered by **Matt Wallace**, and production was handled by **Tom Chauncey** and **B-Team**.

Current projects at **Harbor Sound** in Sausalito, CA, include **Laser Boy**, produced by **John Colla**, (Huey Lewis & The News), cutting their demo, "Million Dollar Man," with **Paul Stubblebine** engineering, **Dana Chappelle** assisting.

Recent action at **Tres Virgos Studios** in San Rafael, CA, **Elements**, a premier album by **Ira Stein/Russel Walder**, on Windham Hill Records, produced by **Will Ackerman**, engineered by **Ed Bannon**. **Terry Haggerty's** (original Sons of Champlain guitarist) yet untitled first solo album engineered by **Robin Yeager** and produced by **Terry Haggerty**, **Robert Missbach** and **Robin Yeager**.

At **Fantasy Studios** in Berkeley, CA, two simultaneous direct to digital sessions were held on April 13, though the sessions were unrelated, both were lead saxophone dates—**Art Pepper** and **Steve Douglas** in separate studios recording to Mitsubishi 2 track.

The VKTMS have just completed an album project at **Parvin Studios** in Pacifica, CA, with engineer **K. Charles Fink**.

Action at **The Automatt** in San Francisco, CA, includes **Santana** working on a new Columbia

LP with **Carlos Santana** and **Bill Graham** producing, **Jim Gaines** engineering and **Maureen Dronney** assisting.

SOUTHERN CAL.

Activity at **Studio Orange** in Orange, CA, includes **The Gumby's** finishing their 6 song 12" EP entitled "Plastic Rock in a Plastic World." **Lester Claypool** produced and engineered along with **Dan Macdonnel** assisting.

At **Emerald City Recording** in Grover City, CA, finishing up single releases for Illusion Records were **Marianne Le Moine**, and **Dana Benet**. The songs were written by **Preston** and **Allen Glass**. **Theo "Magic" Martin** was engineering, and co-producing with **Mr. Preston Glass**.

At **KDisc Mastering** in Hollywood, mastering engineer **John Golden** has been working on **Con Hunley's** new single with **Steve Dorff** and **Gregg Venable**; on **Rex Allen Jr.** single and LP for **Snuff Garrett Productions**.

At **Conway Recording Studio** in Hollywood, CA, **Dusty Springfield** mixing up her latest LP for 20th Century Records with producer/arranger **Andre Fisher** and engineer **Howard Steele**.

At **The Sound Castle** in Los Angeles, CA, **Juice Newton** is in mixing her new album for Capitol Records with **Richard Landis** producing. **Ed Thacker** engineering, **Mitch Gibson** assisting.

At **Wizard Recording Studios** in Hollywood, CA, **Bobby Columby** is producing **Avalon**, for Capitol Records, **Jeremy Smith** is the engineer, **Rich Bosworth**, the second.

Recent activity at **Salty Dog Recording**, Van Nuys, CA includes: **Billy Preston** in recording tracks with **Galen Senogles** engineering and co-producing with **Ralph Benatar**.

At the **Pasha Music House**, in Hollywood, CA, **Spencer Proffer** and **Billy Thorpe** producing Thorpe's new rock LP for Pasha/CBS with **Duane Baron** engineering.

For CBS Television, **Dalton Recorders** in Santa Monica, CA, pre-recorded the "People's Choice Awards," produced by **Allan Baumrucker** for Pierre-Cassette Productions. **Dirk Dalton** sweetening at the studio the live material recorded by **Ed Greene**.

At **Britannia Studio** in Hollywood, CA, **Michael Nesmith** scoring his film "Adventures of Lyle Swann" with engineer **Larry Brown**, assisted by **Russ Bracher** and **Marvin Clamme**.

studio news

Sumet-Bernet Sound Studios in Dallas, TX, has just completed the addition of Studio "D"—a state-of-the-art computerized film mixing, post-production facility with both 16mm and 35mm capability equipped with the latest equipment available in the industry.

Studio manager **Joanne Georgio** reports **Unique Recording** in New York City, has just taken delivery of a brand new fully automated MCI JH-636 (32 x 24) console with 8 VCA

groups. This new addition complements their MTR-90 24 track and Ampex ATR-100 machines, all with Dolby "A" noise reduction.

Studio manager **Casey Bakker** announced that **Holy Trax! Studios** in Livonia, MI, has added Russ Lang cabinets for their 80-8 and 35-2 B machines, a Tascam 122 production cassette machine, JBL 431 1's and a Neumann U-87. Sales by **Hy James** of Ann Arbor.

Greg Hanks, well known in the New York-New England area and throughout the industry as a Audio Consultant has formed a new firm, **New York Technical Support, Ltd.**, specializing in studio installation and service. Hanks arrived in New York in 1978, having been Chief Engineer at Heiders in Los Angeles. Prior to opening this new company he was Service Manager at Audio-techniques, Inc. in Manhattan. Current contracts include film production and editing suites as well as recording studios.

Cheshire Sound Studios, in Atlanta, GA, announces a major upgrading of the facility with the opening of a second automated 24-track studio "Studio 1", as well as the acquisition of a new MCI JH-636 automated console and Ampex MM-1200 24-track recorder for "Studio 2." The new room features an MCI JH-428B automated console and Ampex MM-1100 24-track recorder (with dbx).

Roxy Recorders in New York City announces the installation of its 16 track Ampex MM-1000 with remote and search-to-cue. **Paul Blank** of Omnisound, Ltd. provided many modifications to the machine. Roxy has also installed an Eventide 949 Harmonizer and a UREI 964 frames-per-second metronome. Roxy will keep its Otari MX7800 on-line for 8 track recording and for transfer of 1" 8 track to 2" 16 track.

Duchess Studios in Whittier, CA, announces the addition of a large isolation room to house their new Kawai 7'4" grand piano. Their recently remodeled control room features a new Amek 2000A VCA board and UREI monitors. The studio is being managed by **Paul Svenson**.

North Lake Sound in N. White Plains, N.Y., is pleased to announce recent upgrading including the addition of the Lexicon 224 digital reverb and Linn Drum Computer.

In March, the **Music Source** in Seattle, WA became the first studio in the country to test and mix with the new AKG BX-25 ED reverberation and digital delay system. Testing was done through the cooperation of Ray Bloom and Matrix Marketing of Seattle.

Lou DeLise Productions takes great pleasure in announcing its' recent move to the **Alpha International Recording** complex, located in Philadelphia, PA. Lou DeLise Productions is a full-service audio production house which has served the advertising, film, TV and radio community with creative musical and spoken audio production since 1976.

Studio Hawaii, in Honolulu, HI, recently promoted engineer **John Change** to general manager and head engineer.

Michael Corkran has left the Maryland Center for Public Broadcasting to head the Video Department at **Sheffield Recordings Ltd.** in Baltimore, MD.

by Stephen O'Hara

The record industry spends millions of dollars each year on visual design. Want proof? Try this brief experiment the next time you're in your favorite record shop.

Forget for the moment what you went into the shop to buy and, instead, flip through the albums in three or four bins (this works best when each bin is in a different musical category). Do this quickly, looking at each cover no longer than it takes to let the visual image sink in. Now, take a quick look around the shop, again spending only a few seconds on any one image and then moving along to the next. This visual artillery—posters, banners, hanging mobiles, life-size cardboard cut-outs of current stars, neon light displays, vinyl blow-ups and bubble-gum trading cards—is sometimes compelling, often silly and *always* expensive!

How expensive? By the time a major label has hired a reputable photographer and/or illustrator, studio and assistants, procured props or bussed the whole lot out to a location (perhaps the middle of the Mohave Desert or a mountain peak in Tibet), catered the "shoot," brought in the art director, make-up designer, wardrobe designer, hair designer, "design" designer, stylist, and a host of other necessary "creative" types, the budget for a typical, full-color album cover can easily reach \$10,000 and frequently costs double that!

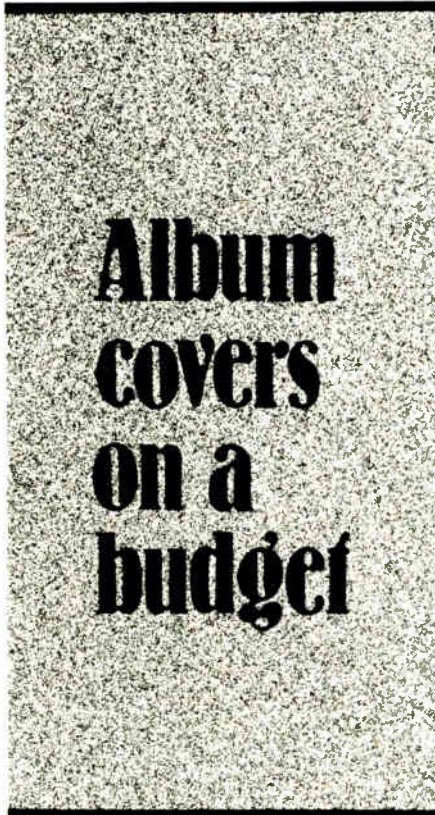
Of course, this is all pre-production work. The actual printing and manufacturing of the cover can cost the record company as much as the record pressing itself; sometimes more in the case of a folding cover, one with a special shape, fold-out booklet, free poster or other promotional craziness.

The point is this; in eight years of professional activity in the San Francisco Area as a recording engineer, producer, arranger, player and occasional record jacket designer, I have seen all too many potentially successful, independently produced records fail to sell even their initial production run (often as few as 500 disks) simply because the packaging was so poorly thought out or executed that even the most forgiving record buyer would pass it up, no matter how good the music it contained.

Consider for a moment the typical promotional budget devoted to a new artist's release by a major record company. Seldom is less than

\$500,000 spent on all phases of introducing a new recorded product to the public, including radio and TV ads, posters and billboards, personal appearances and the like.

Now, unless you are fortunate enough to be independently wealthy,



or have David Rockefeller for an uncle, you or your group will probably be lucky to escape the studio with your bank accounts still intact, let alone with a cool half-mil on hand with which to package and promote your first record. There is one thing you can count on though—once you've managed to place those first, precious handfuls of disks in the local record outlet, it is doubtful the cover photo your cousin took with her brand new Nipponflex or the cover art your brother-in-law so generously "donated" and you felt obligated to use, is going cut it when shelved next to the newest Pat Benatar release!

So, what to do? Look! Look at what the big guns have done. Warners, Columbia, A&M and the like have spent many years, and millions of dollars, determining what makes us go into a store and come out with five albums under our arm—one which we intended to buy, and four we bought cause they "looked" real hot!

Secondly, prioritize. Set aside money *early* in the project to be used later to package your product. It happens so often that all the cash has dried up in the studio/post-production process before many artists even *begin* to think about how the final product is going to look. Groups spend thousands of dollars producing a master tape, and then scramble around in the eleventh hour for a solution to their packaging problem, unwilling to spend even a *hundred* dollars for a professionally done photograph!

"Where do I find good design/photography/illustration, cheap? It's a question I've heard a thousand times. Quality work rarely comes at low prices! But, many areas are bristling with talented and qualified designers, illustrators and photographers aching to break into the record jacket field, or actively involved in it. Most are willing to work within your budgetary requirements—and the more ideas you can come to them with, the less time they have to spend and the less it costs you. You'll find their names in the classifieds of many local music publications, in the yellow pages and (surprise!) on the back covers of locally produced record albums and singles.

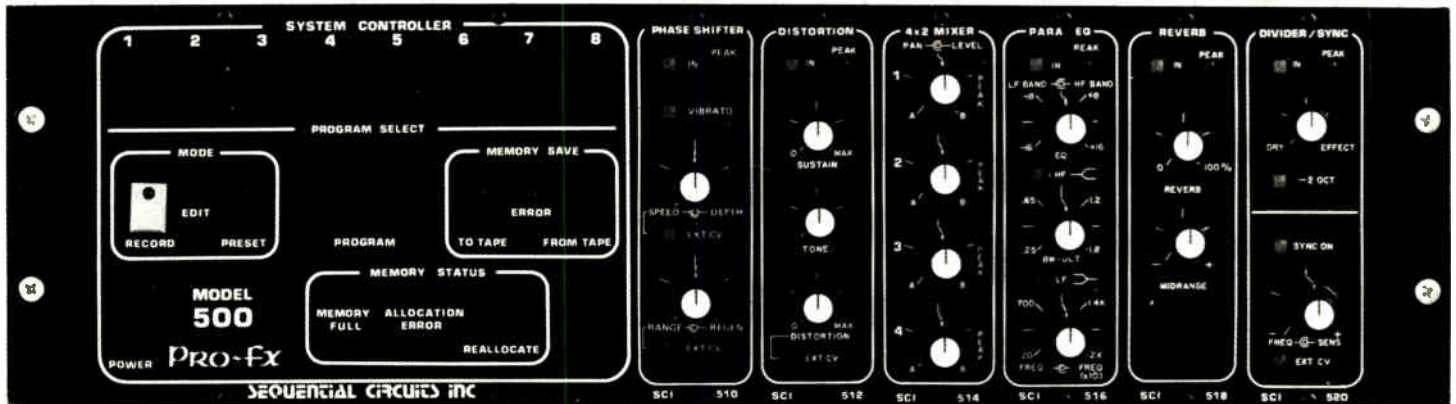
How much will you have to spend? Again, planning ahead can save a lot—a simple, black and white sleeve for a 7 inch disk can be photographed and the artwork completed for as little as a couple hundred dollars. A 12 inch cover, just because of its sheer size, is a bit more of a job and at least \$500 should be set aside to create an effective black and white cover. Start talking color, you start talking bucks! *Very* effective two and three color jackets can be designed for under a grand, but as soon as you go to the full color, much care, and thus time, needs to be taken in planning the photography and use of color in the final design. Keep in mind that just the color separations (the four, separate negatives—one for each ink color—made from your full color artwork or photo) run \$475 - \$650 and more.

Whatever you spend, the expense is worth every penny when it adds up to selling the record to an otherwise disinterested, potential record buyer who may never have heard (or heard of) you or your group. But something about the cover made it worth the \$6.98 to take it home and spin the record that was inside—to see if it lived up to the promises made outside. ■

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4 x 2 Expandable Mixer (Model 514) has four inputs with level and pan controls. Maximum gain can be set from 20 to 40 dB via the internal trimmer on each input channel to accommodate both line and instrument level signals.

Parametric Equalizer (Model 516) is a 2-band, fully parametric, overlapping range equalizer with switchable peaking or shelving operation; any number of these units can be placed in series to obtain as many bands as required.

Reverb (Model 518) is a very smooth reverberation unit using a 6-spring delay line and active limiting to eliminate spring side-effects. This module also has a sophisticated EQ which sets bandwidth and tone of reverb signal.

Transpose/Sync (Model 520) provides many synthesizer effects for other instruments. It will track a note one or two octaves below the original pitch as well as a separate note from an octave below to an octave above. The upper voice can be "hard synced" to the original voice or one octave below. The upper voice can also have its pitch swept up or down by a sweep triggered on each new note; this gives the "sweeping sync" tone used on many keyboard synthesizers.

Coming soon - **Flanger/Doubler (Model 522)** an analog delay in two ranges designed to cover both flanging and doubling effects.

Bones Howe

by James Riordan
and David Schwartz

Bones Howe is a name synonymous with the best in recorded music. His twenty-six years in the music business have contributed greatly to the success of such artists as The Fifth Dimension, The Association, Elvis Presley, Jerry Lee Lewis, Tom Waits, The Mamas and Papas and many others. He is an industry survivor with a brilliant sense of objectivity, an instinctive musical ear, and the courage to go for what is good and what is right.

Bones began his recording industry career with L.A.'s legendary Radio Recorders, after moving out West from Georgia where he had been drumming with a jazz band. His musical talent combined with his engineering aptitude to make him a quick success in the L.A. studio circuit.

He recalls those early days. "When I started, an engineer had to do in a short time what now is stretched out over many weeks. There was no multitrack recording so you mixed everything down to mono in the studio instantly. There were advantages in that you heard the finished record right then. If it was bad, you knew it... you didn't find out six weeks later when you were mixing.

"I had kept up my jazz playing, mainly at nights in the studio after my sessions, and I had become pretty well known among the jazz musicians in L.A. at that time. This experience helped my career along and gave me a good insight into

producing as well as my engineering.

"One day Henry Mancini came in and he was working on a soundtrack for a television series called Peter Gunn. Some of the jazz musicians that Mancini was working with had recommended me to engineer the date, since he was going for a jazz feel on the project. Suddenly the thing became a big hit and then everyone started asking for me to engineer."

About his jump from engineer to producer, Bones says, "I was engineering the Mamas and Papas, and a lot of other acts, and doing some co-producing, but I had never really been responsible for a record. Then in 1965, when I was working at

United Western, these two guys who had started a label called White Whale came to me with a group called The Crossfire and asked me to produce them. I said that I'd be interested if I liked the way they sounded. In these days we were in the transition between surf and folk rock. So I went to see them and they were doing a Bob Dylan song called *It Ain't Me Babe*. I told them, 'It sounds like what's going on right now, it's very exciting. Let's go in and make a record.' We went in and cut it, renamed the group The Turtles and had a top ten record.

"All of a sudden I found myself producing The Turtles, engineering Johnny Rivers and The Mamas and Papas and playing drums
(continued on page 17)

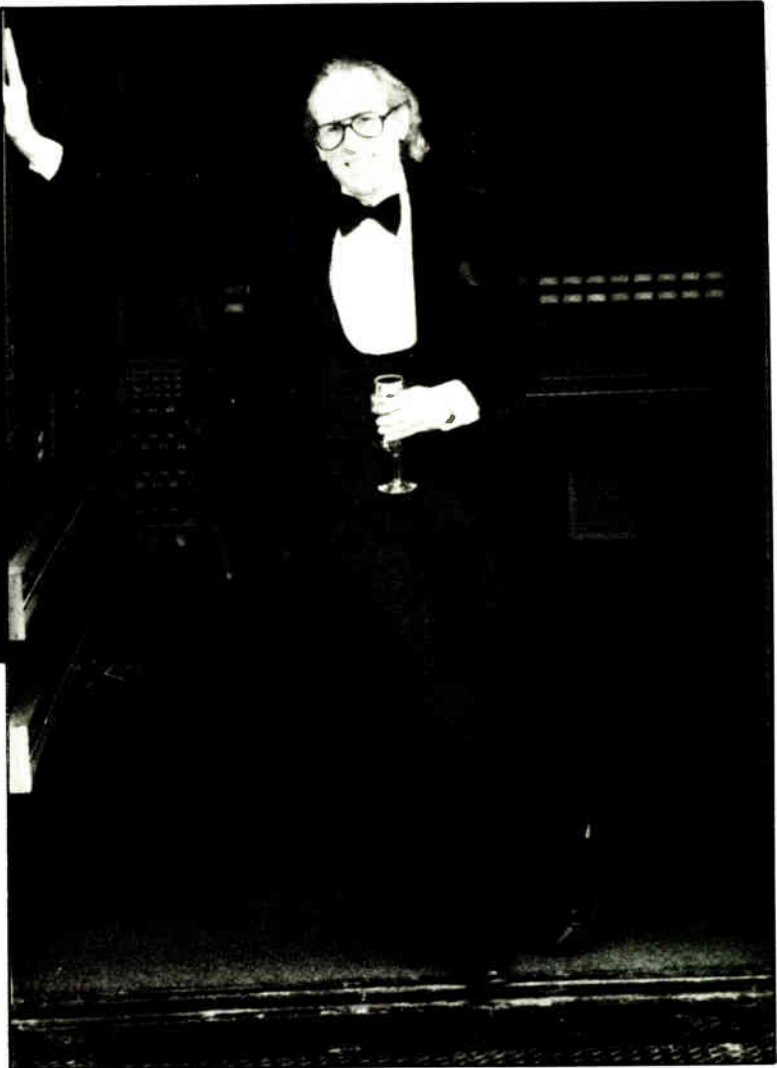


PHOTO: MICHAEL NADEAU

Bones Howe in L.A. Record Plant Truck #3.

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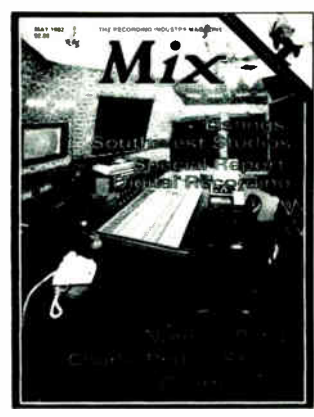
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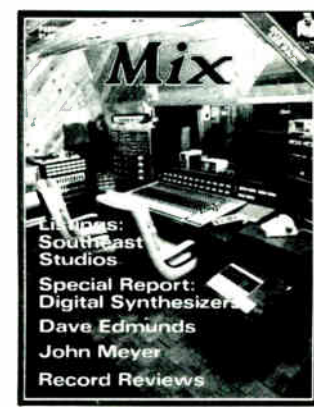
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PHOTO: MICHAEL NADEAU

Bones Howe supervising sound for the 1982 Grammy Awards from the Record Plant remote truck.

(continued from page 14)

for the Grassroots. Actually the Grassroots weren't really a group. There had been a San Francisco band called The Grassroots that had broken up and the singers were putting their vocals on some of P.F. Sloan's demos. The rhythm tracks were done by some of the local session players and I was playing drums on some of the stuff. I played on three or four of the records that way.

"Then one day in 1966 I said to myself, 'Wait a minute. I can't go on staying up 24 hours a day, being a drummer in the morning for the demo sessions, producing the Turtles in the afternoon, and engineering the late sessions for Lou Adler and The Mamas and Papas. I'm going to die doing this.' So I decided that I was just going to produce, and I split from everything else I was doing.

"Right about that time The Association came to me and asked if I would engineer their next album. I said 'No' but I would be happy to produce it. They said 'OK' and we did the album that had *Windy* and *Never My Love* on it. I did more and more producing but it wasn't until 1969 when I produced *Aquarius/Let the Sun Shine In*, with the Fifth Dimension that people really began

treating me like I was a producer. I guess it just takes a certain amount of time to establish a reputation."

Although he downplays his role, Howe is one of the key figures involved with the Grammy Awards. "I'm the Sound Consultant for the Recording Academy, which means that I end up in the truck mixing the show. The music acts on the show are done live, no lip syncing, and we mix 32 inputs live to mono for the TV broadcast. It's one intense week of rehearsal leading up to two hours of panic. But I really enjoy it.

"Also I'm involved with the TV Committee which consults with the producers of the show concerning which artists are performing and presenting awards, and making sure that someone like Farrah Fawcett isn't presenting an R&B award. I guess I'm kind of a liaison between the show producer, the artists on the show and the Academy. I represent the record business in general and it gives me a good perspective on the whole event."

Bones offers practical advice for those trying to break into the engineering field. "Take any job you can find that is professional enough to

be really working in the business... inside the studio as a hustler, a set-up guy, sweeping up the studio, doing tape dubs for a publishing company. Once you're in the business, it's very easy to move around to other jobs. I would say not to try for the job of your dreams first time out, because, you're going to fall short. I started as an apprentice, doing Armed Forces Radio Service work. It had nothing to do with producing hit records, just having a job and getting paid every week. Ask anybody in the business who's made it big and they all started the same way... at the bottom. People who say they're going to be a millionaire by 30, and don't make it, tend to get disappointed and give up."

Bones has strong feelings about what's wrong with the music business these days, beginning with the attitudes of the record companies. "The record companies today are run mainly by lawyers and accountants, and those people are not known for their musical instincts. The fact is, without the musical instincts, you're sunk. You need both kinds of people—the ones who know how to make deals and package and sell, and you need those who can go out and find something to sell... people with

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that musical instinct who can recognize and develop the talent. There are classic combinations of these people, like Herb Alpert and Jerry Moss, who illustrate how both can be done well. Right now we seem to only have the people who know how to sell, and we're lacking people to find that new thing to sell. There's no trend right now—no disco, no punk... the labels are lost and they don't know what to sign. There's this funny saying in the music business that has come home to roost this year. The saying goes that if you are in A&R, you'll be right 90% of the time if you say 'No' 100% of the time. So there's nothing happening now because everybody seems to be playing the percentages.

"Another thing wrong with the music business is that everybody thinks that the minute you get four people together who can play a tune, you should make a record. It's really gotten absurd. There's a lot of satisfaction and fun in just playing music and the competition to record shouldn't be such a big thing. There's more to it than that; making a record is not what music is all about."

According to 49 year old Howe, one of the keys to coping with life in the music industry fast lane is to keep a realistic outlook. "It's a cycle, and you have to see it that way or you can go crazy. The top is only a momentary thing; nobody stays on top forever. The first thing I did with a new girls group that I am producing was to tell them that a lot of time can pass between the day that we sign a contract and the day that they can hold the finished album in their hands. Maybe it'll be a year or more, and so they have to be committed to staying with this group for that length of time. If they aren't willing to make that kind of commitment I suggest that they forget the whole thing."

Bones Howe has given a great deal of thought to the bond between the artist and producer. In fact, he has lectured at the Sherwood Oaks Experimental College on the topic of 'The Psychodynamics of the Producer/Artist Relationship.' He compares it to a marriage, but to the kind that can never work because the expectations are beyond the reality. "Every relationship that a producer has with an artist is terminal; at some point it is going to end. Because I realize that, I have had long relationships with every artist I have produced: The Fifth Dimension for seven years, Tom Waits for eight years. Waits and I ended *again* this year... we've broken up twice before.

He wanted to have so much control over his records that it came down to us realizing that I would rather be his friend than his producer. And it's not as though he can't do it without me. But I'm around and if he wants me to work on his album five years from now, he'll call me up and I'll work with him."

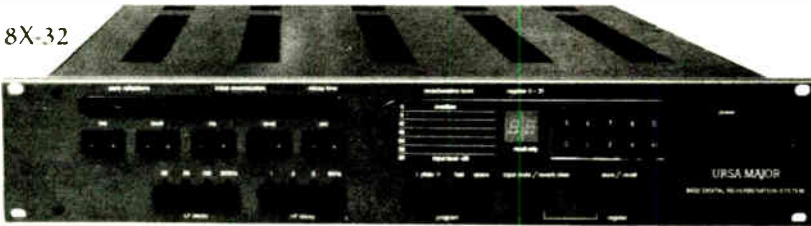
Among the greatest joys in Howe's career are his three children's involvement in the music business. "My son Geoff just engineered Irene Cara's album and works on video projects. He started at 16 working as my second engineer and now lives in New York and does independent engineering and audio consulting for HBO. My daughter Erica works with K-Tel's Publishing Division as John Lombardo's assistant. My other daughter, Kathy, works at A&M Records in Creative Services and is studying to be a studio singer. It's a great satisfaction for me to see my children enjoying this business as much as I have."

While many people see the music business today as a dinosaur in it's final days, Bones sees it instead as a time of opportunity. "It's a business of survivors. If you're in business today and you're still in business a year from now, then you are a survivor... because times are tough right now. The bright side of it is that now is the time that you've been waiting for to clean up the patch bay, or put down that new floor in Studio B, or paint the hallway. All of those things that you've put off because you couldn't afford the time... well, now maybe you've got the time. And get the staff to work doing a little soldering here, some painting there, it's a good change of pace and it can be fun. Don't panic because the studio is sitting empty. The business will turn back up again, and when it does, it will go to the people who are ready for it—the people who have their act together. If you've got dead weight on your payroll, now's the time to get rid of it.

"Chris Stone at the Record Plant is a good example of someone who doesn't look back. He keeps his people busy building and expanding the operation, doing new projects with the future in mind. If you get through the next two years, you'll be doing great, better than you have ever done, with a solid clientele that you can rely on. Because that is what these times are all about. All of those people who jumped into the business in the seventies just to make a fast buck when things were hot are going to disappear."

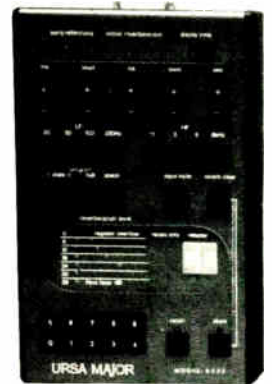
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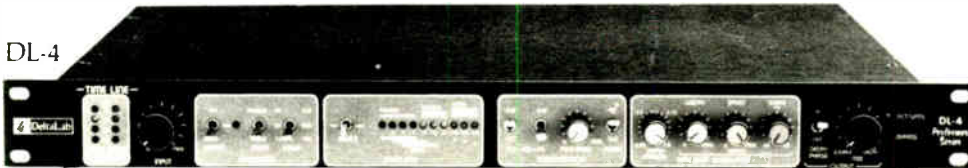
an RS 232 interface, non-volatile memory, complete parameter controls, and an optional remote. In short, the 8X-32 will simulate any acoustic environment from a tile bathroom to the Taj Mahal and it costs thousands of dollars less than the competition. Call or write Bananas for a demonstration.



8X-32 remote

When it comes to effects, the DeltaLab DL-4 and DL-5 are at the top of our list. The DL-4 features 512MS delay at full band width with no degradation. No longer do you have to trade off audio quality for long delay time. The DL-4 features: 2.5 seconds delay with optional memory module, Flanging/Doubling/Chorusing/Echo, optional footswitch control of effects, 90dB min. Dynamic Range, and limited 2 year warranty.

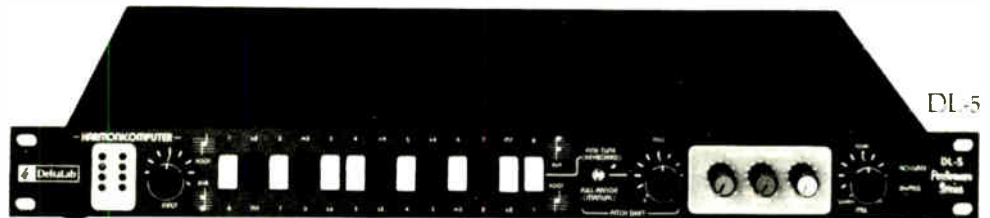
DL-4



encoding system coupled with special multiplying and multiplexing techniques. The DL-5 totally eliminates the typical splice-glitch. The result is a clean sounding harmonizing unit that is not plagued with unnecessary side effects. The DL-5 features: full two octave operation — one octave higher and one octave lower, simplified keyboard style operation, state-of-the-art digital encoding technique maintains maximum bandwidth, VCO provides vibrato effects, 90dB minimum; 95dB typical Dynamic Range.

The DL-5

HARMONICOMPUTER is a high quality pitch-shifting processor which uses DeltaLab's advanced



DL-5



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REMOTE RECORDING

Reeling on the Road

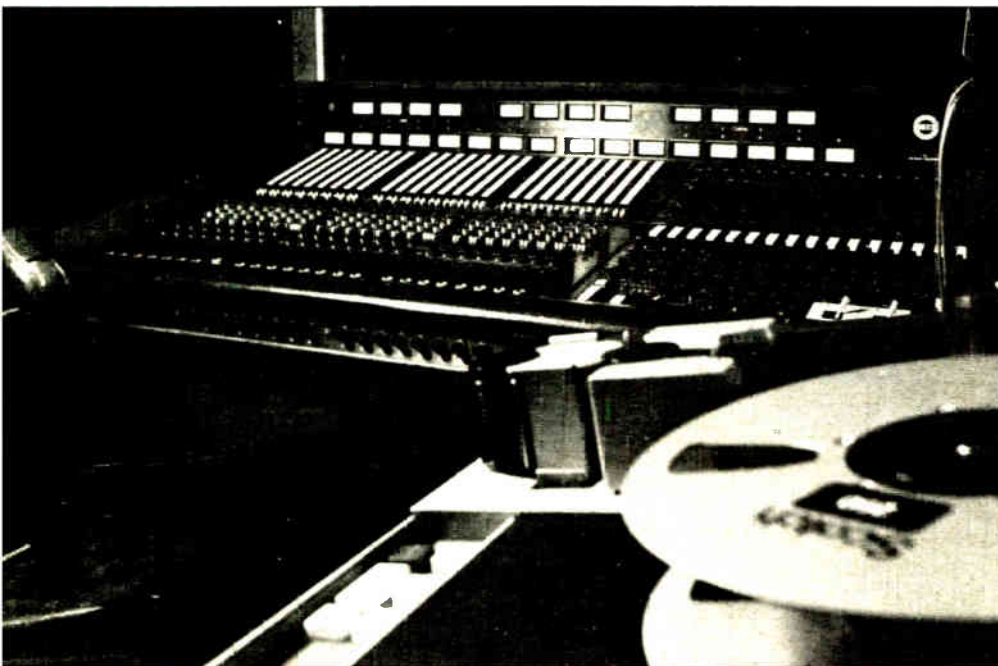
by George Petersen

This past year has shown major changes in the mobile recording industry. Many companies have realized the lucrative offerings of the television, motion picture, cable, and videodisk industries, and have equipped their remote trucks with synchronization gear. TV and film producers have become educated and enlightened to the financial and artistic advantages of quality multitrack sound. Consumers and the general public, having tasted stereo television through live-satellite simulcasts, are now looking forward to the advent of stereo home VCR's and multitrack network TV broadcasting. The effect of video and film on the

mobile recording industry over the past few years cannot be underestimated.

Even more important than the audio/video fusion movement is the fact that neither recording artists nor the record buying public will tolerate poor quality live recordings. Gone are the days when a live performance album would sell in spite of mediocre sound.

Today's mobile trucks offer state-of-the-art recording gear with sound comparable to, if not better than, many land-based studios. Rolling 24 track control rooms are commonplace, and many mobile companies have 46 track interlocked systems available. The roadworthiness of digital recorders has improved markedly over the past few years, and a number of companies now have remote digital trucks.



PHIL EDWARDS RECORDING (PER)

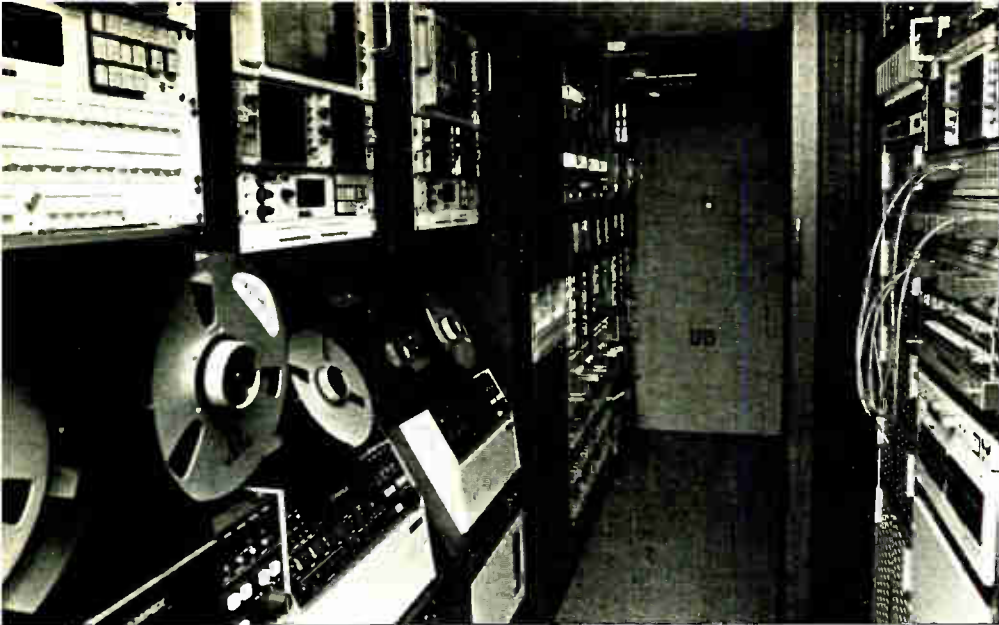
The PER remote truck was built in 1973 to provide mobile and in-house production facilities for Creedence Clearwater Revival. The unit was used to document concert tours, and when stored at its Berkeley warehouse home, became the control area for "Cosmo's Factory."

In that same year the truck was used by Concord Jazz Records for their first live disk, the classic Joe Pass/Herb Ellis *Seven Come Eleven* album. That project marked engineer Phil Edwards' first exposure to the truck, which he later purchased in 1978.

(continued on page 24)

Phil Edwards Recording Truck formerly in service to Creedence Clearwater Revival.

PHOTO: RANNEY WONG



Part of the spacious videotape area in Unitel Video's Odyssey I state-of-the-art remote unit with its 4 Ampex VPR-2B 1" type "C" recorders and production monitors.

Unitel's Odyssey I

by Mia Amato

"State-of-the-art from the ground up."

That's how Al Geisler of Unitel describes the Odyssey I, his company's new audio/video production mobile unit. A huge studio on wheels, Odyssey I not only handles ten-camera video shoots with ease, it can accommodate multi-track recording for an entire symphony orchestra. Truly a truck of the future, Odyssey I is the first video mobile unit to incorporate, "expandable" floor design.

Unitel owns several smaller mobile units but began the development of its new rig with large-scale video productions in mind. In their early development stages, the company acquired a new client, Lincoln Center, whose opera and concert telecasts have been a mainstay of public television for nearly a decade.

"We invited their input and they helped us with the design philosophy," Geisler says "For us, *Live From Lincoln Center* was the ultimate in prestige assignments. From the beginning our thought was to get the very best equipment—the ultimate switcher, the best cameras, the best one-inch tape machines," he adds. The final price tag of two and a half million dollars reflects, he says, "no compromises."

Gerstenslager, the Ohio firm that provides video trucks for the television networks, built the 45-foot tractor trailer body. To accommodate

the large production staff comfortably, most major equipment is bolted to the truck bed and up against the walls. Doors were cut in the sides of the truck, so access to the back of the equipment racks for maintenance can be done from the outside.

One of the biggest problems in mobile video production is the cramped, claustrophobic feeling that results when twenty or more people—are working in an enclosed space for several hours of a shoot. If the program is being "live switched," that is, fed to a live transmission or one master tape with no chance of a second "take," the tension mounts even more.

Elimination of the maintenance "alleys" between equipment racks and external storage solved some of the space problems. The Unitel engineers decided to make one side of the truck "expandable" to create more space in the area of the switching console, so one side of the truck folds outward onto a platform. When fully extended, the control room area is 21 feet wide.

"Right off, we've got fifty percent more space!" enthused Geisler, "The engineers love it... everybody just loves it."

We do most of our work in cities like New York, where there's not much room to spare." In Manhattan, the Odyssey I is usually parked outside of a building and the extended portion sticks out over the curb onto the sidewalk.

The video equipment within is studio quality. The control console is a Grass Valley 300-3 production

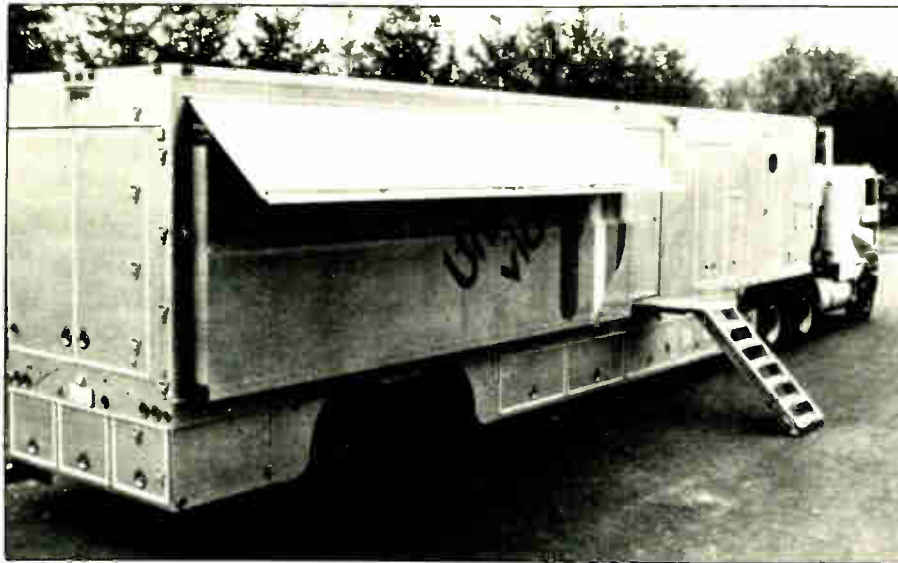
switcher with 24 video inputs; a Grass Valley Mark II digital effects generator provides for sophisticated transitions and special effects. Recording is done on four Ampex VPR-2B machines, the latest generation of one-inch type "C" videotape recorders.

For live-on-tape productions, Unitel offers a switchable iso feed. While main shots are being fed into the main VTR, any other camera—perhaps one focusing on a wide shot or a crowd shot—can be fed into a separate iso (for "isolated") recorder. That material can later be edited into the final video mix.

The video cameras used are all Ikegami. There are four HL 79DAL, top-of-the-line portable units which color-balance automatically. There are six HK 312-E cameras, larger units which are placed on tripods and not hand-held. All the cameras use triax cables which allows them to operate up to 8,000 feet away from the control truck.

The extensive audio setup features a customized Audiotronics console with 32 inputs, with two Sphere 16-input submixers, for a total of 60 inputs, mic or line level. The mixer has 24 outputs, and built in equalizers. There are also external dbx equalizers and limiters. 2-track audio recorders receive the final mix. (Most programs are mixed down to two tracks for stereo simulcast or for placement on the two separate audio channels available on one-inch tapestock). All recordings are time-coded.

Live From Lincoln Center, broadcast live by satellite to public TV stations around the country with a stereo radio simulcast, illustrates the challenges encountered by the Odyssey I. For one thing, the cameras must be unobtrusive so that the audience, which has paid a considerable sum for its opera tickets, will not be disturbed. Lighting levels (often a problem in video) must also be subdued. "When telecasting from the Met, we keep the light levels as low as possible while still maintaining color balance," Gil Wechsler, the Metropolitan Opera's lighting director, commented. He and Johy Leahy, the Met's technical production consultant, worked with Unitel to find a way to assure the accurate representation of costumes, sets and skin tones in less-than-perfect lighting conditions. Their solution was to station the video color-



Unitel's Odyssey 1 partially extended for use. Roof section falls into place when vehicle is fully expanded.

(continued from page 21)

balancing engineer within the theatre, instead of outside in the main truck. This enables the engineer to see the actual colors while matching cameras on the monitor and through the signal equipment.

According to Phil McEneny, VP of sales and marketing for Unitel, production for cable television figures largely in the company's future.

Odyssey 1 has been involved in several cable programs, including a live Frank Zappa concert produced by Boggs-Baker Productions for Warner's MTV Music Channel and upcoming Wayne Newton special.

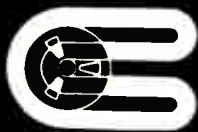
McEneny says it's hard to say exactly how much a ten-camera Odyssey shoot costs, "because every job we do is bid separately. It depends how many units are

involved, how many days, if it's a one-shot deal or a series."

A producer using the truck can bring his own video crew, or use technicians from Unitel's own staff. "We prefer to keep our own technical director and tape operators so we have some control over the quality," McEneny says. His staff will also arrange to subcontract construction and catering and may offer the company's own post-production facility as part of a package deal.

This season musical programming has filled up most of Odyssey 1's time schedule, as *Live From Lincoln Center* scheduling makes way for *In Performance* at the White House. The regularly scheduled trips to Washington, D.C. for this public TV series foreshadow even longer journeys for the Odyssey from its New York home base.

"We built it for long range travel. It can go anywhere," glows Geisler, "Its obvious advantage is as simple as this: instead of two trucks pulling up to a job, you've got one." ■



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 - 2-MCI digital recorders
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(continued from page 20)

The PER remote unit has since been upgraded several times. It now houses twin multitrack recorders, video monitoring, transformer mic-splitting, and a DeMedio designed API console which features separate quad and stereo monitor mixes, a useful function while doing simultaneous broadcast and multitrack recording.

The truck most recently provided audio facilities for the newly-conceived San Francisco International Jazz Festival. This event required three multitrack machines, to cover two stages simultaneously, and stereo and mono feeds for live broadcasting, tape recording, and a live stereo satellite link to Japan.



Interior of Bodacious truck equipped for 2 track digital recording.

BODACIOUS AUDIO

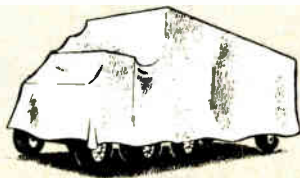
Bodacious Audio, of San Mateo, CA, is the first company to bring mobile digital recording to Northern California. Their remote truck has been extensively involved in radio broadcasting, and their credits include the Bay Area Music Awards (Bammies), for the past two years, as well as having engineered live-to-

digital radio shows. Herb Pallant, Vice President of the firm, says that Bodacious Audio now offers their clients the Ampex ATR-100 1/2 inch, two-track mastering system as well.

The original concept was to incorporate high quality analog using the Ampex machine with provisions to

go digital as soon as it could provide the reliability and performance required. Bodacious has now incorporated the Sony Digital Mastering System PCM-10. "The PCM-10 is one of the best kept industry secrets. No digital system is

(continued on page 26)



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Reelsound's new tractor trailer mobile unit. We'll be truck'n by the summer. Wherever you go we can be there with all the latest equipment to produce the highest quality sound. Our new Sierra/Hidley designed studio will be equipped with MCI 600 automated series console, two MCI 24 tape machines, MCI half-inch and quarter-inch 2 tracks and an overdub room. Outboard equipment includes Urie, dbx, and Valley People limiters and processing units, DL-1, Space Station, Ursa Major 8 x 32 digital reverb and a complete collection of microphones. We're equipped with a SMPTE system for video sweetening and interlocking of multitracks. All of which means we're gearing for the best possible concert and TV production sounds.

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Peter Yianilos, designer and builder of Artisan, getting down some of his own tracks.

bile unit? The heart of the truck is two 24-track MCI tape recorders which I built from scratch. I put hundreds of hours into each machine to achieve a more durable machine to hold up to the tortures of the road.

The truck also has one stereo recorder for mixdowns, three Technics cassette recorders, 24-channel Dolby-A noise reduction, and an MCI JH-400 mixing console. And we just bought new UREI 811A speakers, the first ones in Florida. We also use an Eventide Harmonizer and Kepex and Gain Brain outboard devices.

Is there any particular reason for using that equipment? We use MCI equipment because of my experience as a designer at MCI, and also because I can fix anything in the truck in a matter of minutes. The rest of the equipment is used because through years of experimentation I've found it to be the best for the needed applications.

How large is your road crew? Two or three people, including myself, depending on the scope of the job. A stereo mixing of a symphony involves less than a 40 microphone set-up for a TV special.

What are the special problems you face as a remote recording engineer? It boils down to one thing: time. Within an average of 12 to 14 hours we have to come in and establish a personal rapport and work towards an intense goal with people we've never met. We don't have days. I feel rapport—getting along with the band, the group manager, stage manager, roadies—is essential. That's now easy. We're not usually making their jobs easier. We really disturb the flow of a tour even though it's for a good cause.

What are some other problems you face? Because we are an accessory to a long tour for perhaps a week at most, we may not be included in the original planning stages. Last minute planning and communication may result in details being over-looked. For instance, quite a few times we have done live remotes without the benefit of a sound check, and several times the artists themselves have been totally unaware of our presence.

How much of a problem is the actual traveling to a gig? The travel time between dates means you don't sleep sometimes. When you have an eight-hour estimated travel time, you allocate ten in case of a flat tire or other problems. Time is our biggest worry. We're always in a hurry.

What are some of the high points in your remote recording career? One of the highest points in my life was working with producer George Martin recording a high school marching band for a three-minute song for the film "Honky Tonk Freeway."

He's a perfect gentleman, the most pleasant person I've ever worked with. He's a total optimist. During an eight-hour day he gave me the benefit of the doubt and helped me grow. He didn't have to make any concessions to anybody. He thanked me for the quality of my work. That's like your mother telling you she loves you.

Do you have any words of wisdom for remote recording engineers? Yes. Keep your mind and ears wide open. This is an artistic field we're involved in and we can't regard ourselves as merely technicians. You've got to be an artist when sitting at the console.

Be sympathetic to the artist. Get on the same train of thought. That way you decrease your work by 30 percent. It happens on the third take instead of the ninth. Put yourself in the artist's shoes. Don't forget the emotional pitfalls and peaks an artist has. That's something I don't think you'll read in any teaching manuals. ■



PHOTO: ROBERT AZMITIA

Artisan's Peter Yianilos

by Scott R. Benarde

Peter Yianilos' secret, deep-down desire is to take center stage in concert halls in Everytown, U.S.A., and make the electric guitar cradled in his arms, sing, whisper and cry the melodies in his mind. But performing will have to wait. For now, the 26-year old president of Artisan Records, Inc., travels throughout the country in his remote recording unit, recording the concert sounds of everybody from the Fort Lauderdale Symphony Orchestra to Heart to Al Jarreau.

During the five years Yianilos has been in the mobile recording business, he has been awarded seven gold and platinum records for recording best-selling albums.

Yianilos chatted about the joys and pitfalls of remote recording just before heading his remote unit to north Florida to record an Allman Brothers concert:

Why did you chose to build a remote unit? I love to drive and I love the excitement of live performances. With a mobile studio, I could do what I love to do—travel and record live performances.

What kind of vehicle did you buy and what design did you use? The unit is a 27-foot, seven-ton GMC motor home. The design was my own. I'd never seen the inside of a remote before that. It was three years after I built mine that I finally saw another one. Everything I do is like that. I dive in over my head, then teach myself.

Speaking of equipment, what do you use inside your mo-



Left: Interior of Recording Connection's Roadmaster II 40 foot Silver Eagle bus.

(continued from page 24)

perfect, but many people prefer this system to analog, and it has never let us down," says David Haynes, Chief Engineer and President of Bodacious. "We have been using a modified Sunn console and recently have been experimenting with a Harrison "Alive" console. A most important consideration is the flexibility to do everything from two mike direct-to-

digital classical recordings to full blown mixdowns with auxillary equipment patched into each channel."

THE RECORDING CONNECTION

The Roadmaster II is the mobile recording arm of The Recording Connection, which also

operates a two-studio recording facility in Beachwood, Ohio (Cleveland area). The remote unit, a 40' Silver Eagle bus, features a Soundcraft Series 3B 32 in/24 out console, and an MCI JH-24 transformerless two-inch 24 track machine.

The Kinks' gold album, *One For The Road*, was recorded live by the Roadmaster II on location in Providence, Rhode Island. Any live albums recorded by Arista Records in the midwest are also recorded by the bus, which is similarly used by NBC who use the Roadmaster II as the official remote recording leg for their "The Source" radio news programs.

THE RECORD PLANT

The New York Record Plant's new mobile unit, dubbed the "Black Truck," was custom designed and fitted on a 900 cubic inch turbo charged Peterbilt tractor to provide speed and reliability in getting from concert to concert. The New York
(continued on page 28)

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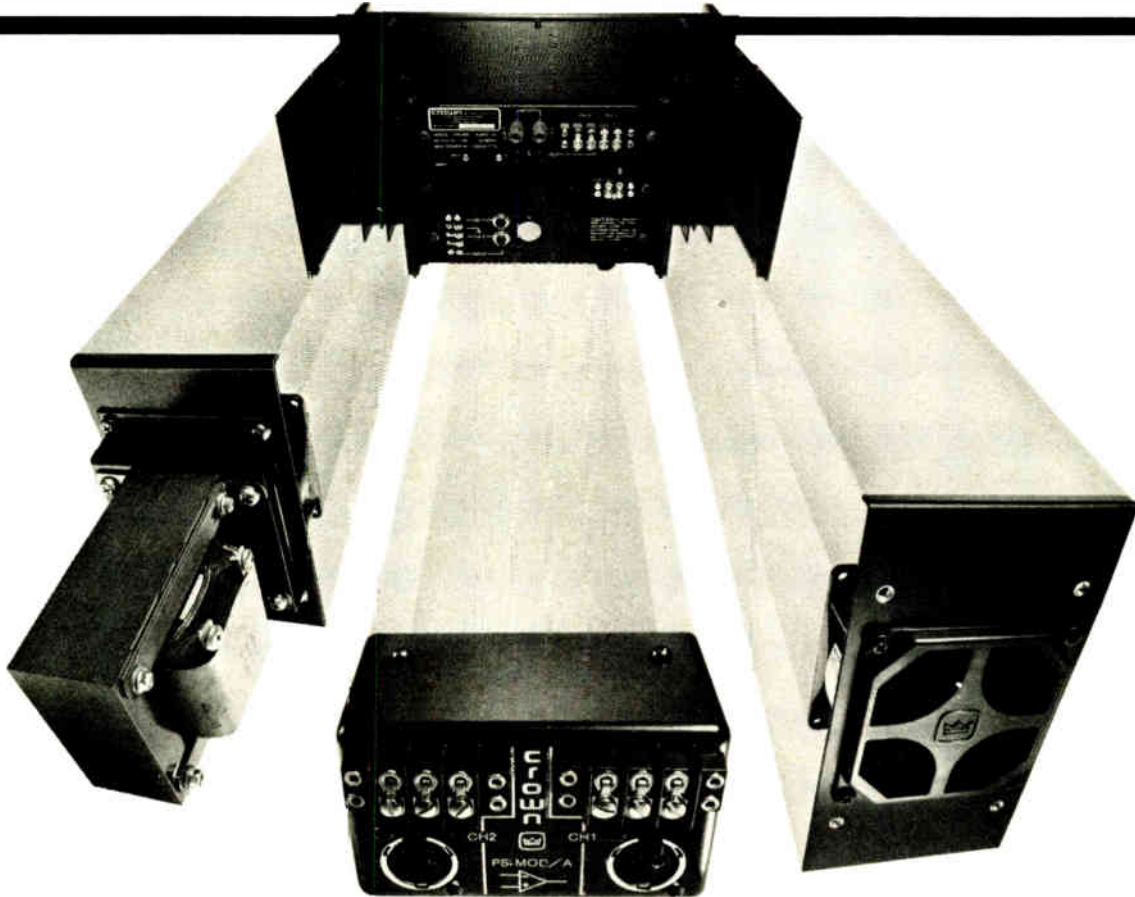
Credits: Concord, Monterey, KJAZ Jazz Festivals, Mel Torme, George Shearing, Willie Nelson, Stan Getz, Dave Brubeck, Walter Hawkins, Dexter Gordon, Jefferson Starship; video shoots for HBO, KPIX, KQED, Jet Danger Records; live remotes at Great American Music Hall, Dante's, Keystone Korner

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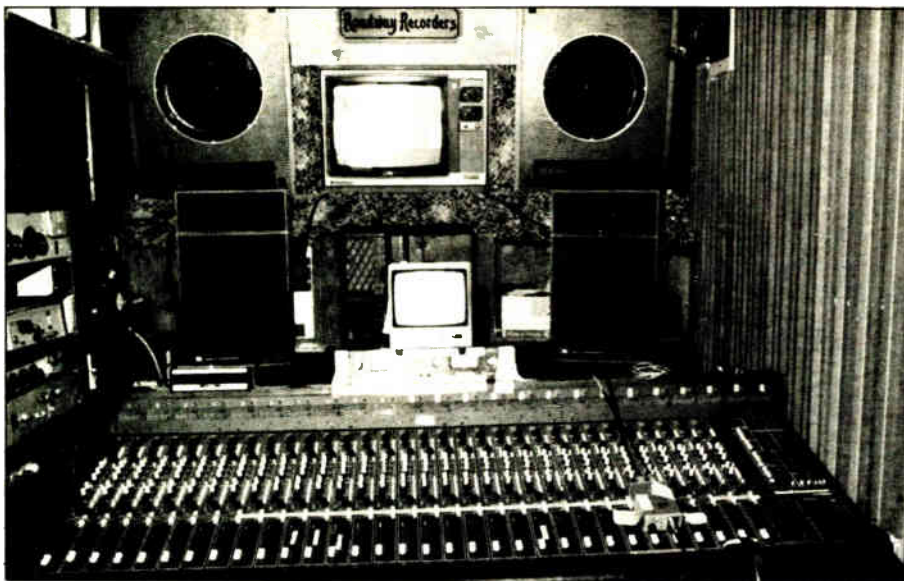


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Left: Action Position at Roadway Recorders.

In the past, the Roadway remote truck has done live feeds for Guy Lombardo's New Year's Eve at the Waldorf Astoria. This particular job required 85 microphone inputs and three separate mixing consoles.

Roadway President Richard Dior is confident that video is becoming a major force in remote recording. "We at Roadway have gone above and beyond albums over the years. Video will dominate the 80's and Roadway will be dominating audio recording for television and cable on the East Coast."

(continued from page 26)

City-based Black Truck is equipped with an API custom mixing console, and twin Ampex MM 1200 24 track recorders. The console is designed to handle up to 88 mike lines with as many as 44 outputs.

The busy Record Plant remote units have already this year worked on projects for The Cars, Tammy Wynette, and Blue Oyster Cult, as well as television specials for Buddy Rich, Wayne Newton, and Al Dimeola.

REELSOUND RECORDING

As reported in last month's issue of Mix, the Reelsound Recording mobile unit is quite active and Malcolm Harper, owner of the Manchaca, Texas company, is now in the process of building a second mobile unit. Their original unit is contained in a 1948 Flexible road bus. This black metallic six-wheeler houses two MCI 24 track recorders, a MCI 428LM console, over 40 microphones, and a plethora of outboard equipment.

The new truck will be housed in a 42 foot trailer-van and is scheduled for completion this summer.

ROADWAY RECORDERS

Roadway Recorders, of Livingston, New Jersey, has established itself as a leader in diversified live recording. Diversification of projects is a key here, as their past clients have ranged from The Talking Heads to engineering Pope John Paul II's album. One of their recent recordings was HBO's Sherlock Holmes, starring Frank Langella, which was taped at the Williamstown (MA) Theatre Festival and was aired last November.

Following is a list of remote recording operations that responded to our survey, some of them being so good as to supply additional information on their operations. We urge any remote recorders that we might have missed to get in touch with us so that we can include them in the next survey.

REMOTE RECORDING OPERATIONS

SOUTHERN CALIFORNIA

ALL STAR SOUND & RECORDING
1070 E. Front St. #1, Ventura, CA 93001
(805) 653-6661
Contact: Ed Spittle

BEST AUDIO
5422 Fair Ave., N. Hollywood, CA 91601
(213) 763-2378
Contact: Bob Huntley, Bob Estrin

ENACTRON STUDIOS OF CALIFORNIA, INC.
5102 Vineland Ave., N. Hollywood, CA 91601
(213) 761-0511
Contact: Stuart Taylor

Equipment: 40' truck; isolation booth; close circuit video monitor; Neve console; 24 track machine; Klipsch monitors; on board echo

Services Available: A full service recording company specializing in temporary full studio installations and on location live recording. The Enactron truck eliminates the usual problems of mobile/location recording and generates all sorts of new possibilities for all recording, television and film projects. Credits (remote recording for film): Star is Born, Last Waltz, The Rose, Honeysuckle Rose; Credits (remote albums): Bonnie Raitt, Leon Russell, Amazing Rhythm Aces, Jimmy Buffett, Emmy Lou Harris, Joe Walsh, Dan Fogelberg, and many more; Albums recorded in truck: Willie Nelson "Stardust", Emmy Lou (albums 1 thru 5), Anne Murray, Rosanne Cash, Albert Lee, Johnny Cash

FILAMENT PRO AUDIO
143 E. Arrow Hwy., San Dimas, CA 91773
(213) 339-0081, (714) 592-2848
Contact: Frank Oppenstein

WALLY HEIDER RECORDING
1604 No. Cahuenga, Hollywood, CA 90028
(213) 466-5474
Contact: M. Hew Vertin

Equipment: Multiple trucks with varied audio configurations. Consoles: custom API 40 x 24, custom API 32 x 24, Audiotronics 501 28 x 24 Tape Machines: Ampex MM1200, 24-16-B track, Ampex ATR 104-102, Ampex 440. Monitors: custom Altec 604E w/Mastering Lab crossovers; BTX, EECO, Gray SMPTE; over 500 microphones including wireless; Dolby, dbx noise reduction, EMT 140, BX-10 reverb, Sony 17" & 19" color monitors, Monitor Amps: McIntosh 2105, 200 pieces of outboard equipment, both FET and tube.

Services Available: Wally Heider Recording offers 7 recording studios capable of all post-production needs including scoring w/picture to 35mm mag or video plus 9 live echo chambers and one of the largest tube microphone inventories in the world. Credits include: Academy Awards, Emmy Awards, Grammy Awards, Don Kirshner Rock Concerts, Eagles Live, Bette Midler's "Jinxed," "Roadie," plus many more I.A.T.S.E. local #695 signatory

JAMES B. LANSING SOUND, INC.
8500 Balboa Blvd., Northridge, CA 91329
(213) 893-8411
Contact: Ronald H. Means

LOCATION RECORDING
2201 West Burbank Blvd., Burbank, CA 91506
(213) 849-1321
Contact: Steve Guy

PHUSION
P.O. Box 7981, Newport Beach, CA 92660
(714) 751-6670
Contact: Mark Paul

TIM PINCH RECORDING
6600 San Fernando Rd., Glendale, CA 91201
(213) 507-9537
Contact: Tim Pinch

Equipment: Spectra Sonics 28 x 24 console modified specifically for remote recording, including in line monitoring, Altec 604-E's with Mastering Labs x overs; 1176 and dbx 160 limiters, Kexepes and Gain Brains; Ampex MM1200 24 track, Ampex 440 2 track; Jensen splitter X-Irms in snake, 16' x 8' x 8' control room, air conditioning, video monitoring, etc.

Services Available: We specialize in live audio for television specials, for example The Jacksons at the Forum, Merle Haggard at Anaheim Stadium, The American Music Awards, A Day in the Country at the Rosebowl, Tom Johnston at the Country Club, Englebert Humperdink in Las Vegas, Alice Cooper, Go Go's, America, etc. In addition, live albums such as Al DiMeola, John McLaughlin, Paco Delungra—Friday Night in San Francisco, Buddy Miles, Merle Haggard, The Police, Devo, etc. Plus we have a complete 24 track studio for video post-production, mixing live albums, regular album production, etc.

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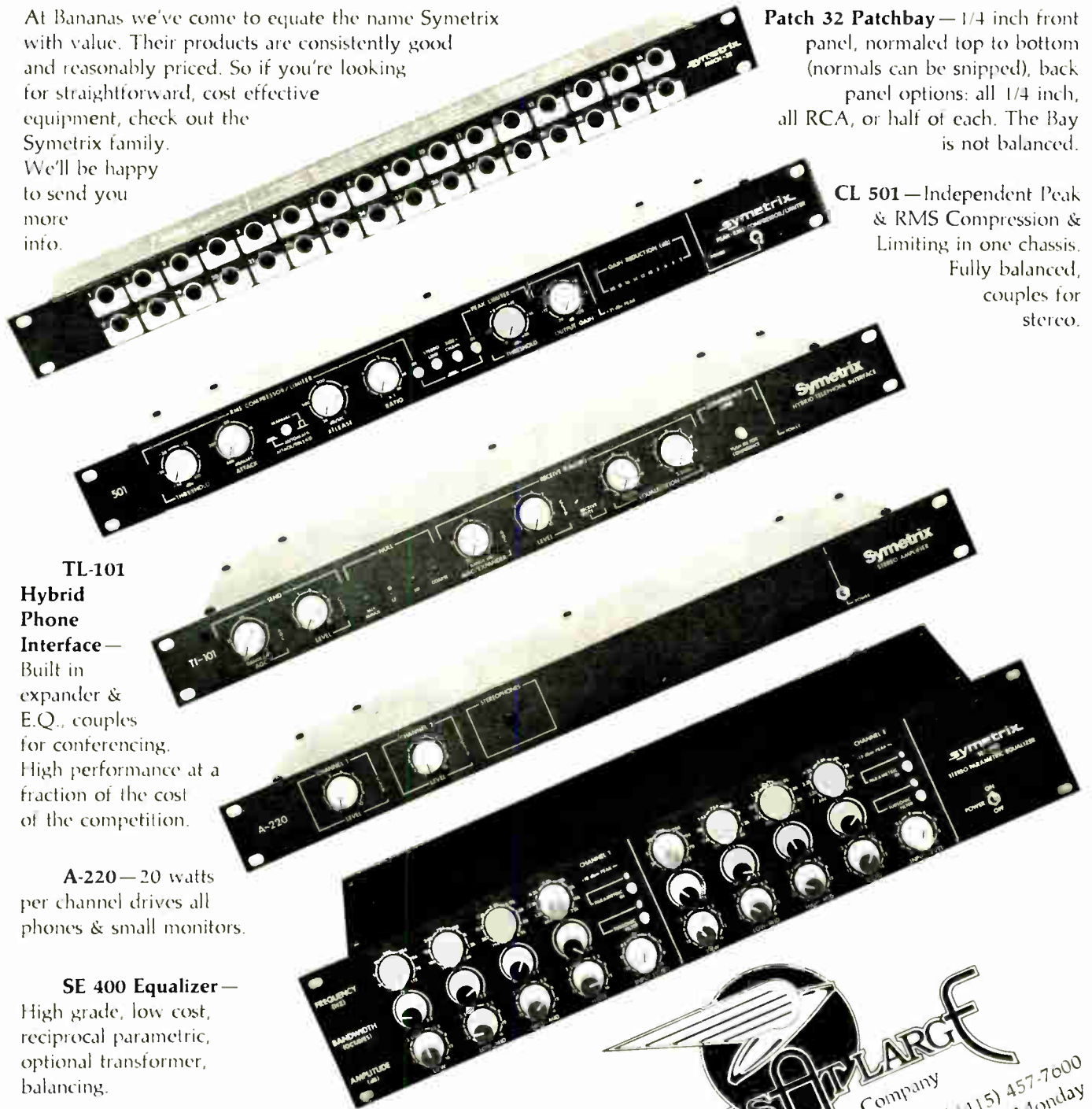
Patch 32 Patchbay—1/4 inch front panel, normaled top to bottom (normals can be snipped), back panel options: all 1/4 inch, all RCA, or half of each. The Bay is not balanced.

CL 501—Independent Peak & RMS Compression & Limiting in one chassis. Fully balanced, couples for stereo.

TL-101
Hybrid Phone Interface—Built in expander & E.Q., couples for conferencing. High performance at a fraction of the cost of the competition.

A-220—20 watts per channel drives all phones & small monitors.

SE 400 Equalizer—High grade, low cost, reciprocal parametric, optional transformer, balancing.



BANANAS **APLARGE**
Company
Audio/Musical
802 Fourth Street (4th & Lincoln), San Rafael (415) 457-7600
Hours: 11-6:30 Tuesday-Friday, 11-5 Saturday & Monday
Closed Sunday.



*The Record Plant
Los Angeles, CA*

THE RECORD PLANT

8456 West 3rd St., Los Angeles, CA 90048
(213) 653-0240
Contact: Gale Sacks

Services Available: Record Plant Remotes first voyage was the Concert for Bangladesh in 1971. Now on the West Coast, we have no affiliation with Record Plant, New York. With union and non-union capability, we specialize in films, video, and live concert sound recording. Truck No. 1 is 32 in x 24 out, No. 2 is 44 in x 24 out, No. 3 is 44 in x 32 out; all with API consoles, (2) 3M M79 24 track recorders or (2) 32 track digital recorders at a slight extra charge. Air conditioned control room, closed circuit TV with color monitor, two channel intercom, wide selection of outboard gear. SMPTE and Dolby. New truck #4 has a 32 in x 24 out Audiotronics console. Special rates available. For booking and sales, call Gale Sacks or Mark Eschelman. A division of Record Plant, Inc.

RECORDING SERVICES CO.

10824 Ventura Blvd., Studio City, CA 91604
(213) 766-7191
Contact: John Streck

Equipment: 2 through 24 track recorders, SMPTE synchronizers, Adams-Smith, BTX, Lock, Dolby noise reduction, portable post production, audio for video "sweetening" packages, 24 track remote truck.

Services Available: RSC provides special portable recording systems in road cases for 2 through 24 track location recording, video and film post production and SMPTE synchronizing, and our 24 track remote truck is a comfortable control room on wheels. Full technical assistance provided to help get your show on the air.

NORTHWEST



ALIVE RECORDING CO.

149 N.E. 59th Seattle, Wash. 98105
(206) 522-8168

Bruce Buckner/Owner

*Alive Recording
Seattle, WA*

ALIVE RECORDING
149 N.E. 59th, Seattle, WA 98105
(206) 522-8168
Contact: Bruce Buckner

Equipment: Truck: 2 ton International Loadster 1600 Control Room Computer designed acoustically tuned control room. Completely self-contained room built exclusively for location recording. Control room dimensions: 22' x 7'3" x 6'9". Tape Recorders: Ampex MM-1200 24 track with additional 16 track head assembly, Otari MX 5050 (1/2 track), Revox A77 (1/2 track), Sony (cassette), TEAC (1/4 track) Mixing Console Neotek (customized) 24 x 24 x 8 x 2. Monitors: JBL 4333, Auratones 5-C, E-V Sentry 100 Monitor Amplifiers: BGW 500 Reverb & Delay AKG BX-10 (reverb), Lexicon Prime Time (digital delay) Compression, Limiting: UREI, dbx, Symetrix, Universal Audio (tube) EQ Orban (parametric), UREI, Audio Control. Other Outboard Gear: Symetrix noise gated, Clear Com intercom system, Panasonic video camera and monitor, "Sola" voltage regulation Microphones: AKG's, Sennheiser's, E.V.'s, Shure's, Beyer's, Countryman direct boxes.

Services Available: Options: digital recording, video synchronizations, and any other outboard gear available on request. Rates: \$875/per 12 hour block (includes 2 engineers)

AUGUSTWOLF, INC.

1250 Pine St., Suite 102, Walnut Creek, CA 94596
(415) 933-2617
Contact: Douglas Reid

BODACIOUS AUDIO INC.

4114 George Ave., Suite 1, San Mateo, CA 94403
(415) 573-5297
Contact: Herb Pallant

Equipment: Sony PCM digital mastering system, Ampex ATR 102, 104 analog mastering system (1/4 & 1/2 formats), Sunn 2216, graphic and parametric equalization, Rogers LS35A, Threshold, dbx, Dolby A, Dolby B, Custom PZM, Schoeps, Shure, AKG, Electro-Voice, RCA, Sennheiser, Cal-Rec. On Request: Harrison Alive 24 inputs, Eventide Harmonizer, digital reverb and full Scamp system. Ampex ATR mastering system rental 1/2" 2 track for mixdown and mastering.

Services Available: Finally, a remote recording truck designed especially for "live" video productions, radio broadcasts, album, and demo projects. So get on board the first remote truck to bring digital to the bay area and the country. Recent credits include the 1981 Bay Area Music Awards, co-producers of the "Fat Fry" live to digital radio shows for KFAT, KTIM, KVRE, KSJO, RCA, Polygram, MSI, Jerry Garcia, Jerry Jeff Walker, Ernest Tubbs, Commander Cody, New Grass Revival, The Casuals, LaCosse Productions, SFO, Hanks/Ross Productions.

PHIL EDWARDS RECORDING (PER)

1338 Mission St., San Francisco, CA 94103
(415) 861-4439

Contact: Phil DeLancie, Remote Manager

Equipment: PER's remote truck is a GMC cab with a 21' x 8' x 7' body, air ride, air conditioning, and lift gate. Microphones: AKG 414, 451; Neumann U 47, U-87, KM-84, Sennheiser 421, Shure SM-85, 56, 58, 53; Sony EMC22P; Electro-Voice RE-15, 1751; RCA 77DX, Countryman direct boxes. Over 60 mics in all. Console: de Medio/API 2416 custom, 24 x 16 x 24, API 1604, 16 x 4 outboard mixer available. Monitoring: Altec 604 8G monitors, Auratones, McIntosh MC2100 power amps. Tape Machines: 3M 79 16 track (2), 3M 79 8 track, MCI JH-110B 2 track (3), Ampex 440C servo 2 track (2), Aiwa and Sony cassette. 24 track available by arrangement. Accessories: UREI 1176, LA-3A limiters, Orban parametrics, de-essers, Dolby M16 multitrack A-type noise reduction, 27 pair transformer isolated mic splitter, AKG stereo echo, ClearCom and Altec intercom systems, Sony closed circuit video, cables, stands, etc.

Services Available: PER is fully equipped and experienced to provide complete on-location audio services and facilities for all types of projects including video production, live albums, live broadcast, radio production, and film soundtracks. Complete packages for simultaneous recording and broadcast are available, as are our fine multitrack mixdown and post-production facilities. See January 1982 Mix listings for a sampling of our credits.

ROB KINGDOM MOBILE RECORDING

120 Remington #415, Sunnyvale, CA 94087
(408) 732-5305

Contact: Rob Kingdom.

Equipment: Tascam 85-16, Otari MX 5050B 2 track, Studiomaster 20 in x 16 out mixer; JBL and Auratone monitor speakers; dbx compressors, Symetrix signal gates, EXR Exciter, Lexicon Prime Time DDL, Delta Graph EQ, 10 channel microphone splitter; large microphone selection (Neumann, Sennheiser, E-V, Shure, Sony), Countryman and custom made direct boxes; AKG BX-10 reverbation unit.

Services Available: Specializing in quality location recording. We do only remote recording. Our rates are highly competitive, providing quality 16 track recording at rates that are only slightly higher than 8 track competitors. Video link-up with SMPTE time code synchronization is also available. Please call for a quote, whatever your needs for location recording are.

P.F.S. RECORDING

P.O. Box 6840, San Jose, CA 95150-6840
(408) 275-6322
Contact: Mike Halloran

SHYNE SOUND

40 Woodland, San Rafael, CA 94901
(415) 459-2833
Contact: Leroy Shyne

SOUNDPLEX

P.O. Box 763, Ashland, OR 97520
(503) 482-4822
Contact: Douglas K. Faerber

STARMAN/PARAGON MOBILE UNIT 1

P.O. Box 20604, Sacramento, CA 95820
(916) 454-4525
Contact: Almeritt V. Covington

STEELHEAD PRODUCTIONS

Box 366, Blackfoot, ID 83221
(208) 785-7298
Contact: Jon Lyksett, owner/mgr

TECHNICAL SOUNDS, INC./

FAST TRACK STUDIOS
1906 115th Pl., Northglenn, CO 80233
(303) 457-0730
Contact: Terry McMurtry

TRANSPARENT RECORDINGS

883 Golden Gate Ave., San Francisco, CA 94102
(415) 563-6164
Contact: Marian Lewis

SOUTHWEST



*Chaton Recording
Scottsdale, AZ*

CHATON RECORDINGS

5625 Nauni Valley Dr., Scottsdale, AZ 85253
(602) 991-2802

Contact: Marie Ravenscroft

Equipment: Otari MTR-90 24 track and Otari MX-5050B 2 track tape recorders, Soundcraft Series 800 console, dbx 208 noise reduction, Tannoy SM-12B monitors, UREI 535 dual graphic EQ, dbx 900 modular processing with comp/limiters and noise gates, Master Room XL305 reverb unit, Wireworks 27 channel 2-way patch panels, BTX Shadow Synchronizer, BTX 5400 SYMTF code reader/writer, Clear-Com audio communication, Videotek 17" color TV monitor, 3 Ikegami 5" B&W TV monitors, Sony AVC 3260 B&W stage video camera, best available mics.

Services Available: The CAT (Chaton Audio Truck), a full 24 track remote recording facility, is able to handle any type of on-location audio production, from live concerts and albums to remote broadcast, commercial projects and films. The CAT can interface and synchronize the multi-track recorder with video or film via SMPTE code.

DIGITAL SERVICES

2001 Kirby Dr., Houston, TX 77019
(713) 520-6201
Contact: John Moran

HIGHLAND SOUND CO.

PHANTOM PRODUCTIONS
P.O. Box 3949, Austin, TX 78766
(512) 474-0963
Contact: Martin Theophilus, Cheryl Theophilus

WE'RE THE ONE FOR THE ROAD!

THE FULL SAIL **DREAM MACHINE** 24-TRACK MOBILE RECORDING UNIT



FOR RATES AND INFORMATION PLEASE CALL: **305-788-2450**
 FULL SAIL RECORDERS, INC. 660 DOUGLAS AVENUE, ALTAMONTE SPRINGS, FL 32701

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Vol. 6 #2

Name _____ Address _____

City _____ State _____ Zip _____



Omega Audio
Dallas, TX

OMEGA AUDIO

8036 Aviation Place, Box 71, Dallas, TX 75235
(214) 350-9066

Equipment: 24 track remote recording included in our 27 ft custom finished Ford truck. Equipment includes Custom 30 in x 24 out mixing console with 3 band sweep EQ, two track audio recorders, Otari MTR-90 24 track recorder, 24 channels of dbx noise reduction in Gotham TTM rack, 70 microphones of various types, both dynamic and condensers of major brands, 34 pair microphone snake with 30 transformer isolated stage splits, JBL monitors, 1/2 octave tuned with UREI 539 graphics, Auratone monitors are also available, full compliment of signal processing equipment including limiters, parametric EQ, digital delay, reverb, etc, closed circuit video monitors for interface with video production facilities, two way headset communication system, 150 amp stage power distribution, full BTX SMPTE time code computer.

Services Available: Omega Audio maintains one of the most

successful 24 track remote facilities in the country. Since 1973 Omega has worked with over 127 major recording artists. In recent years the facility has been re-fitted for audio support of video and film recording projects. Omega Audio specializes in video music. Our extensive knowledge and experience in this business have caused many producers and artists to select our remote facility as their "first choice" in assuring quality and reliability in the field. Credits: Johnny Cash, Helen Reddy, Oak Ridge Boys, Merle Haggard, Ben Vereen, Anne Murray, Quarterflash, Blondie, Willie Nelson, Loretta Lynn, Alabama, Art Garfunkel, Jerry Lewis, Larry Gatlin, Al Jarreau, etc.

REELSOUND RECORDING CO.

P.O. Box 280, Manchaca, TX 78652 (located near Austin)
(512) 472-3325, 282-0713

Contact: Malcolm H. Harper, Jr.
Equipment: MCI 636-LM automated console, (2) JH-24 24 track machines (lockable), (2) MCI JH-110B 2 tracks, 1/2" 2 track, Ursa Major 6 x 32 reverb, MICMIX XL-305, DDL-1 delay, DDL-2, (4) Dynatones, dbx rack, (2) limiters, (2) DS units, Allison rack, Kepelex, Gain Brains, (4) UREI LA-3A, (2) dbx 160, MCI parametrics, Sierra/Hidley acoustic design with TM 7 monitors, Crown and Studer power amps, AKG, Beyer Neumann, E-V, Shure, PZM, UREI, and Countryman microphones; 48 input Jensen split box; color TV monitor system, overdub room, 42 ft trailer.
Services Available: Remote TV and radio concert recording, live album work, studio overdub, automated mixing, video SMPTE sweetening of multitracks.

AUDIO RENTAL SERVICE & SALES

268 W. Normandy, Chicago Heights, IL 60411
(312) 754-9191

Contact: Gary Cobb

HIGH FIDELITY RECORDING

1059 Porter, Wichita, KS 67203
(316) 262-6456

Contact: James Strattan

**DUWAYNE KLOOS RECORDING/
WESTMARK RECORDS & TAPES**

8345 Duluth St., Golden Valley, MN 55427
(612) 544-3050

Contact: DuWayne or Joann Kloos

THE RECORDING CONNECTION

23330 Commerse Park Rd., Beachwood, OH 44120
(216) 464-4141

Contact: Arnie Rosenberg

Equipment: Soundcraft Series 3B, 32 in x 24 out recording console with 24 channel monitor mix, MCI JH-24 2" 24 track tape machine, Technics RD-1520 1/4" 2 track, Technics M85 cassette, JBL 4313 monitors, McIntosh MC 2205 power amp/200 watts per channel, UREI 1176N and LA-4A limiters, DeltaLab DL-4 digital delay, complete FM walkie-talkie system/12 auxiliary input/output channels, 40 in/out stage box, Clear-Com intercom system, B&W TV monitors and camera, 200 ft power line capability to power source, isolated power, 32 channel Dolby and x-tra microphones upon request.

Services Available: The Recording Connection's Roadmaster II is a mobile, 24 track, total state of the art facility, housed in a 40' Silver Eagle bus. We record many top name acts for Westwood One, NBC Source Network, Concert Satellite Network, Telemation Area Prod., Myriad Media Prod., and DIR Broadcasting. Album credits include Blackfoot's "Tomcatin'", Kink's "One for the Road," Ozze Osborn's "I Don't Know" single, and the Burnt River Band. Roadmaster II has become recognized not only for the finest live recordings available but for economic viability.

NORTH CENTRAL

AUDIO GRAPHIC SERVICES

1516 Farris Ave., Royal Oak, MI 48067
(313) 544-1793

Contact: Edward J. Wolfrum

SCREAMS & ROSES AUDIO ENG.

8 West Sherry Drive, Trotwood, OH 45426
(513) 837-6350

Contact: David C. Sheward

SOUTHEAST

ARTISAN RECORDERS, INC.

1421 S.W. 12 Avenue, Pompano Beach, FL 33060
(305) 786-0660

Contact: Scott Strawbridge

Services Available: Some clients AC/DC, Atlanta Rhythm Section, Blackfoot, Pat Benatar, Roy Clark, The Commodores, Crosby, Stills & Nash, Heart, Al Jarreau, George Martin, Willie Nelson, Jaco Pastorius, The Police, Kenny Rogers, Linda Ronstadt, Spyro Gyra, Weather Report. We have been providing complete on-location multi-track recording & soundmixing services to the record, television, radio, and film industries for 6 years. In that time, we have earned a reputation as one of the finest mobile recording companies in the business. We are very grateful to our many clients for putting their faith in us and putting us on the map.

CATFISH BAY SOUND STUDIOS

133 Franklin St., Clarksville, TN 37040
(615) 552-2769

Contact: Chuck Emery

CRITERIA RECORDING CO., INC.

1755 N.E. 149 St., Miami, FL 33181
(305) 947-5611

Contact: Joe Foglia

Equipment: Criteria designed custom built MCI JH-636 transformerless console with 48 inputs, 32 output channels, 4 echo sends, sub-grouping, back-up on-line power supplies, UREI Time Aligned 811 monitors, closed circuit color video system, 6 kilowatt on-board generator, Dolby or dbx noise reduction, MCI JH-114 8/16/24 track transformerless recorders, MCI JH-110 2/4 track transformerless recorders, JH-45 SMPTE sync generator, JVC 3/4" video cassette recorder, 8 video and SMPTE link-up lines, selection from Criteria's vast collection of microphones including

CHATON RECORDINGS' 24-TRACK AUDIO TRUCK

THE CAT

TOAST OF THE 1982 N.A.B.

THE CAT wowed 'em in Dallas! Buford Jones was on board, working with Chaton's Steven Moore during session at Willie Hubbard's live recording session at Billy Bob's Texas, and again at South Fork Ranch at the invitation of the REAL J.R. (Joe R. Dunkin)! MORE ABOUT THE NEWEST DIMENSION IN REMOTE RECORDING ON PAGE 30

CHATON RECORDINGS
5625 E. NAUNI VALLEY DR.
SCOTTSDALE, AZ 85253
(602) 991-2802

Neumann, Schoeps, AKG, Sony, Sennheiser, Shure E-V, PZM Beyer and Audio-Technica, outboard gear selection from Criteria's inventory of Pultec and Trident equalizers, UREI and dbx limiters, Eventide and Lexicon delays and reverberation, at no extra charge.

Services Available: Criteria's fully equipped and air-conditioned 25' GMC Traveler Coach offers exceptional monitoring and recording quality you've come to expect from a world-class recording facility anywhere you want to take it.



Criteria Recording
Miami, FL

FANTA

1213 16th Ave. South, Nashville, TN 37212
(615) 327-1731

Contact: Johnny Rosen.

Equipment: 40 input Sphere console, (2) Ampex 24 tracks, (2) Ampex 2 track AG440B's, Ampex 4 track, Nagra 4.2L, 2 cassettes, Eventide 910 Harmonizer, (4) Valley People Dyna-mite Dynamic Processors, (4) dbx 160's, (2) ADR Vocal Stressers, (2) UREI 117's, (2) dbx 163's, Master-Room stereo reverb, McIntosh MC2105 amp, BGW, Sony and Pioneer amps, E-V Century 3's, JBL 4311, Auratones, 10 station/16 set earphone system, Clear-Com intercom, private channel 2-way radio, 17 channel mobile telephone, 5 line telephone system, color and B&W monitors, carry approximately 80 microphones, synchronizers for video lock-up.

Services Available: Fanta is a 40-input, dual 24 track mobile recording facility with an emphasis on mobile. The Fanta truck and its crew have worked on shows ranging from the Rolling Stones to the N.Y. Philharmonic. The company has recorded live albums for artists including Kenny Loggins, Barbara Mandrell and Teddy Pendergrass. Film credits include the "Blues Brothers," Robert Altman's "Nashville," and "Coal Miners Daughter." Television projects range from the Great Performance Series for CBS and the Mike Douglas Shows filmed on the Mississippi Queen Steamboat. Our most ambitious audio project was a 46 track opera for producer Curtis Davs.

FULL SAIL DREAM MACHINE

1221 Lee Road, Suite 207, Orlando, FL 32810
(305) 299-1076

Contact: Jon Phelps



QL Mobile
Coral Gables, FL

QL MOBILE

314 Romano Ave., Coral Gables, FL 33134
(305) 446-2477

Contact: Rob Burr

SANBORN PRODUCTIONS

Bull Run Studios of Nashville
Rt. 3, Box 120, Ashland City, TN 37015
(615) 254-6538

Contact: Carl Frost, President

Equipment: Sound Workshop 1600, 29 x 24 and Yamaha PM 180, 6 x 2 Ampex 1200/24, MCI JH 114 24, Otari MTR-90 Ampex ATR 102, Dolby M-24, SMPTE, Ten channels of compression including 1176, LA 3A, 160, 162, Scamp and Orange County, Scamp rack with EQ, gates, filters, De-essers, and compression Eventide Harmonizer 910, and Phaser/Flinger, DeltaLab DL-1 and MICMIX XL 305. Over sixty microphones and DI's including Neumann, AKG, Sennheiser, Studer, Electro-Voice, Sony, Shure, Countryman, PZM, and Jensen Monitors are Eastern Acoustic Works MS-50 driven by Yamaha B-2. Two channel CCTV, and Clear-Com Control room measures 19 x 8 x 8 and has 3 tons of air conditioning, Jensen splitters and extensive stage wiring capabilities.

Services Available: Sound for film and video. Radio and television broadcasts, album projects. Established in 1978.

SOUND ENTERPRISES

P.O. Box 11211, 190 Waynoka Lane, Memphis, TN 38111
(901) 458-0275

Contact: Rodney Peppenhorst

NORTHEAST

AURA SONIC LTD.

140-02 Poplar Ave., Flushing, N.Y. 11355
(212) 886-6500

Contact: Steve Remote

Equipment: This truck is equipped with a Harrison 32 x 32 desk, (2) MX-20 Sony mixers, 57 mic lines, 66 transformer splits, Ampex MM1100 24 track machine (3M 32 track for digital recording), (2) Yamaha P2200 power amps, an assortment of speakers including, JBL 4311, E-V Sentry 100, EAW MS-50, Auratones, Advent; a wide assortment of mics: Sennheiser, Neumann, AKG, Sony, Shure, E-V; air conditioning, heat and other extras included.

Services Available: 32 digital and 24 track recording for broadcast, video work, and/or album projects. Sound reinforcement available for extra support for special recording dates. Additional equipment and/or services are available with proper notice.

BROOKS REMOTE

899 Troy Ave., Brooklyn, N.Y. 11203
(212) 282-7344

Contact: Clyde Brooks

DIGITAL BY DICKENSON

9 Westinghouse Plaza, Bloomfield, N.J. 07003
(201) 429-8996

Contact: Frank R. Dickenson Jr.

Equipment: Double digital 3M 32 tracks can team up with your favorite remote truck for live location recording. Do post production at a multi-track studio of your choice in the NE. Also video lock-up with digital soundtracks. Mixdown to digital JVC 2 track for mastering for ultimate in digital sound. Our digital 32's and 2 tracks are ready for work in your studio at reasonable rates. Call us and visit with Frank on how we record "Music by the Numbers".

FEDCO AUDIO LABS

60 Manning St., Providence, R.I. 02906
(401) 272-3157

Contact: Jeff Eustis

MOBILE RECORDERS LTD.

Southbury, CT 06488
(203) 264-2659

Contact: George Rothar

RECORD PLANT STUDIOS LTD.

321 W. 44th St., New York, N.Y. 10036
(212) 581-6505

Contact: David Hewitt, Randi Greenstein.

ROADWAY RECORDERS, INC.

51 Glendale Ave., Livingston, N.J. 07039
(201) 994-9695

Contact: Richard Dior or Barry Fisher

Equipment: The Roadway Mobile Unit was designed as a dual 24/16 track on-location remote truck. Our control room is a GMC Chev C-50 truck, with a 18' x 8' x 8' and houses a Sound Workshop Series 30 32 x 32 x 8 x 2 console and API 12 x 12 x 8 x 2 submixer, MCI JH-114 24/16 2" tape machines, Otari 2 tracks, Big Reds, JBL 4311's, Auratones, Crown DC-300A, D 150, D 75 Outboard Gear dbx RM 160, UREI LA-3A, LA-4A, Little Dipper, MXR graphic EQ, Orban 111B reverb, Orban De-esser, ClearCom w/King Biscuit speaker, 6 remote stations, two channel cue system, etc. Microphones by AKG, E-V, Neumann, Sennheiser, Sony, Shure, Schoeps, Countryman direct boxes, and 50 pair mike snake w/splitters, closed circuit TV with JVC color cameras and color monitor, 1/2" VHS video, and 3/4" available upon request.

Services Available: Roadway Recorders has been in the remote recording field since 1972 and has evolved into one of the Northeast's most diversified remote trucks. Some of our clients are: Betty Carter, Manon McPartland, Charles Stewart, Tim Wright, WNET-TV "GI JIVE," WOR-TV 1979 New York EMMYS live NY Hilton, WPIX-TV New Years Eve live from the Waldorf Astoria w/Guy Lombardo-Stephanie Mills, Live, HBO "Here it is, Burlesque," HBO "Sherlock Holmes w/Frank Langela, WNEW-FM Live from Meadowlands, Boston, Outlaws, Poco, Todd Rundgren, Newport Jazz 1980, "Yamashita Tno," Mount Vernon Community Choir, and Pope John Paul II a commemorative album. Call for bookings and rates.

SEAWIND AUDIO, INC.

1134 Fox Chapel Rd., Pittsburg, PA 15288
(412) 963-7455

Contact: Tom Mechlin

Equipment: Tangent 32 x 16 console, Otari MTR-90 16 track, Tascam 80-8 8 track, Technics 15-20 2 track, dbx noise reduction, Orban parametric equalizers, UREI LA-4 compressor/limiter, RCA close circuit television monitoring, CSI MDM-4 near field monitors, Countryman DI boxes, 250 ft cable with custom transformer splitter, condenser and dynamic microphones from AKG to Sony, and all others in between.

Services Available: Complete 2, 8 and 16 track remote recording. Please call for rates. Staff engineers and maintenance available. Independents welcome.

SKYELABS

58 W. Tidbury Dr., Dover, DE 19901
(302) 697-6226

Contact: Bob Skye

Equipment: Tape Decks MCI JH-114 24 track, Ampex AG-440B 4 track, Ampex 351/440 2 track, Technics RS 1500 2 track. Consoles: Sound Workshop Series 30 (42 x 24, modified) Amps: Phase Linear & Crown Speakers: UREI 811A Time Aligned monitors, Ampex/JBL, Technics SB-F2, Outboard, Delta Graph EQ, DeltaLab DL-4, UREI LA3A, Master-Room 305 reverb Microphones: Sennheiser, Shure, Electro-Voice Misc: 300 foot snake (42 x 3).

Services Available: Ready to handle any situation from concert and custom recording to video post-production. Have an idea, special project? Try us, no problem. We specialize in dreams, ideas & creativity.

STUDIO 198 PRODUCTIONS, INC.

198 Bloomfield Ave., Newark, N.J. 07104
(201) 481-0972

Contact: Greg Ferguson

Equipment: Itam 1610 16 track, dbx, Ampex MM-1200 16 track, Otari MX-5050 8d/dbx 155's 8 track, Ampex PR10 1/2 track, 3M UR 210/Sony PCM-10 digital mastering system, Pioneer RT 2022 1/2 track, Otari MX-5050B 1/2 track, Pioneer C77 1250 cassette and Sony TC 158SD cassette, custom built 20' x 8' Yamaha PM-700, Harrison "Alive" 16 x 16 x 16 x 8, Soundcraftsman PA 5002, Dynaco ST 410/C 100, Bose 800, E-V Sentry, Gauss 3-way speakers, Echo reverb and delay: Marshall Time Modulator, MXR flanger, Space Station, AKG BX-10, Audioarts para-metric EQ, Ashly SC 50 limiters, dbx 163 limiters, dbx 160 limiters, Sansui SE-7 graphic EQ, RG Expander, Shure MK63, Ampex MX-35 tube mixer, Shure M67 4 x 1 Microphones Sennheiser MD-421's, E-V RE-11's, 664, 66, 1776; Sony ECM-50; Shure SM-57's, SM-58's and SM-60's.

Services Available: Color and black & white video production, sound reinforcement, location recording. Studio 198 is a warm and congenial production company dedicated to the highest levels of broadcast and music production. Our clientele includes radio stations, major record labels, independent producers, religious organizations and law firms. We will guarantee our work and do not charge for set up time. Sound reinforcement and location recording for artists and producers are easily arranged to fit the individuals time and budget restraints.

UNITEL VIDEO INC.

510 W. 57th St., New York, N.Y. 10019
(212) 265-3600

Contact: Phil McEnery, Rich Karney

PROGRAMMABLE RHYTHM MACHINES part 2

ROLAND TR-808 • OBERHEIM DMX • LINN DRUM

by Bob Hodas
and Vince Gutman

There is a new generation of musical instruments showing up in recording studios across the country, benefitting the composing musician and producer alike.

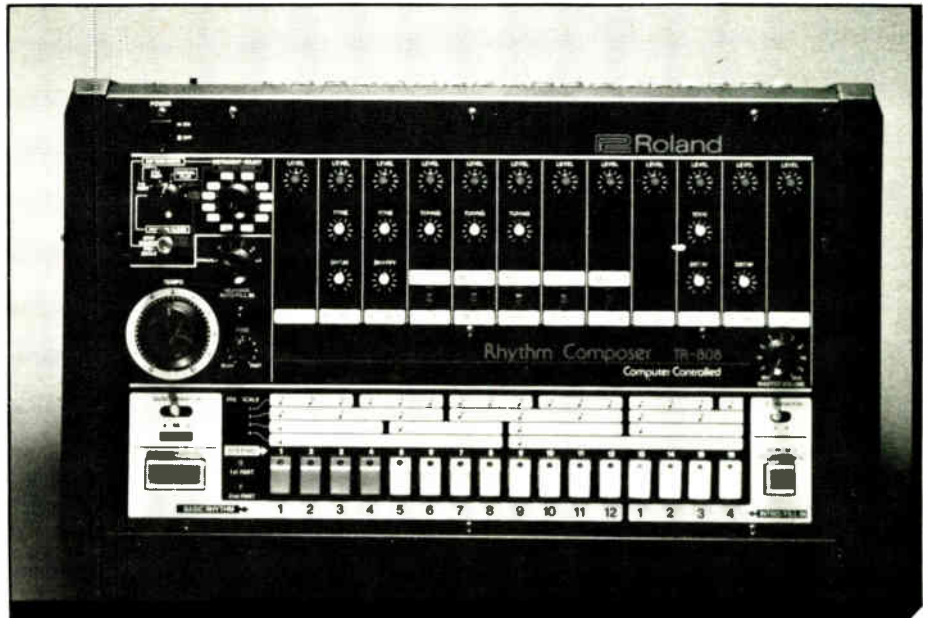
Programmable automated rhythm boxes and "drum machines" are proving to be useful creative tools in the studio as well as on stage for many of today's top recording artists in all music fields.

Early attempts and development of rhythm units stemmed mainly from organ companies whose prime objectives were to provide the keyboardist modest rhythm accompaniment thus enabling them to solo on their instruments.

Although these units served a useful purpose, there were apparent drawbacks and limitations which hampered their popularity in the creative world. For instance, aside from selecting a "standard" beat, the only user-controllable parameters were "tempo" and "volume." Also, in many cases the voicing of these units produced less than believable percussive sounds that again the user had no control over (such as equalization, pitch and dynamics).

By comparison, the new breed of rhythm boxes/drum machines emphasize flexibility and can be generalized into two categories: Digital controlled with analog voicing and digital controlled with digitally stored sounds.

You need not be an electronics technician to decode these simple principles of operation. However, we will define these for there is a marked difference in the final sounds that they will produce. Note that both types of units employ "digital control," meaning there is computer "memory" the user can address through key style switches enabling him to "store" individual note patterns and select the desired voicing in an order suitable for his purpose (including "fills" of his choice). You can



Roland TR-808

Circle #018 on Reader Service Card

then at a later time recall them from memory for "playback." However, as I have pointed out, there is a difference in the voicing technique employed. Analog voicing simply means the particular sound or voice we are using is being created at that instant by circuitry which is designed to create that particular sound. Whereas digitally stored sounds are a representation of real drum (or other) sounds that have been programmed on to a "chip," and are recalled when needed to produce that particular voice.

Unlike their predecessors, these drum machines/rhythm boxes boast realistic drum sounds and offer flexibility that make them easily adaptable to today's multi-track recording format.

In this article, we will be looking at three top of the line rhythm machines: the Roland TR-808, which is a rhythm machine with synthesized sounds; the Oberheim DMX and the Linn Electronics Linn Drum which are both rhythm machines that store real drum sounds digitally. Audio analysis of these machines was done at Tres Virgos

Studios in San Rafael, California. Tres Virgos' LEDE™ environment was chosen because of its clarity and lack of coloration and sound. Drummer John O'Pat assisted on these sessions in order to get the opinion of a real drummer on the playability of these units. I would like to point out to percussionists, as well as others reading this, that my experience has been that these units are not replacing drummers as much as drummers are playing the machines for many current major recordings.

The Roland TR-808 Rhythm Composer is a versatile, fully programmable rhythm machine. Available are eleven different sounds for each rhythm pattern plus an accent. Sixteen total sounds are provided to choose from. These include bass drum, snare, cowbell, cymbal, opened high hat and closed high hat, each having its own level control. Switch-selectable sounds that share the same level control are low-conga, low-tom, mid-conga, mid-tom, high-conga, high-tom, claves, rim shot, maracas, and handclaps. Tuning controls are also available on bass

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drum, snare, low, mid, and high toms or conga, the cymbal and open high hat. Combined with separate volume controls, these tunings make for a nice mixture on the main outputs. An advantage to this machine is that the individual instruments each have their own output allowing them to be run through a mixing console with a more sophisticated EQ or effects routing. The sounds being synthesized are not master quality sounds but have merit considering price and versatility. Lounge sets and commercial produc-

tion houses have used this machine to full potential, and you have undoubtedly heard some of these rhythms on the radio.

Rhythms can be played according to four different meters: 4/4; 8/8; 3/4; and 6/8. Each pattern consists of sixteen beats total. Sixteen different rhythm patterns can be written into each of the two groups and played separately, or combined to play both Group A and Group B together in sequence. The first and second pattern writing allows you to have thirty-two

beats in each pattern.

Odd time signatures are also possible via a feature that allows you to choose the length of the pattern. Each instrument must be programmed one at a time either in real time or by actually writing the pattern and the rhythm with the pattern selector switches. Tempo is adjustable by a step pot with a fine-tuning, continuously variable pot at its side. Tempo is shown by a series of LED's which run through the notes as the pattern is playing. Creative programming could break the bars down into 16th or even -32nd notes.

Twelve tracks can be made from sixty-four measures each. Any of these tracks can be combined, up to a total of all twelve for seven hundred and sixty-eight continuous measures. Four intro or fill patterns can be inserted through the auto-fill control at every second, fourth, eighth, twelfth, or sixteenth measure. Intros and fill pre-programs can also be inserted manually in real time. All of the instruments in a pattern can be wiped from memory by simply pressing the pattern clear button.

Rear panel access has an output section with a master output for high and low level signals and independent outputs for each instrument. Running an individual instrument out removes that instrument from the mix and main outputs. There are three trigger outs that are synchronized through the handclaps, cowbell, or accent. A pedal switch will activate the stop, start, or full function. There is also a synchronization.

The operation manual for the TR-808 is very clear and easy to understand. This is a very good unit for budget demo purposes and has already found its way into many smaller studios. List price is \$1,095.

The Oberheim DMX is a sophisticated rhythm machine that uses real drum sounds stored digitally. The unit has seventeen different drum sounds: bass, snare, high hat with a closed, accented, and opened mode; six tom-toms; ride cymbal; crash cymbal; cross-stick; tambourine; shaker; and handclaps. The bass and snare drum each have three different volume buttons while the ride cymbal, tambourine, and shaker have two volumes. The twenty-four instrument program buttons are arranged on eight voice cards in groups of three. Mixed output is controlled by a master volume fader while each of the eight voices have their own fader control. For this reason, only eight instruments may be played on any beat. This is noticeably limiting in the two percussion voices. The other problem with this type of grouping is that only one volume controls all three

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instruments on each voice card. Voice card panning is set from the drummer's point of view as opposed to the audience's point of view which is backwards from the way most engineers pan a drum mix.

The voices may be tuned by removing two thumb screws at the front of the unit, lifting the hinged cover, and adjusting the thumb wheel pots on the voice cards. Tuning range is one-half octave. Pitches may also be controlled with a pedal accessed through the rear panel jack.

Tempo may be adjusted from twenty-five to two hundred and fifty beats per minute by either typing in the desired tempo on the key pad or using the key pad increase and decrease buttons to automatically alter tempos. Tempos, as well as other operation functions, are shown on an alpha-numeric display above the key pad.

The total memory capacity of the DMX is two thousand events. There are many ways this capacity can be divided amongst sequences. The DMX can accommodate one sequence of two thousand notes or one hundred sequences of twenty notes each. It is best to take advantage of the repetitive nature of the music by constructing songs from short sequences. Each part of a song requires one third as much memory as a single event in a sequence, so the most efficient use of the memory is to make songs from short sequences rather than appending long sequences together. A percentage of the memory remaining can be displayed on the alpha-numeric display with a touch of a button.

There are one hundred sequences possible and fifty songs. The DMX is set up to normally record each sequence as two bars, but a length function button allows one to adjust a sequence shorter or longer as one desires. Maximum sequence length is stated as six minutes of eighth notes at eighty beats per minute. Standard sequence length is two measures but can be extended from one to ninety-nine measures if so desired. The sequence may also be appended to itself effectively doubling the length of the sequence. Sequences of different time signatures may be appended together, but only the tempo of the first sequence will be applied to the rest of the sequences appended. A song may be a maximum length of two hundred and fifty-five sequences. Each sequence in a song can have its own tempo, length, and time signature, facilitating the arrangement of a complex song with time and meter changes. Sequences can be replaced, inserted, or erased from a song quite easily.

The DMX will record in real time or in a step function mode, record-

ing one note at a time per beat. In real time, drums can be recorded one or more at a time giving the feeling of actually playing the parts. The action of the voice buttons is very good and adds to the playability and feel of this machine. Erasing may be done in either real time or in the step mode. In addition to erasing single notes at a time, one may erase an entire instrument from a sequence at the push of a button or erase an entire sequence or an entire song. There is a memory protection switch on the back panel of the unit and when engaged, the unit will not record, erase, copy, or edit.

This unit will record in any time signature desired, and can be adjusted with the key pad and displayed

on the alpha-numeric display. The quantizing function automatically corrects your playing to the nearest beat. The DMX is normally set to quantize to a sixteenth note and can be changed to run from a 1/4 note to a 1/32 note triple accuracy. For a natural feel, quantizing may be turned off. Swing function is similar to quantizing in that it will adjust the feel of your recording when trying to create a shuffle or swing. The first half of the beat will get more time and can be adjusted in six steps between fifty percent and seventy-one percent.

Back panel access rounds off the versatility of this unit. It includes a cassette interface which allows for external memory storage onto cassette. After the memory transfer is completed,

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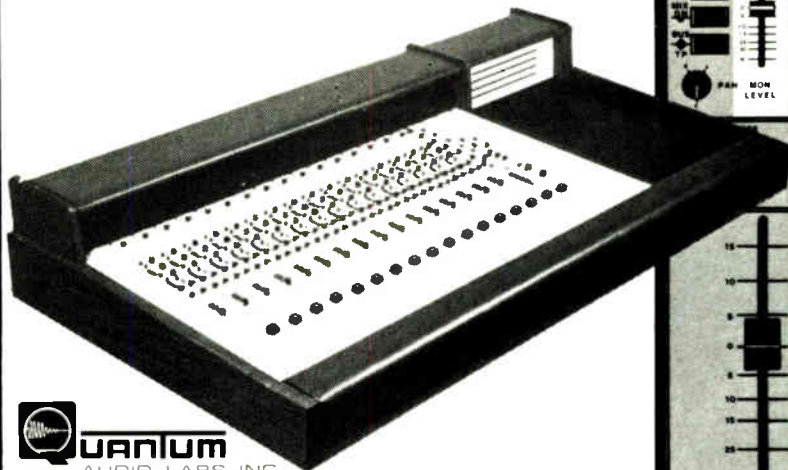
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the unit can check the audio tape to make sure there are no errors in the memory cassette. The DMX can either be a master or slave to the Oberheim DSX sequencer. It can sync up to a tape recorder and generate its own sync tones. Master outputs allow output of either left and right channels or a mono mix. Each individual voice, including the metronome, has its own output allowing it to be run through a more complex board for the addition of more sophisticated EQ and the effects of a mixing console. Two mox plugs from the back panel allow the bottom row of voices to be controlled with outside triggers for control voltages. Syndrums may be used as triggers or sequencers with control voltages and gates can also be used to trigger the drums. Two jacks allow hooking up foot switches to start and stop songs and sequences, advance songs and sequences, or re-cycle sequences in a song for vamping.

The DMX performed all of its stated functions immaculately. It was easy to operate, and the operations manual was straightforward. It can be fully mastered in an evening or two. The DMX is not a synthesizer, and all sounds in this unit are real sounds recorded analog and stored digitally on chips. Cymbals and all percussion sounded quite good, and the snare had a good feel to it. The kick drum had

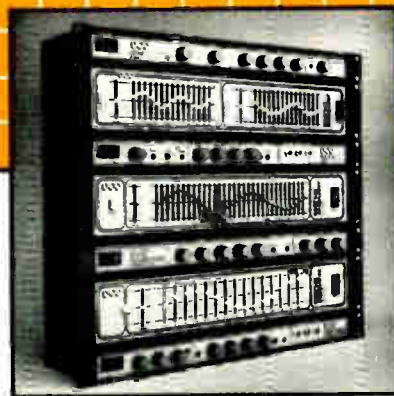
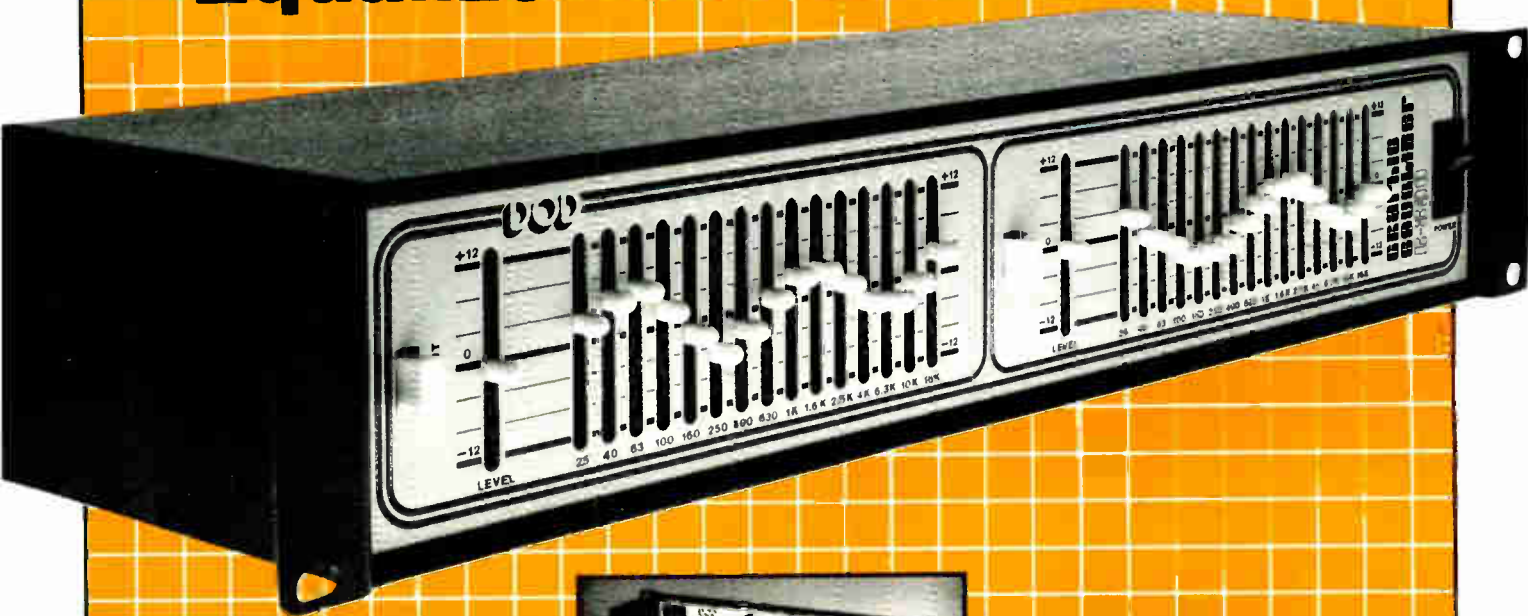
punch, and though lacking low-end, this could be taken directly out and EQ'd on a board. The tom-toms were the weakest sounding voices. They were very mid-range oriented, and they sounded like they were recordings of single-headed toms. They generally lacked depth, length, and low-end. Tuning controls were good for effects, but there seemed to be a narrow window for adjusting the controls where the drums and the percussion have the very best sound. The user is not necessarily stuck with these sounds, as Oberheim is currently working on a library of voice cards which are user-replaceable and will have a variety of different instruments stored on chips with different sets of filters. Hopefully, new voice cards will contain more memory for better decay. This new library of cards and sounds should soon be available to the public, and as with any Oberheim quality instrument, updates will be retrofittable as much as possible. Research and upgrading will be continuous. The price for the DMX is \$2,895.00.

The Linn Electronics Linn Drum is another rhythm machine that stores real drum sounds digitally. This is the son of the LM-1 (which is no longer available). There are fifteen different drum sounds on this unit. They are as

follows: bass; snare, side stick; crash cymbal; cowbell; handclaps; ride cymbal; high, medium and low toms; high and low conga; tambourine; opened and closed high hat; and cabasa. The snare has three different volume program buttons while bass drum, closed high hat, cabasa, tambourine, and ride cymbal each have two volume buttons. The top row of program buttons have shared sounds which are easily selectable and indicated by a percussion LED. Each voice has its own fader allowing each instrument to be individually mixed on the main outputs. There is also a fader for the metronome click. Each voice has full left-to-right spectrum panning by a pan-slider detented in the center. There are front panel tuning pots for the snare, high, medium, and low toms, high and low conga, and high hat decay pot. This front panel tuning is very convenient and functional. Tempo is adjusted by a rotary pot. The tempo is not displayed but can be felt by listening to the click track.

There are forty-nine possible patterns that can be programmed into the Linn Drum and forty-nine songs made from the combined patterns. Pattern numbers are displayed by pressing pattern select buttons which also serve for choosing the error correction and percentage of swing. Standard pattern

Dual 15 Band Graphic Equalizer R-830



Description

The DOD R-830 is a solid state dual 15 band graphic equalizer which is designed for mounting in a standard 19" rack. The DOD R-830 is intended for acoustic and room equalization to minimize unwanted resonance and compensate for specific frequency sound absorption.

The R-830 is mounted in a rugged, extruded aluminum case with heavy top and end panels to resist warps and dents.

Two sets of 15 bands on 2/3 ISO centers with 12 db of boost or cut... in-and-out switch which does not disturb the balance condition... level control with 12 db of boost or padding... 1/4" balanced and unbalanced input and output jacks... illuminated power rocker switch.

Specifications

Frequency Response:
10-40 KHz.
Total Harmonic Distortion:
Less than 0.01%.

Intermodulation Distortion:

Less than 0.01%

Signal to noise ratio:

95 db.

Maximum Output Level—Balanced:

20 dbm (ref: 1mW/600 ohms).

10 Vrms into 10K ohms.

Maximum Output Level—Unbalanced

17 dbm (ref: 1mW/600 ohms).

5 Vrms into 10K ohms.

Output Impedance—Balanced:

940 ohms.

Output Impedance—Unbalanced:

470 ohms.

Maximum Input Level:

+ 20 dbm (ref: 0.775 V).

Input Impedance—Balanced:

66K ohms.

Input Impedance—Unbalanced:

33K ohms.

EQ Control Range:

± 12 db.

EQ Center Frequencies:

15 bands on standard 2/3 octave.

ISO centers (25 Hz 16 KHz).

Level Control Range:

± 12 db.

In/Out Switch

EQ bypass, does not disable balanced input and balanced output.

I/O Connectors—Input

One 1/4" phone jack (balanced).

One 1/4" phone jack (unbalanced).

I/O Connectors—Output:

One 1/4" phone jack (balanced).

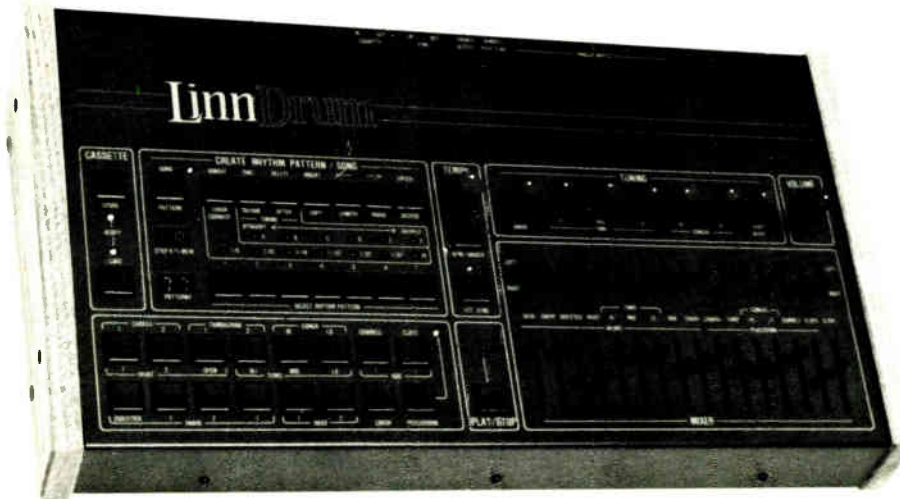
One 1/4" phone jack (unbalanced).

Dimensions:

3 1/2" x 6" x 19"



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length is two bars, but this can be adjusted to any length desired for the creation of odd time signatures or for extremely long or short patterns. Odd time signatures or pattern lengths are not displayed and must be coordinated with the click track.

The Linn Drum only records in real time. For pattern recording, the Linn Drum will play through the pattern length and continue to loop until you have programmed all of the drums desired. One or more drums may be played at once giving the feeling of actually playing a kit. Specific notes may be erased in real time or entire patterns or songs may be erased at the punch of a button. Patterns may be doubled by hitting a copy button, and may also be appended together to form songs. In the song mode, patterns may be inserted between two other patterns or specific patterns may be deleted from the song and replaced by another pattern. Patterns of different time signatures may be combined into songs, but this unit will not memorize tempo changes, and so changing tempos must be done manually in real time. If the unit sync tone is laid down on a tape track, the pre-programmed song will follow the sync tone to make the correct tempo changes. An error correction circuit will correct your playing for perfect timing. It can correct your playing to the nearest 8th note, 8th note triplet, 16th note, 16th note triplet, 32nd note, or 32nd note triplet. Error correction may also be turned off to give your song a human feel, complete with tempo problems if so desired. A shuffle selection mode allows one, while recording, to choose from six different shuffle feels. One nice feature of this machine is that once you have recorded the shuffle, you are not necessarily

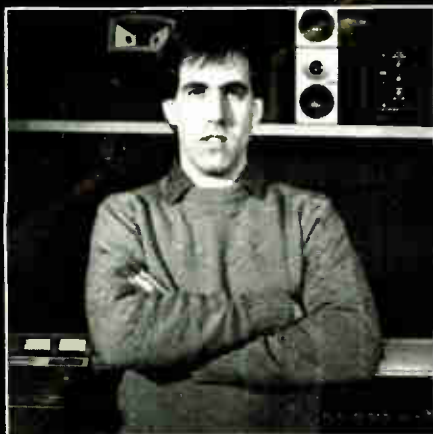
stuck with that feel. The six-shuffle feels may also be applied after recording to give a producer an idea of what percentage of swing he would like for that tune.

The Linn Drum has the ability to dump pattern and song memory onto cassette for later retrieval in order to build a library of patterns and songs. As stated previously, the Linn Drum will generate a sync signal so that it may be synched up to tape machines. A remote switch can be plugged into the back panel for stopping and starting the Linn Drum, and pedals may also be plugged into control voltage inputs to change the tuning of the drums. This may also be hooked up to synthesizers with control voltages and gates. The Linn Drum has the ability to interface with any sequencer. The trigger output on this unit is programmable by the front panel. It can be used to drive the gate input on any synthesizer, at any interval chosen by the error correction buttons, or then can be triggered by the cowbell output and played whenever the cowbell is played. Five trigger inputs may be assigned to any drum on the front panel. The trigger input is actually a sophisticated audio circuit with threshold controlled by an adjustable screw on the back panel. This way, the drum may be triggered by a sequencer, a microphone, or a Syndrum. The triggers could be hooked up to a tape machine to replace a poorly recorded drum track. The unit is triggered by the previously taped drum allowing for the Linn overdub to have exactly the same feel. Additionally, the back panel has fifteen output jacks for each individual voice so that they may be run through a regular mixing console for more sophisticated EQ and effects generations.

The sounds of this Linn Drum were simply incredible. The drums had depth, good attack, fine low end, and good long decay. The cymbals also were impressive with their length of decay. If you are not happy with these sounds, or if you would like more toms to replace perhaps conga or percussion, you may order the Linn Drum with zero insertion sockets so they can send you new chips for simple user replacement as they expand their sound library. If you are so inclined, you can send a half track, fifteen IPS tape, and they will program the sound of your very own drums onto chips which they will then send to you. The Linn Drum uses the same playable buttons that the Oberheim uses, and the feel and playability of this unit is very good. I must say I was quite impressed with the sound and the operation of the Linn Drum. The unit is much smaller than the LM-1, being merely twelve inches deep, four inches high, and twenty inches wide. The price is \$2,995.00

Each of the units discussed above have a great deal to offer for the budget in which they fit. I do not see these units as replacing drummers as most recordings you have now heard using these drum machines, have actually been played by drummers because of their ability to compose the rhythm patterns necessary. They can save time, though, and in a studio, time is equated with money. I can definitely see some of these units replacing studio drum kits in the future.

I would like to thank John O'Pat, Jerry Jacob, Ed Bannon, Gordon Rudd, Todd McKinney, Roger Linn, J.D. Sharpe and Fred Waxler for the donation of time and equipment in order to make this article possible. ■



Raul Suarez

Experience: Guitar and keyboard player; sound company owner; live and recording engineer.

Q: How does someone learn about sound when he's just getting started?

A: Well, I'll give the same answer that was given me when I was just getting started: Read brochures. Manufacturers print literature about their equipment, and we try to keep it all on hand at Leo's Pro Audio. You can learn about all kinds of equipment this way. Some manufacturers print application notes that give detailed information on how to use different kinds of equipment. Also, at Leo's we're always happy to answer questions and give advice on just about anything.

Q: What new kinds of equipment are manufacturers coming out with now?

A: In the past year or so, both manufacturers and consumers have tended towards compact integrated systems. Before, if you really wanted sophisticated quality equipment, you had to buy separate components. Several companies have now come out with really nice units that have all the features and power of the separates and the ease of using a compact unit. A lot of the component stuff that is on the market doesn't even compare.

Q: But aren't there still advantages to component equipment?

A: Obviously a compact unit cannot be made to suit everyone's needs. Components still offer greater specialization and allow for more complex setups. But compacts are a really good alternative to components, and now they can put out a lot of sound.

SOUND ADVICE:

A sound professional from Leo's Pro Audio answers four frequently-asked questions about concert sound equipment.

Components still give you the flexibility to pick the piece of equipment that has the features you need. It allows you to have the advantages of a bi- or tri-amped system, or a sophisticated monitor system.

After having worked in other stores, I enjoy working in a place that carries as many different kinds of equipment as we do at Leo's. It means that we can provide our customers with the right kind of equipment for any situation.

Q: What about special effects, and compressors and equalizers — don't these make things sound better?

A: Only to a point. A weak link in the sound system will still be there, and using lots of signal processing may only be a futile attempt to hide it. It's sometimes better to upgrade than expand. Once you have a system that's good enough for what you're using it for, then effects can make a huge difference. They can fatten up the sound and improve it a lot.



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SOUND ON STAGE

CONCERT SOUND MIXERS at home in the studio

Chances are, live sound mixing was not one of the options presented to you by your high school career counselor. Except for those of us in the business, very few people even realize that there is an actual need for our existence. What notice we do get is often in the form of: "Nice job on the lights!" "What is it you do, exactly?" "Why'd ya hafta sit that big contraption right in front of *our* seats," and "I hope ya ain't gonna stand once the show begins!" What kind of person thrives on widespread non-recognition and occasional verbal abuse—and why? To get their own observations on their choice of occupation, we spoke with two of today's top sound mixers—Shep Lonsdale and Kevin Elson.



Shep Lonsdale

by Pat Maloney

Although many mixers spend several years working for unknown groups before connecting up with a big name act, British-born Shep Lonsdale started out somewhat differently. "The first band I ever worked for was the Yardbirds. I went to the same art school in England that Eric Clapton attended. I soon began going to his gigs and helped out by setting up equipment, shoving cases about, etc. The term 'Roady' didn't exist then but I guess

that's what I was."

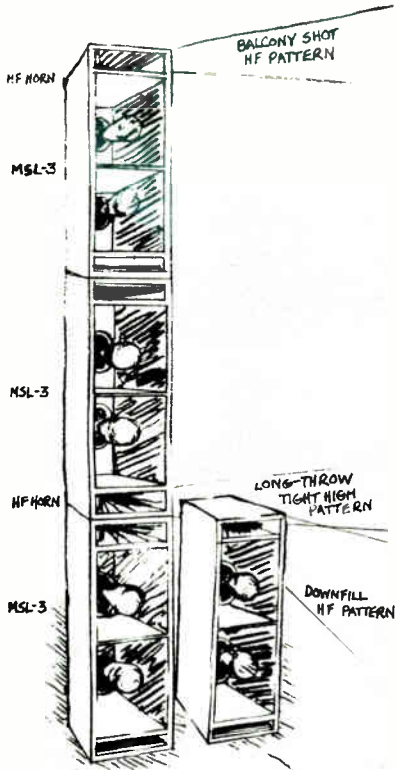
While working for other English bands such as the Who and Pink Floyd, Shep began to make a name for himself as an accomplished drummer and musician in his own right. Eventually he drummed up a position with an American band from Philadelphia and returned with them to the States—a move which later led to a year and a half association with the J. Geils Band as house sound mixer. Eventually his twin

talents for drumming and engineering got him a position as co-engineer for the Doobie Brothers.

"I started with the band in 1975," Shep recalled. "Grey Ingram and myself were responsible for the house mix at the time." Since drums were his specialty, Shep concentrated on the 34 channels that were reserved for the two drum kits and Grey handled the balance of the mix. "We did that together up until 1978 when I left to play with the band 'Charlie.' A year and a half later I joined Toto and mixed their monitors for 6 or 7 months." Since the band was composed of studio musicians, this job proved to be a real challenge for Lonsdale as they expected to hear the same quality of sound onstage that they were used to hearing in the studio. "At the end of the 6 month tour we ended up in Calaveras, California, where we opened the show for my old friends, The Doobie Brothers. I mixed the monitors for Toto and then went out front and did the house mix for the Doobies! So I had come full circle and I've been with them ever since. The only difference is now I'm doing the entire 60 channel mix myself!"

The most recent Doobies tour ended last November and Shep was quite pleased with the PA system that had been provided by Innovative Audio. "The speakers are actually the old Tychobrahe columns with JBL components consisting of two 15's, a horn and two JBL "bullets." Two of these were coupled to a subwoofer bin containing four 18's and the three cabinets were then hung together as a single unit. In a typical arena we would fly six

Technical Information Series



Every sound professional knows that loudspeaker arraying is a complex art. The history of sound reinforcement has seen a succession of theories and sophisticated calculations dealing with such concerns as coverage, acoustic power, and directivity. At each step in that succession, it has been the translation in the field of the theoretical ideal to the real that has pointed the way to improvements in the theory.

The Meyer Approach

At Meyer Sound, we've applied over a decade of research and field experience to the production of a growing line of reinforcement loudspeaker systems optimized for arraying, and we've developed sets of simple, clear guidelines for applying these systems. For the professional user, calculation and experimentation are replaced by a body of dependable techniques offering the means to make arrays which afford consistent, exceptional performance.

Polar Control

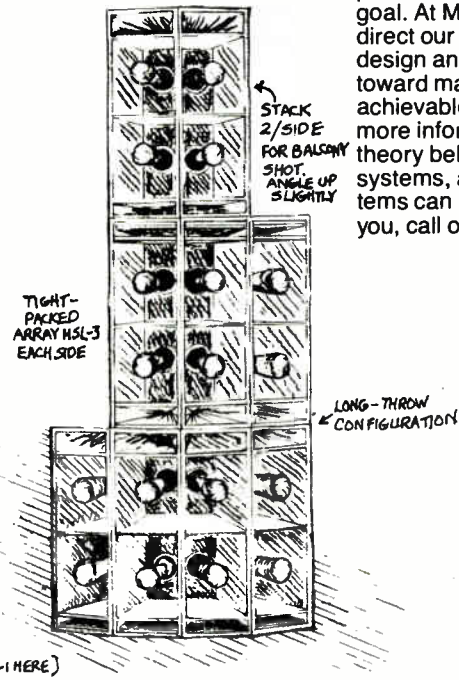
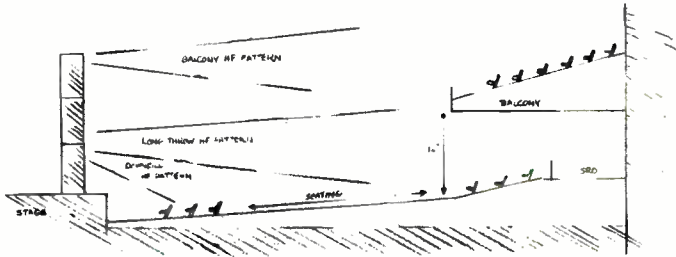
An important key to this performance is careful control of polar response. Meyer Sound reinforcement systems are designed to be coherent not only in terms of phase, but also in terms of propagation. For this reason, the crossover transition in Meyer systems is smooth and seamless, and frequency response remains consistent over long throws. In arrays, propagation coherence means smooth addition between adjacent units, minimizing lobing and producing a coherent image of the source behind the array. In practical terms, this means even, controlled coverage, greatly enhanced clarity, and little or no need for room EQ.

Modular Design

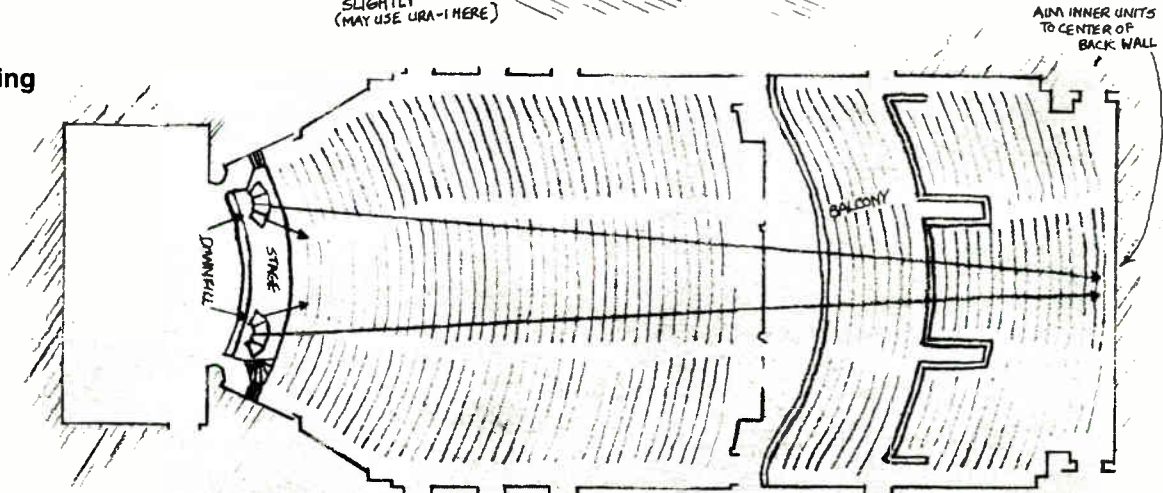
Meyer Sound reinforcement loudspeakers are designed as modular systems: full-range building blocks which offer the flexibility to meet a wide variety of demands. This means, for example, that the same product which serves for live music reinforcement in a 500-seat club can be used to make a large array for voice reinforcement in a 15,000-seat sports arena. Finally, since the array retains the performance of the modular unit with which it is made, its characteristics are predictable.

User Orientation

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Topic 1 Loudspeaker Arraying



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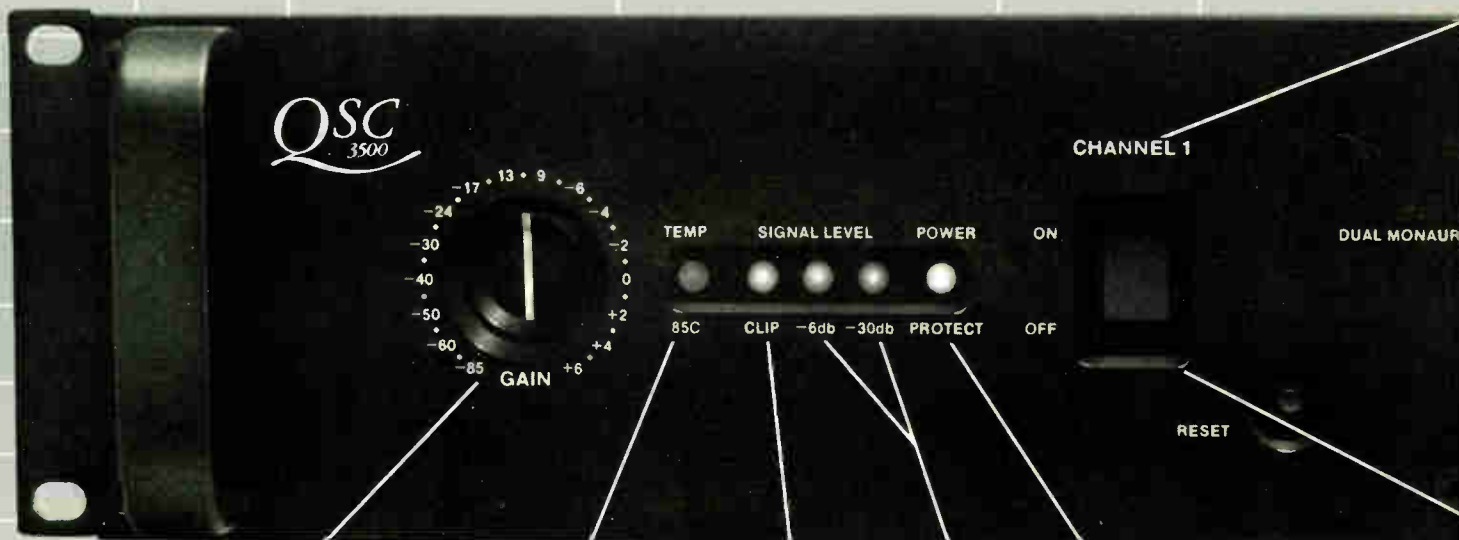
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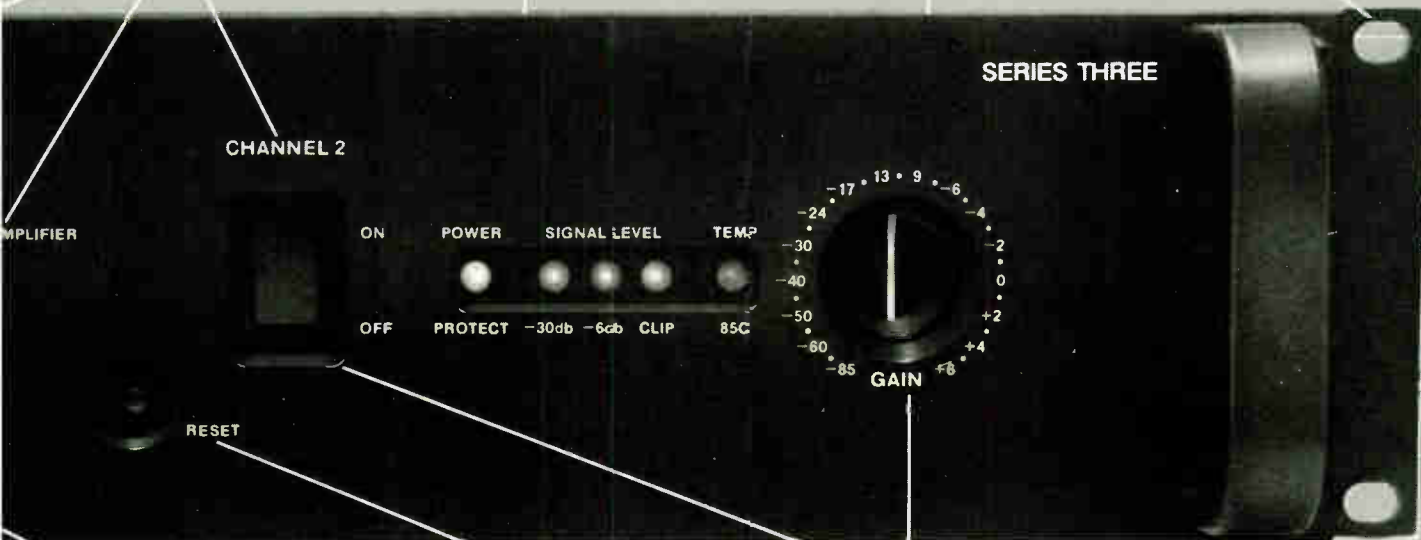
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of these per side plus a couple more for side and rear fill." Cerwin-Vega amplifiers powered the system.

"Innovative Audio has been very good about working with any suggestions we've had about modifying the system," Shep declared. "They are really into improving the system and are continually updating it. I'd hate for anybody to think that it's anything like the old Tycobrahe system—it's not! Tycobrahe used to be Jim Gamble's company years ago and I've been using Jim's mixing consoles for about 2 years now."

The boards have been modified by Dirk Shubert of Shubert Systems Group in L.A. and are, in Shep's opinion, "... just incredible! They are the best boards I have ever worked on." According to Shep, Dirk was involved in the original design of the boards and has speeded up the front end a bit. The onstage monitor mixer has 40 inputs feeding 16 separate busses while the two house boards have 30 input channels apiece.

The house mixers were originally set up for 24 inputs but Shep had another six added when they were customized to accommodate his effects return requirements. Sixteen subgroup faders are available in the mono mode

or eight in stereo applications. Shep actually uses a combination of mono and stereo grouping during a typical concert, with most of the groups being stereo with just a slight spread. "I don't feel it is right to mix in full stereo because the majority of the audience can't hear it the way I do. So I spread things like the toms and background voices just a little and reserve extreme stereo for a special effect. For instance, I'll sweep the guitar or the piano during instrumental breaks. Background vocals are run through a Lexicon 224 digital reverb and then spread around a bit."

Other effects devices include two Eventide Harmonizers, a rack of Valley People processors, and 12 channels of Omnicraft passive noise gates—all equipment that Shep says holds up very well on the road and sounds great as well.

The Doobies have a microphone endorsement deal with AKG and therefore tend to use a lot of their mikes. For the drums Shep uses an AKG D-12 on each of the kicks, C-414's on the toms, 451's on high hats, and Sennheiser 441's (left over from their earlier Sennheiser endorsement days) on the snares. "I designed and built the snare drums in collaboration with Drum

Workshops," he pointed out, "and they produce such a good sound that I just mike them from the top. I also use a single AKG C-34 stereo mike set to the mid-side configuration over each drum kit and the sound is terrific!" AKG 451's were chosen for the vocals while Countryman active direct boxes were used on the bass and keyboards.

By the time you read this article, Shep will be on the road again with Toto in Japan. Only this time he will be in control of the house sound, not the monitors. He's not exactly getting off easy however, as the group's 17 keyboards will help to insure that all 60 input channels see some action along the way. "In Japan we will use a PA provided by Hibino Sound. It's a JBL system that we've used five times now and are very happy with. It's available as a three or four way setup depending on your requirements. The sound is excellent, the crew is amazing, and I recommend them highly."

At the conclusion of the Toto tour, Lonsdale plans to go out with the Doobies again in July or August. Constant touring under high pressure conditions and general life "on the road" can quickly disillusion the faint hearted, so the importance of a proper attitude toward this line of work is particularly important. Shep's attitude toward live sound mixing has always been musical rather than technical, he says. "Although I have a good deal of technical knowledge, I try to keep it out of the way when I'm mixing! When I start working for a band and they want me to mix I first go to their rehearsals, sit down in the middle of their setup and just listen. I'll walk around and sit in different places while they rehearse and try to get the feel of what it is they are trying to do with their music. I approach mixing as if my board were a musical instrument—like a huge synthesizer. Instead of making electrical connections however, I am controlling the creative output of the actual musicians—real people who are playing and trying to create a musical environment for the audience. I try to capture the essence of what they are doing and bring that out in the mix.

"Also, if I feel that a particular tune or segue isn't working, I'll tell them. And since the people I work with know I'm a professional musician they will listen to me. I'm not just employed by the band—I hang out with them and they are my friends as well. So I try to develop a really good relationship with all the groups I work with. I won't work for a band I don't like—musically or personally."

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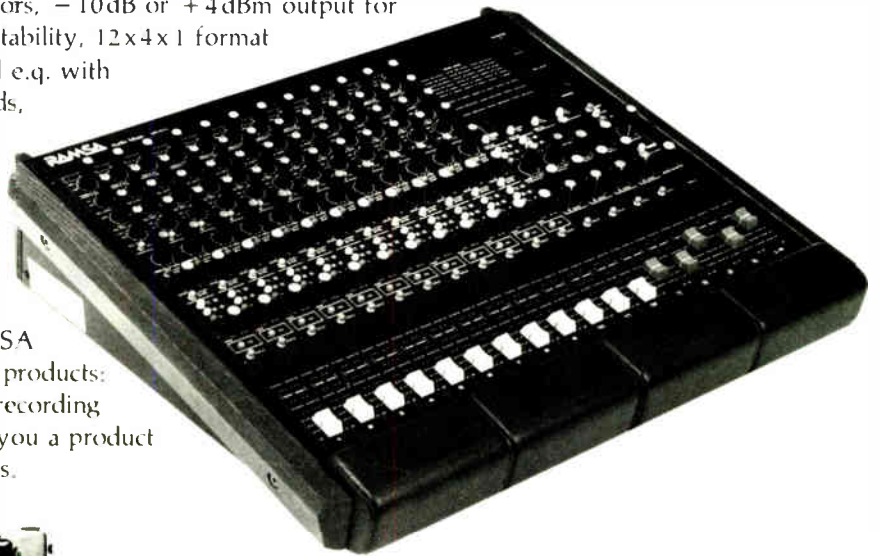
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Kevin Elson



Kevin Elson behind the controls at Fantasy's Studio D in Berkeley, CA.

by Jack McDonough

Journey soundman Kevin Elson—who both produces the band's records and mixes their live sound—vividly recalls the time in 1973 when, at the tender age of 19, he got his baptism by fire into the world of concert mixing with Lynyrd Skynyrd, who had just released their first album and been put on the road as the opening act for the Who's "Quadrophenia" tour.

"It was just a crazy time," laughs Elson now. "The band went from playing to 200 people in Southern nightclubs to playing arenas like the Cow Palace in San Francisco almost overnight. In fact the Cow Palace was the first arena we played. Talk about scared people!

"The biggest problem was being given opening act equipment—an eleven channel Sunn board, behind the stage. No out-front mix position. So it was mix to where you thought it was close, then run out front, listen, run back, get up on stage again, adjust, run back out front. It was sink or swim—a seven piece band with eleven inputs. It was really a frustrating time. But I learned a lot."

The frustrating times are well behind Kevin now, since Journey—long one of most popular tour bands and now, with the success of *Escape* and its three chart busting singles, one of the top record-sellers as well—spares no expense in getting the concert sound they want.

The Journey system, put to-

gether by Audio Analysts of Montreal from a design they created with an assist from Clare Brothers, is a 48 cabinet system, with most of the cabinets, explains Elson, "flown in a circle around the stage." Each cabinet is a 4x4 model S14 and contains two JBL K151 18" speakers, four JBL K110 10" mid-bass speakers, one JBL 2441 2" custom-made throat compressor driver, and two of the brand-new Yamaha tweeters. The system is powered by Phase Linear 700 Series 2 amps, with JBL crossover. The mid-bass, notes Elson, crosses at 250 cycles, the midrange at 1200 and the highs at 6500. Each cabinet is rated at 1000 watts RMS, and the sound is mixed on a 36-channel-in, eight-channel-out Midas console.

Journey has been using this system for three years (Bruce Springsteen is another long-time user) and Elson says its principal virtue is that "it's very loud but remains clean. It's a real flat system—like walking into a studio with the monitors cranked all the way up. It's also very portable, quick up and down, and will all fit into one trailer."

Elson came to Journey at the very beginning of 1979, after having spent six years (1971 to 1977) mixing on the road for Skynyrd, right up to the night when that band's career was shattered when their chartered plane went down over a Mississippi pine forest. Kevin—who did not regain consciousness until the second day after the accident—sustained serious foot, hip and head injuries (he says he now has only 25% use of his right foot, which lost a joint and had to be bolted and pinned)

was unable to work for a year afterward. Then Clayton Johnson, a San Franciscan and former Bill Graham employee who had been Skynyrd's stage manager, referred Kevin to FM Productions, who hired him for Van Morrison's late 1978 *Wavelength* tour.

"On our first day of rehearsals at S.I.R.," recalls Kevin, "I ran into Journey's road manager Pat Morrow, whom I knew because Journey had done some dates with Skynyrd. Pat took me to meet Herbie (Journey manager Herbie Herbert, who now also manages Elson's career as well) and I liked the situation right away. The people were very personable, very close, and that was a main concern for me because Skynyrd was a real family situation and I wanted to be able to find that again. And Herbie told me right away, 'I want you to advance. I don't want you to be just a sound engineer.' So that was it. I moved to San Francisco and began working for Journey."

Since then he has co-produced *Departure* with engineer Geoff Workman (who had also engineered Journey's two previous albums, *Infinity* and *Evolution*, with producer Roy Thomas Baker); solely produced the live LP *Captured*; and produced most of the material for *Escape*. Kevin became eligible for a 1982 Grammy when *Escape* was nominated as Best Engineered Recording, but Steely Dan's *Gauche* took the award.

Elson also co-produced (with Journey) the soundtrack for the Japanese film *Dream After Dream*, which has had only limited release in the U.S. This album, cut at the ultra-modern CBS/Sony Shinanomachi Studios in Tokyo (a Hidley/Westlake studio which Elson says is almost exactly similar to another Hidley/Westlake room, Fantasy's studio D, where *Escape* was cut) was definitely one of Kevin's tougher assignments since everything has to be cut and mixed in two weeks. Another problem was dealing with the Japanese engineers via an interpreter "who couldn't pick up on a lot of the terms we'd use." Despite the pressure he says "it was very rewarding because the work was so fresh and different."

Elson believes that his main contribution to Journey's success "was in getting them to loosen up, convincing them to perform the way they felt, and that it didn't have to be letter-perfect. Especially Steve (Perry, lead vocalist). He was so into having to do every line perfectly that it drove him crazy."

"Journey had learned a lot from Baker (their former producer) but they needed more in terms of direction and involvement. They had good songs, and performed well because



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Baker demanded good performances. But if they were booked into a studio for six hours a day, and things began to gel at the end of the session, it was tough luck because it was time to move out for the next band. It was the worst case I've seen of that whole L.A. studio situation.

"So I approached it the way Skynyrd would—just go for takes, and it feels good, fine. *Departure* had a bit of that loosening up and *Escape* really came around to the point where a lot of vocals were one-take. We even had situations where a scratch vocal done during basics ended up being the final vocal performance, because to try to go out and perfect them just wasn't happening."

To do the live album, *Captured*, Elson used the 24-track truck owned by Le Mobile of Montreal, which he describes as "a studio on wheels. It's got twin Studer machines, Neve console and just about every piece of outboard equipment you'd need. The guy does a lot of Canadian television with the truck so it's all analyzed perfectly for mixing."

Kevin says he recorded "about ten shows" on the 24-track and did some other shows on two-track and eight-track setups. "For each show I recorded I made a cassette at the same

time and then had cassettes made for each of the players and let them make lists of their favorite takes. It really helped because we didn't have to get into the studio and sift through every little thing. Then I took the tapes to Doraville (to Studio One, where Elson had previously worked with Rodney Mills mixing Skynyrd's *Street Survivors*) for mixing. The band had heard the material so much after playing it for eight months that I thought they'd lost some perspective, and they said, 'Just go and do it, we'd rather just hear it when it's done.' And that worked out fine, because it gave me the freedom to focus on the strengths of the band and to put out what I thought they sounded like live. It meant a lot to me that they gave me that respect and that leeway. So I brought back a mastered version and luckily everyone was pleased."

Returning to Doraville (Elson's "favorite studio for comfort") for a project on which he had been given his freedom was for Kevin a reminder of that earlier work on "Street Survivors."

Due to a management decision, Kevin—despite the fact that he had mixed Skynyrd's live sound from the very beginning—did not participate in the creation of Skynyrd's only live album, *One From The Road*. Instead

that LP, which drew negative critical comments from many quarters upon its release, was produced by the well-known Tom Dowd, who also did the original production on *Street Survivors*.

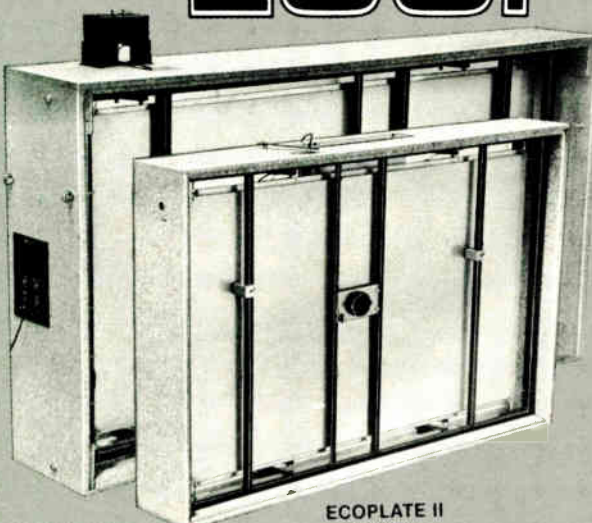
"When the live LP was done and I wasn't involved," recalls Kevin, "that turned me around a bit. I continued to do the live sound but it wasn't with the same dedication because I felt I could do better work than what was being done. At that point I had no reason to argue, and *Street Survivors* was a classic case. The album started with Dowd at Criteria, and the band wasn't happy with what was going on. I think a lot of it was Steve Gaines. It was his first studio record with them and he was willing to say he didn't like it.

"At that point Rodney Mills and I convinced the band they should recut. After pulling out from Criteria they gave me safety copies of the master and I went to Doraville and redid the drums with Artemus. We did a quick mix and took it back to the band and said, 'This is the difference, just with the drum tracks.' And they said okay and we started recutting. Dowd's only work after that was in arranging the horns for 'What's Your Name' in L.A."

Kevin, who was given a "special engineering credit" on the LP says

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that "My main contribution was getting the band reorganized and convincing them they could do a better record. I did a lot of work getting guitar sounds, trying different amps and systems. But the sound of the record is Rodney Mills' work."

Elson's general approach to production is that "once the basics are set and the album is rolling I start to tune in on arranging. I work on getting more said in a shorter time. I like guitar solos to be memorable, just like a vocal melody, so that if someone hears it once they'll remember it and hum it."

These traits date back both to his own earlier days as a musician (keyboard and guitar) with local bands in his native Jacksonville, Florida (one of his colleagues was Donnie Van Zant, who introduced him to brother Ronnie, lead singer for Skynyrd) and to his observations in the studio of Al Kooper, who produced the Skynyrd debut LP.

"From Kooper I began to learn what could be done with arranging. When the band went in they had a good idea of studio work having done demos in Muscle Shoals with Jimmy Johnson, but Kooper really broke things down into what guitar parts were needed and got everybody listening to each other so they'd know what each other were doing. So I was learning more than what the consoles and recorders were doing, learning more about breaking down songs, and since I had been a player I could understand what he was working for."

And why did he make the switch from player to engineer? Well, says Kevin, "I used to go to the Jacksonville Coliseum to hear groups and it always sounded bad. I always wanted to try to figure out why—aside from the obvious reason of the building itself being so bad. So I just got more interested in actual engineering and after my band split up I thought I'd find a job in a local studio trying to learn more. At the time Skynyrd was still playing as The One Percent so I started helping them with their P.A. systems. Then in '71, my senior year in high school, they went up to Muscle Shoals to do their first demos and I went up with them. And eventually I just decided that I didn't want to be in a band. I wanted to be able to depend on myself for my career rather than depending on a band full of other people."

Kevin expects work on the next Journey album to begin midsummer with an eye toward early September release. He is also working with 415, a new young band also managed by Herbert/Nightmare, and has just completed producing the third album by Shooting Star, done mostly at Caribou ranch with some wrapup at Fantasy. ■

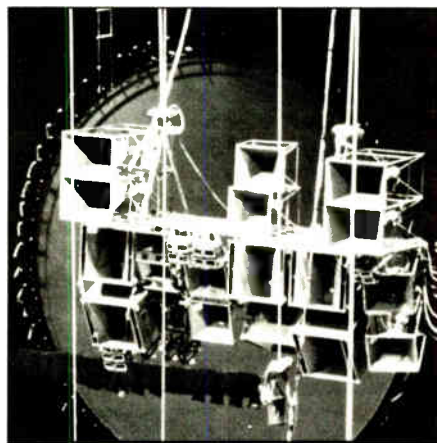
As we move into the summer concert season, we thought it would be appropriate to list some of the more active sound reinforcement companies currently in operation. This list will be updated in the not too distant future, so if you were inadvertently left out, please get in touch soon so we can add you to the next list.

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Contact: David Fish, David Farrell

NORTHWEST SOUND, INC.

P.O. Box 3586, Portland, OR 97208
(503) 286-9411
Contact: Bob Sterne

NOVA SOUND RESEARCH

2323 Corinth Ave., W. Los Angeles, CA
(213) 477-1938
Contact: Harry Grossman

PERFORMANCE AUDIO

2358 So. Main, Salt Lake city, UT 84115
(801) 355-8890
Contact: Klay Anderson



Pro Media San Francisco, CA

PRO MEDIA

185 Berry St., #3865, San Francisco, CA 94107
(415) 957-1383
Contact: Debra Kay

Equipment: Pro Media's rapid growth in professional sound reinforcement installations and concert recording work is a direct result of the dedication of its owner, Drew Serb. The business philosophy of Pro Media is to provide its clients the most critical elements in successful sound systems: top grade and reliable equipment, managed by experienced and professional personnel.

Services Available: Pro Media provides not only the necessary sophisticated equipment to produce the sound its clients require, but also offers experienced sound engineering for the maximum in concert sound coverage, audio mixing, and exciting sound dynamics.

Along with providing remote recording and engineering support, Pro Media offers complete design, engineering and installation service to users of professional sound systems.

Pro Media both rents and sells professional audio equipment from current inventory of products available from Meyer Sound Labs, Yamaha Ampex JBL, Lexicon, UREI, Altec, JIVE, HME, Vega, AKG, Sennheiser, AB Systems, ATD, Shure, TEAC, McIntosh Revox and many others.

RANDALL SCHILLER PRODUCTIONS

1207 Fifth Ave., San Francisco, CA 94122
(415) 661-7553
Contact: Randy Schiller

SHOWCO INC.

9011 Governors Row, Dallas, TX 75247
(214) 630-1188
Contact: Randy Reeder

SHYNE SOUND

40 Woodland, San Rafael, CA 94901
(415) 459-2833
Contact: Leroy Shyne

Equipment: TEAC 808 (8 track), Pioneer RT 4022 (4 track), MCI 110B (2 track), TEAC C35 w dbx NR cassette, Allen & Heath 122 mixer, (Soundcraft 1S mixer & TEAC 35 16 16 track available), 27 pair Jensen transformer split, dbx 165 compressor/limiters, Orban Parasound reverb, UREI & MXR 31 band graphers, BGW and Sweet C power amps; Klipsch MCM speaker system, (4) Klipsch La Scalas, Bose 802 monitors.

Services Available: Compact sound reinforcement service, sound system design, installation consultation and analysis. All above systems have the capability of being solar powered for noiseless remote operation.

SOUND CHASER

LIVE SOUND REINFORCEMENT CO.
1345 Wt. "I" St., Ontario, CA 91762
(714) 984-4224
Contact: Darryl Lima, Steve Trinnell

SOUND ON STAGE

100 N. Hill Dr. #30, Brisbane, CA 94005
(415) 468-2990
Contact: Ann Jerry Pletzer

SOUTHERN THUNDER SOUND

766 Cromwell Ave., St. Paul, MN 55114
(612) 645-9736
Contact: Art or Roy Welter

STAAR PRODUCTIONS

1118 W. Markham, Little Rock, AR 72201
(501) 372-1513
Contact: Mike Pinner

Equipment: Staar Productions (stage, theatrics & audio reinforcement) announces the last word in sound reinforcement—the all new Omega V system. Omega V is a true 5 way system which not only offers sound electronically crossed over 5 ways, but also 5 ways to prevent sound.

The house system consists of 40 visually identical cabinets. This system can be set up 5 different ways ranging from all 40 cabinets flown from a customized truss network to setting on the deck with sub bass on the floor. The latter creating a low profile powerful sound. The system is powered entirely by Crown amps and JBL speakers. Monitor and house consoles are Stevenson interfaced with 3 band parametric equalization. All outboard equalization being White's octave.

Services Available: Staar Productions in cooperation with Bylites Inc., is able to offer a complete tour package. For information contact Mike Pinner in care of Staar Productions.

STANAL SOUND LTD.

816 E. 25th St., Kearney, NE 68847
(308) 237-2207

STANAL SOUND LTD.

16123 Valerio, Van Nuys, CA 91406
(213) 786-2500
Contact: Stan Miller

TECHNICAL SOUNDS INC./FAST TRACK STUDIOS

1906 E. 115 Place, Northglenn, CO 80233
(303) 457-0730
Contact: Terry McMurtry

T.F.A. INC.

10701 Vanowen St., N. Hollywood, CA 91605
(213) 980-9070
Contact: Pierre D'Asques

WAH SOUND

1115 R Street, Sacramento, CA 95814
(916) 444-5491
Contact: Walter Horstein

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500 Plazamour Drive Suite 3, Atlanta, GA
(404) 876-5600
Contact: Scott Waterbury

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13 Air Industrial Park, Plattsburgh, N.Y. 12901
(518) 561-5071
Contact: Bert Pare

AUDIO FREQUENCY SYSTEMS

4848 Prospect Ave., Cincinnati, OH 45242
(513) 772-8063
Contact: Harold Blumberg

AUDIO ONE

51 Hawthorne St., Elyria, OH 44035
(216) 323-6414
Contact: Rick Galbraith, Bill Webner

AUDIO RENTAL SERVICE & SALES

268 W. Normandy, Chicago Heights, IL 60411
(312) 754-9191
Contact: Gary Cobb

AUDIO UNLIMITED OF NORTH AMERICA, INC.

P.O. Box 9225, Greensboro, N.C. 27408
(919) 274-4682
Contact: Lois Washburn Lewis, Manager/Tech Services

AUDY INSTRUMENTS, INC.

235 Lafayette St./P.O. Box 2054, Salem, MA 01970
(617) 744-5320
Contact: Al Kennedy

BRIGHTON SOUND

315 Mt. Read Blvd./P.O. Box 7977 Lyell Station,
Rochester, N.Y. 14606
(716) 328-1220
Contact: G.T. Sweeney

BRITANNIA ROW PRODUCTIONS, INC.

21-29 45th Road, Long Island City, N.Y. 11101
(212) 729-0600/0660
Contact: Micky Treadwell, Kevin Hartmann

CAPRON LIGHTING & SOUND CO., INC.

278 West St., Box C-509, Needham, MA 02194
(612) 444-8850 (24 hours)
Contact: Jim Warwick, President

CARLO SOUND & CASES INC.

2 Music Circle E., Nashville, TN 37203
(615) 259-0900
Contact: John Logan, David Threet

CINA-SOUND, INC.

168 W. Camden Avenue, Moorestown, N.J. 08057
(609) 234-8948
Contact: Frank Concetta or Rob Dickson

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(717) 733-1211

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Contact: T. Hanley, Dan Kidwell

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(812) 886-9583
Contact: Jim Lane

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517 W. Third St., Cincinnati, OH 45202
(513) 721-3809
Contact: Tom Whisner
Equipment: B&W, TAD, JBL, Yamaha, UREI, Sennheiser, Ashly, Stevenson, Community, PZM, AKG, Shure. 4-way hanging modular sound system, 32 channel house system, 24 x 8 monitors, 3-way wedges and sidelills, monitors can fly, 60 KW house, 15 KW monitor
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Contact: Jeff Palmer

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Equipment: Sound systems for up to 5000 seat venues. 28 x 8 main console; four-way speaker system, multiple, biamped and tramped monitor mixes. Eventide and Lexicon effects, Shure, Electro-Voice and Sennheiser microphones; dbx compression, experienced main and monitor engineers available
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NBF SOUND SYSTEMS INC.
Star Route Box 22, New Hope, PA 18938
(215) 862-2624
Contact: Brian Skinner

PYRAMID AUDIO INC.
16240 Prince Dr., South Holland, IL 60473
(312) 339-8014
Contact: Bob Vukelich
Services Available: Pyramid Audio is not just another P.A. company. We employ the latest technology from 12 years of experience in studio design and construction in addition to the sale and installation of professional audio for studios, sound design for musicals and the design and manufacture of pro audio products. The neat and clean appearance of our sound systems are indicative of their performance as well. Combined with ultra high efficiency and deceptively compact size, we offer the highest degree of professionalism to your production with the least amount of hassles and wasted seating space. We come highly recommended by all who have used our services. We have not specified any particular system due to the varying needs of each production. Let us know what your requirements are and we will be glad to satisfy those needs.

REEL SOUND
1502 E. Jackson St., Bloomington, IL 61701
(309) 829-1612
Contact: Kevin Kelley

SAWMILL SOUND CO., INC.
330 South Dukeland St., Baltimore, MD 21223
(301) 624-7676
Contact: Michael Connell

SCREAMS AND ROSES AUDIO ENG.
8 West Sherry Dr., Trotwood, OH 45426
(513) 837-6350
Contact: David C. Sheward

SEE FACTOR INDUSTRY
37-11 30th St., Long Island City, N.Y.
(212) 784-4200
Contact: Bob See, Mike Sinclair

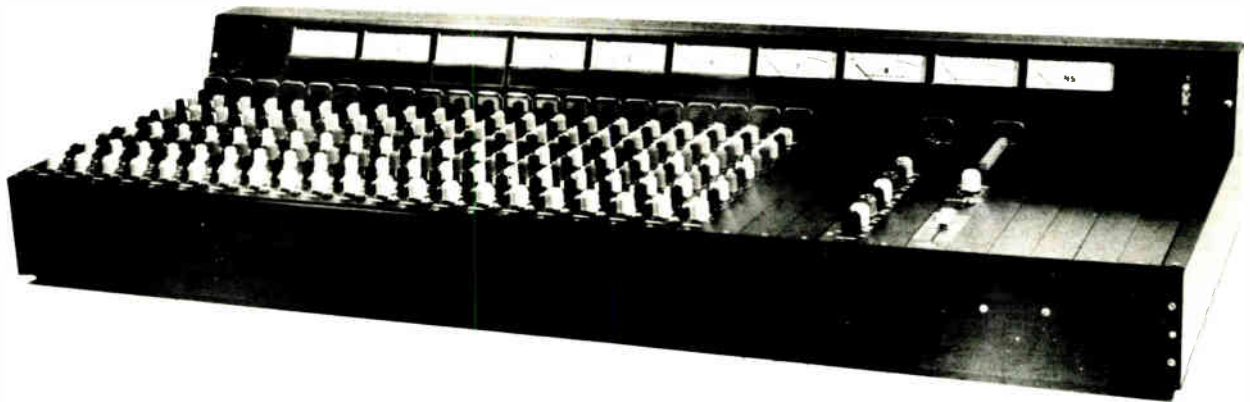
SOUNDZ MUSIC RENTALS
516 N. Milwaukee Ave., Wheeling, IL 60090
(312) 537-8211
Contact: Mr. "C" Etian

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1776 Hempstead Tpk., E. Meadow, N.Y. 11554
(516) 794-2345
Contact: Charles O'Rourke

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(412) 728-1234
Contact: Vince Steed
Equipment: Two, three, and four-way Eastern Acoustic Works/Gauss/Yamaha systems; 25k watts of Yamaha power; Yamaha PM-2000-32 main consoles; Malcolm Hill 24 x 8 monitor consoles; Eastern Acoustic Works and Yamaha stage monitors, Yamaha, Lexicon, Ashly, Audioarts, Klark Teknik, and White Instruments outboard gear, microphones by AKG, Electro-Voice, Sennheiser, Sony, Beyer, and Shure
Services Available: System design, sales, and rentals. One-nighters, festivals, fairs, and touring systems. Experience in all types of sound reinforcement, from symphonic and theater reinforcement to all-out rock shows. Complete Pro-Audio Sales and Service. AB Systems, AKG, ClearCom, Calzone, Eastern Acoustic Works, Electro-Voice, Gauss, Klark Teknik, Sennheiser, Shure, Star Case, Whirlwind, Yamaha, and others

STUDIO 198 PRODUCTIONS, INC.
198 Bloomfield Ave., Newark, N.J. 07104
(201) 481-0972
Contact: Greg Furqason
(See remote recording listings for further information)

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1701 N. Harrison St., Ft. Wayne, IN 46808
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Contact: Michael Klecka



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THE BONZAI ZONE

EPISODE #5: "Trashfan Fever"

by Mr. Bonzai
(Last episode:

In preparation for a videotaping of The Incredible Shrinking Heads, Mr. Bonzai suggested that Layla get an announcement on radio K-YOK requesting a small audience for the show. The tape is intended as a video promo for the band "Rockheads." Now, the cast and crew have gathered at Goldwiz

Studios, next door to Harry Liebman's teleproduction house, Impact Video. Harry has been using the abandoned lot at night without a permit. It has just been learned that Layla told the radio station to announce that Andy Kaufman was throwing a party and wanted fans dressed in trashbags. The response is overwhelming—over 5000 Kaufman fans are assembling outside of the studio gates...).

"Layla, how could you do it?" I asked in disbelief. "We don't have Andy Kaufman. How can we hold off that kinky crowd of New Wavers?"

"Don't panic, Mr. Bonzai," she purred soothingly as she swabbed my sweaty dome. "We can use ELVIS, our video synthesizer, to produce a simulated Andy Kaufman. And with Smilin' Deaf Eddie's vocal synthesizer they'll never know the difference."

"I'll need an hour to program a voice analysis into the computer," added Eddie scientifically.

"An HOUR!" snapped Sarah Bellum, lead singer of the Heads. "That crowd will be vicious in ten minutes."

"You better get on stage and rock 'n' roll," I suggested.

The band headed for the stage to prepare for performance. They popped into their inflatable business suits, hooked up the air compressors, tuned bagpipes, and got in the general groove. I hoped their explosive act would satisfy the crowd while we prepared a bogus Andy Kaufman in the Impact Video lab.

"What an opportunity," said Harry with that stirring air of confidence that we associated with only the great leaders, like Admiral Nelson, General Patton and Sergeant Bilko. That crowd of extras would cost a fortune, but this is a news event. We might have a bonafide media bonanza windfall!"

As his prophetic words faded we heard the startling kapocketa-kapocketa of a television helicopter over the ghostly walls of the old Goldwiz Studios.

"What'd I tell ya," said Harry. "It's the chopper from 'Tune In the Town.' Let's go out and greet the press."

Layla and Eddie slipped into the catacombs of Impact Video to create an 'Andy', while I joined Harry

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at the dangerously sagging gates of Goldwiz. As we fumbled with the rusty chains we were stopped by an old duffer wielding a hefty handgun.

"OK, hold it right there!" he ordered. "These studios are in receivership. There ain't supposed to be no filmin' done."

Harry swallowed hard and I sensed his computer brain cooking up a quick solution souffle. "Didn't you get the memo from Sam?" he asked assuredly.

"Sam?... You mean *Mr. Goldwiz*? No... 'scuse me... uh, do you have a copy?"

"Sure thing," Harry answered. "We have to reshoot a scene tonight for a sneak preview. I've got the permit here someplace..."

Harry fumbled around while I took the lead and chatted up the guard.

"Would you mind making a cameo appearance? Our guard came down with the flu."

The security cop fell for our ploy like a pair of Hollywood trousers. I thought I recognized him from small parts in some Three Stooges shorts. In Los Angeles, just about everybody has worked as an extra.

"Well, sure..." he agreed.

I slipped his gun out, emptied the bullets, and had it back in his holster before he had finished combing his hair.

"Great. You pretend to keep the crowd in order while Harry films the event."

Harry ran to the Manwitch crane, strapped on his Readycam, mounted the hydraulic steed and ascended to his lofty position. Good crane shots can make the difference between a low budget look and a spectacle. We opened the gates and the crowd swarmed into the lot: they all wore the trashbags we had requested and it was a delirious sight to see 5000 raving Glad Bags billowing towards me. One plastic spectre came up and removed his disguise.

"Hi, I'm Rover Washington from K-YOK."

"Nice to meet you, Rover. I'm Mr. Bonzai."

"Where's Andy Kaufman?" he asked with urgency.

"Oh, he'll be here soon. We've got a special performance to present while we're waiting."

That's cool Mr. Bonzo," he said. "Hey, I'd like you to meet some of the K-YOK jocks. This is Shelley Sharkskin, she does our 'Life in the Slow Lane' drivetime slot, and here's ol' Roland Stone, our night man."

I shook hands with the staff as other well known L.A. personalities

came up and removed their bags. It was a real parade of the ruling hip. I met Klark Supermann, the German singer who was burning up the charts with his hit single, "Gesundheit, Did You Come?" ... and the Pinballs, a high school band who had gained national exposure with their video arcade ballad, "I Want a Chick With Fast Hands" ... and there was Franco Coppacolla, the director who was supposedly negotiating to purchase Goldwiz Studios... oops, I realized.

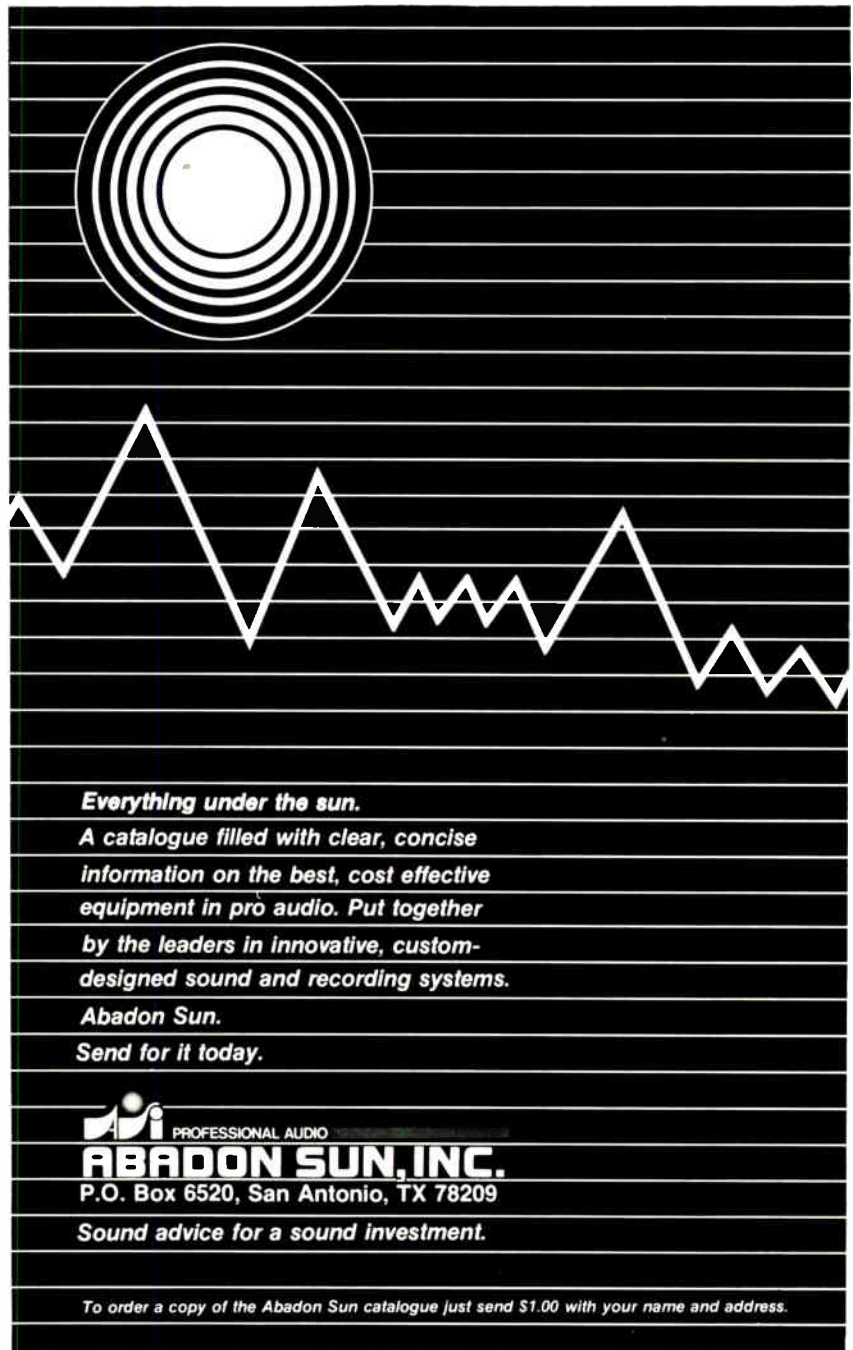
"What is all this?" Coppacolla barked harshly as he probed his index finger into my solar plexus.

We were on thin ice, but luckily, the Heads broke into song as the compressors began to fill their


inflatable suits. Franco stopped his interrogation and watched in fascination as the crowd stampeded past us to form ranks around the stage. The unmistakable strains of Sarah's vocals leashed out at the yearning throng. Harry waved from atop his boom and caught the eye of Franco. They must have known each other, because Franco smiled in warm recognition and gave him the high sign.

Harry blasted out with his bullhorn, "Mr. Bonzai, put on that blue Chroma-key suit and start fighting your way through the crowd to the stage. We're rolling!" ■

(to be continued)



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PREVIEW



BTX MULTI TRANSPORT CONTROLLER

The BTX Corporation has expanded their Shadow System capability with the new Shadow Multiplexer that allows 1-3 synchronizers to be fully accessed by one controller. Two-machine systems can be upgraded to control three or four transports.

Some features of the BTX Shadow Controller include: independently-selectable punch in/out offset and type of lock, and the ability to store up to nine frame-accurate time code locations in each Shadow unit for cueing and punch functions. Based on standard SMPTE/EBU codes, the system offers flexible control while interlocking multiple audio recorders, VTR's, and film transports.

For more information, contact:

The BTX Corporation
12 Huron Drive,
Natick, MA 01760

Circle #035 on Reader Service Card



LOW COST TIME COMPRESSION SYSTEM

Eventide has introduced Timesqueeze Jr.TM, a new compression/expansion system for audio and video recorders, and film projectors. Priced at just \$5,000, the Timesqueeze Jr. system consists of an Eventide H949 Harmonizer[®] and their new PTC 960 Precision Tape Controller. Operating controls on the new unit are easy to use. Merely set the desired percentage change on four thumbwheel switches, and the resulting time change can be calculated to the fraction of a second.

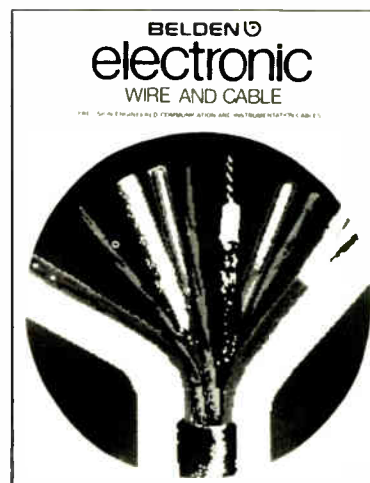
The H949 Harmonizer is the key to high quality compression/expansion through audio pitch normalization. The Harmonizer also offers many other audio effects including:

digital delay, flanging, doubling and chorus effects, reverb, echo, reverse and repeat audio. Cost-conscious users of the Timesqueeze Jr. will appreciate the unit's double-duty versatility.

For more information, contact:

Eventide Clockworks, Inc.
265 West 54th Street,
New York, N.Y. 10019

Circle #036 on Reader Service Card



WIRE/CABLE CATALOG FROM BELDEN

Belden Corporation has published a new, illustrated Electronic Wire and Cable Catalog (No. 882), a comprehensive source of cable information and products for communications, broadcast, and other electronics users.

The new catalog describes standard product lines in ten individually indexed categories, including: multi-conductor cables, computer cables, molded cable assemblies, coaxial and video cables, and a wide range of other types. The catalog also contains technical information, specifications, construction details, and applications data.

For a copy of the catalog, contact:
Manager, Marketing Communications
Belden Corporation
2000 South Batavia Ave.,
Geneva, IL 60134

Circle #037 on Reader Service Card

NEW ACTIVE DIRECT BOX

Ohmatronics, of Los Angeles, CA, have just completed two years of extensive testing on their ADB-1 active direct box, which is now available. The ADB-1 uses transformerless, BIFET-driven circuitry to change low-level high impedance input signals to high-level low impedance outputs.

The unit boasts a frequency response of 20 Hz to 100 kHz, a signal to noise ratio of -94 dB, and a rated distortion level of .005%. The ADB-1 uses two standard 9 volt batteries for power.

For more information, contact:

Ohmatronics
225 North Madison,
Los Angeles, CA 90004

Circle #038 on Reader Service Card

NEW PRESSURE ZONE MIKE FROM MILAB

The Milab MP-30 pressure zone hemispherical microphone is available in two versions. One has normal mike level and 200 ohm output impedance. The other has an electronically balanced, transformerless line output. Both versions operate from a 48 volt source and are rated for up to a 140 dB sound pressure level.

The capsule in the MP microphones is an electret pressure type and is mounted within the pressure zone housing so that the sound is received indirectly, without phase interference distortion.

The line level microphone is ideal for digital and direct-to-disk recording where no transformers are desired in any part of the signal path. Prices for the MP-30 microphones start at under \$100 for the mike level version.

For more information, contact:

Cara International
P.O. Box 9339,
Marina Del Rey, CA 90291

Circle #039 on Reader Service Card



REVOX UPDATES B77 RECORDER

The Revox B77 MK II, a new version of the highly regarded B77 recorder, offers several significant improvements of interest to audiophiles and recording professionals.

The MK II incorporates a variable speed control which adjusts the tape speed as much as two musical half-tones above or below the fixed speed. This facilitates pitch matching with off-speed tapes, as well as other creative effects.

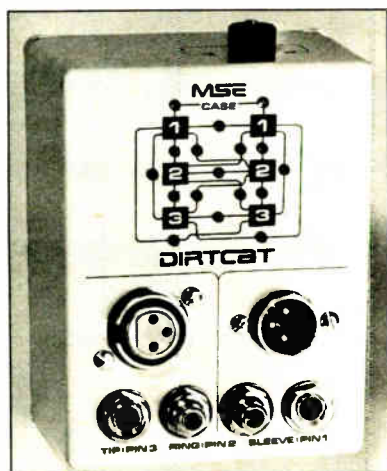
For easier editing, the front record head shield remains in the down (open) position when the edit switch is engaged, regardless of the transport operating mode. The B77 MK II's improved transport control logic provides smoother tape acceleration regardless of tape speed or reel size.

All the popular features of the original B77 have been retained, including a die-cast transport chassis, servo-controlled capstan motor, ASA standard VU meters with peak reading LED's 10 1/2" reel capacity and universal supply. The B77 MK II has a suggested list price of \$1,799.

For more information, contact:

Studer Revox America
1425 Elm Hill Pike,
Nashville, TN 37210

Circle #040 on Reader Service Card



Dirtcats DCT-100

DIGITAL CABLE ANALYZER FROM MSE

MSE announces the availability of the DIRTCAT DCT-100, a digital real-time cable analyzer designed to quickly and accurately locate cable defects. The DCT-100 detects shorts with only one cable end connected. It scans the cable for correct signal paths and a color-coded LED display indicates which paths are active, and whether connections are standard or non-standard. The colored LED readout is a useful feature when using the unit in dimly-lit areas, such as live sound situations and studio troubleshooting.

The DCT-100 provides a 100 Hz line level square wave test tone to permit audible as well as visual checks of loudspeakers and stereo headphones. Since it is a hands-off test, cables can be manipulated to easily detect intermittent connections. The unit is equipped with XLR, RCA pin, and 1/4" jacks, and the case leaves enough room so users can install other connectors, such as BNC or TT, if desired.

The compact DIRTCAT DCT-100 operates on a 9 volt battery, and is priced at \$185, F.O.B. Los Angeles, CA. Dealer inquiries are invited.

For more information, contact:

MSE
14047 Roblar Road,
Sherman Oaks, CA 91423

Circle #041 on Reader Service Card



NEW WIRELESS MIKES FROM TELEX

Telex Communications has added two VHF transmitter microphones to its wireless mike lines. Both models incorporate the transmitter, 30 dB compression circuits, and omnidirectional antennae into the microphone housing for a neat appearance.

The Model WHM-300 is a cardioid electret microphone with a flat response suited for the speaking voice. This mike is equipped with separate switches for RF and audio, so the sound can be turned off without losing control of the RF carrier.

The WHM-400 is a cardioid dynamic microphone with a slight emphasis in the lower audio range for the rich, full tonal quality preferred by many vocalists. This mike has no on-off switch, to prevent performers from inadvertently turning the mike off.

A wide range of standard and custom transmitter frequency ranges are available, and both microphones have a frequency response of 50-15,000 Hz. Prices for either the WHM-300 or WHM-400 begin at \$425, and Telex dual diversity receivers are also available.

For more information, contact:

Telex Communications, Inc.
9600 Aldrich Ave. South,
Minneapolis, MN 55420

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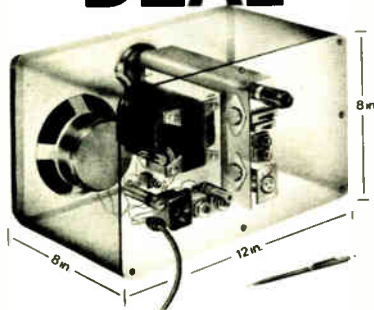
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by David Gans

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"Kenny Rogers investing in a state-of-the-art recording studio reflects a basic trust and faith in the business in a time when everybody else seems to be losing it," says Terry Williams, manager of Lion Share Recording Studio, in Los Angeles and a longtime associate of the bearded superstar. "Kenny isn't a magician—he doesn't have a little hat with moons and stars on it—he's just a man like everybody else. But he's going to show people that it's still possible to succeed."

Rogers bought the studio, then known as Concord, and took over in mid-1981 with plans to reconstruct the main room immediately and eventually make Lion Share into a full-range audio and video production facility. "Kenny told me, 'I want you to make this studio better than any of the competition,'" recalls Williams, who has known Rogers since they became partners in The First Edition 17 years ago. "I said, 'No problem, but it's going to be expensive!' There's some pretty stiff competition in this neighborhood—The Record Plant, Cherokee, and Sunset Sound, to name just a few."

The base rate of \$200 per hour, Williams notes, includes everything—instruments and outboard gear—except interlocking the two 24-tracks. "As a producer, I'll often

spend more in cartage and rentals than anything else," he says. "A Prophet-10, which is essentially an orchestra in a box, can cost \$350 or \$400 a day; an Eddie Reynolds Rhodes (specially-tweaked for more consistent level from low to high registers) costs a lot to rent. Well, they're included in our price, along with the Linn Drum Computer, any synthesizer you can possibly imagine, and lots of other instruments."

"We didn't just go out and get a bunch of guitars to have around—we set everything up to our own high standards as players," Williams continues. "I took the guitars to a guy named Kim Darby, who works out of his home in the San Fernando Valley and he sets them up *fabulously*."

The equipment list, says Williams, includes "one of everything, and two of most": AMS, Lexicon (224 and Prime Time), Eventide (Flanger and Harmonizer) and Publison; seven EMT 140's; a complete Scamp rack; Aphex Aural Exciter; old and new LA-2A, In-cvionics and dbx limiters; API 550 and 560 and UREI equalizers; Kepexes and Gain Brains; a roomful of microphones from ancient tube Neumann's to PZM's; UREI, Yamaha and Auratone speakers; and lots more. "That's just the fixed stuff in Studio A," says Williams. "There's lots more that we can wheel around from room to room."



URE STUDIO

Lion Share's main room has a Neve 8108 with Necam, a pair of Studer 800's with Studer's TLS interlocking system, a Studer A-80 1/2" two-track and a A-80 1/4" two-track. The studio was designed by Lakeside Associates, Carl Yanchar and Steve Fouce, in conjunction with Jay Antista and Terry Williams of Lion Share. "I had to work within the existing walls, couldn't go up," explains Williams. "Because it was such a small room, I wanted to make it as live as possible—but deadening it is a piece of cake."

The louvers in both the main and isolation rooms are controllable from the console. When they're open, sound disappears into "six feet of dead hanging traps," according to Williams. Curtains and mirrors can be moved or eliminated, resulting in a flexible acoustic environment that can be tuned by the engineer while the performer sings or plays.

Lion Share has two other studios which Williams says will eventually be rebuilt—if he can ever take them down long enough to work on them. "Kenny got in here when Studio A was just being finished, and I said, 'I need at least a week to burn this room in.' But forget it! That was a creative tool, and Kenny wanted to get in and play right away—and he'll tie up all three rooms at once between tracking, strings, vocals

and miscellaneous overdubs. I had to take the place down for a week recently just so my tech staff could get familiar with all the new equipment!"

There is a large tape library behind Studio C which Williams says will be sacrificed to expansion. "The only thing I can't record here is a 50-piece orchestra, so what I'm going to do is turn Studio C around and make it into a big room," says Williams. "I'm not sure yet whether we'll get SSL, API, or my favorite console, Trident." It currently features an API console and 3M 79 decks.

The old Studio A, now called Studio B, is a very small room used primarily for video sweetening. "A lot of rock and R&B players like it because

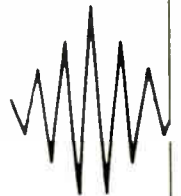
it's got a really tight sound," says Williams. It's equipped with 3M 79's and a small Harrison board.

In its short period of existence, Lion Share has been used by many important clients from the record industry, as well as the film and TV industries. Among its clients, it lists Sly Stone, Don Henley, Tim Schmitt, the "Fame" TV show, Fleetwood Mac, Eloise Laws, Debra Laws, and the film "Annie."

Williams notes that Lion Share already has video production facilities and plans to turn the complex into a state-of-the-art multimedia facility. "That's what Kenny wants," he says with a certain amount of awe and a great deal of affection, "and that's what we're gonna have." ■

rms sound

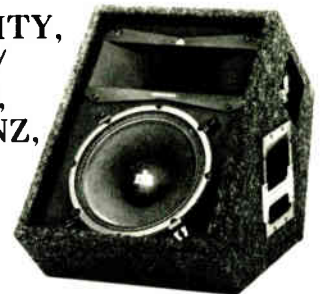
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LEGAL ISSUES in Music and Video

by Edward R. (Ned) Hearn

Note: In the April issue of Mix we presented the first part of "Legal Issues in Music and Video," which dealt with musicians' rights when being hired to create and/or perform original scores for video projects. The second half of this article discusses the complexities involved in seeking permission to use music from existing sources. The author, Ned Hearn, is the current director of Bay Area Lawyers for the Arts, and co-authored "Musicians's Guide to Copyright" and the "Musician's Manual: A Practical Career Guide."

OBTAINING RIGHTS TO USE EXISTING MUSIC

At times, the producer of a video project may want to use existing music rather than retain someone to create original music. This usage presents an entirely separate array of considerations from those discussed in the preceding section. There has been much written over the past few years concerning what ought to be paid for the right to use existing music in video productions. The phalanx of managers, lawyers, producers, music publishers, unions, record companies and the like have been jockeying with each other on how much should be paid or received but to date no widespread industry standards have been established. Rather, if anything, the movement to standards has been marginal because of the concern about making commitments that turn out to be bad deals because too little or too much has been demanded and paid, and out of fear of establishing precedents that later developments fail to justify.

Before discussing some of the approaches that have been used in

reaching an agreement on a sum to be paid for the use of existing material, it is first useful to understand the kinds of permissions that have to be secured.

Exclusive to the copyright owner of a work are the rights to reproduce and distribute it, the rights to perform and display it and the rights to create derivative works (that is, works based in substantial part on a pre-existing work, such as different arrangements of an existing song or a movie based on a screenplay). When a producer wishes to use existing copyrighted music, he/she must identify who is the owner of the music and obtain permission from the owner. The producer, therefore, must first determine who the owner is and whether the person or company with whom he/she is dealing has the authority to give permission to use that work. Having obtained that information, the producer must then identify the scope of uses to be made with the music and the markets in which the project will be exploited, and make certain the license meets the full scope of the producer's needs.

At this point it is useful to understand the distinction between what is known as a compulsory license and a negotiated license. Compulsory licenses are granted by statute and authorize non-owners to use the copyrighted material of others in certain limited contexts. The situations where a compulsory license exists under the current copyright statute include the reproduction of songs on a phonorecord (not audiovisual, strictly sound) when the song already has been released on a record for sale to the public and the intended use by the proposed user is to record the song once again for release to the public on phonorecords (a compulsory mechanical license). A statutory royalty of 4 cents (or $\frac{3}{4}\text{¢}$

per minute of playing time, whichever is greater) per song per record made and distributed must be paid to the owner of the music. This compulsory license is not available for the use of music in a video production.

Additional statutory compulsory licenses exist for the performance of music over (1) cable television—cable broadcasters pay an annual royalty fee to the Copyright Royalty Tribunal, an arm of the Copyright Office which then divides the money among copyright claimants including BMI and ASCAP for owners of music performed over cable); (2) jukeboxes—the owners of jukeboxes pay an annual royalty fee to the Copyright Royalty Tribunal for payment to the owners of the music; and (3) public broadcast stations—which also pay an annual fee to the Copyright Royalty Tribunal. Another statutory compulsory license relates to the performances (but not reproduction) of a sound recording on which music is embodied. No fee payment is required for that performance. In practically all other situations, licenses for the use of music must be negotiated. That is, the producer must get the permission and agreement of the owner of the music. It also should be noted that if the music is already on a sound recording and the producer wishes to reproduce that sound recording as well, then the producer also must get permission from the owner of the sound recording, which is usually the record company, and therefore may be a different person or entity than the owner of the music itself. Union reuse fees also will have to be paid for the use of the sound recording in the video project.

Generally speaking, any use of music in a visual context requires what is known as a negotiated synchronization and performance license from the owner of the music. The synchronization portion of the license is for the right to record the song in a synchronized relation with the action on the video. The performance aspect of the license authorizes the use of the song while displaying the video in United States theatres for public viewing. If the video is broadcast over television or shown in clubs, then those organizations should have obtained the necessary performance licenses from BMI and ASCAP.

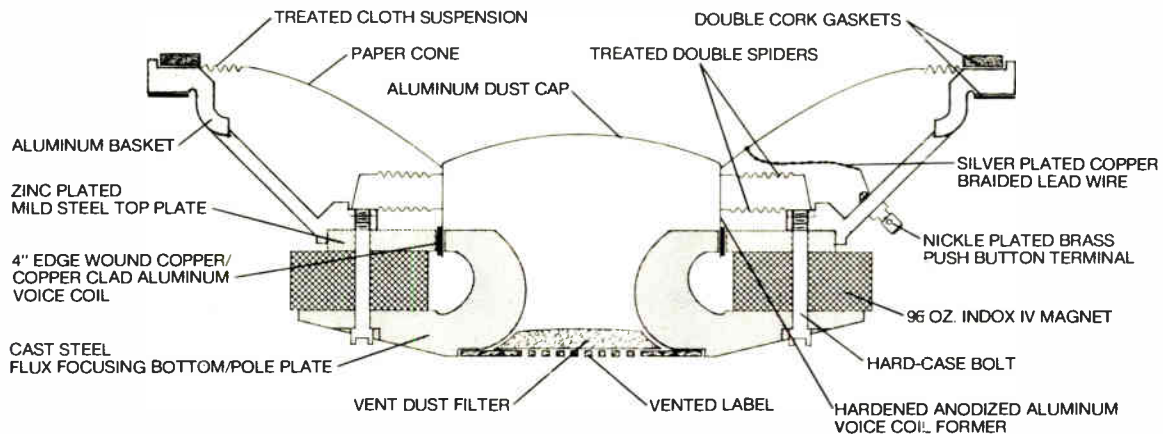
Clearances for the use of music in video productions can be obtained through (a) the Harry Fox Agency, 110 East 59th St., New York, NY 10022, (212)751-1930; (b) from the music publishers directly, and also (c)

(continued on page 65)

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VIDEO NEWS

by Mia Amato

HARDWARE: FEAR OF FORMATS

The advent of the one piece video camera raises the spectre of yet another production format: in this case, half inch tape. Beta and VHS, the home video formats much maligned for poor image quality, have reappeared for broadcast use in new combo units introduced by *RCA*, *Sony*, *Ikegami*, and *Panasonic*.

At the spring NAB show broadcasters did indeed drool over the combo units and tiny recording decks which plug into the back or side of the cameras. Available models all have two audio tracks plus control or timecode track. An improved encoding system promises better image quality and stability on standard half-inch cassettes. Manufacturers all showed editing VCRs for the format which incorporate similar features found on U-matic decks.

The new cameras are not, however, intended for program production. They are meant for news shooting, their wireless mobility intended for journalists hot-footing it down urban streets or Central American terrain.

Broadcasters are concerned about interchangeability and the editing of half-inch material into newscasts, and have appealed to manufacturers to come up with one format for the new cameras—either VHS or Beta. RCA, which pioneered half-inch ENG with its prototype Hawkeye camera last year, moved quickly with a standards proposal for VHS. The Society of Motion Picture and Television Engineers, the trade group largely responsible for the standardization of Type C one-inch equipment, is currently running its

own tests. The rest of the video industry will be holding on to its wallet, if not its breath, until the SMPTE reaches a decision. One-inch is expected to remain the preferred format for program production.

COMPANIES: AN URGE TO MERGE

Northwest Teleproductions, which has video and film facilities in Minneapolis and Dallas, is expanding into the Chicago area with video editing and film-to-tape transfer services. The new company, dubbed *Northwest/Chicago*, will be located within *Universal Recording's* studio complex, enhancing Universal's ability to serve video music clients. Universal engineers plan to integrate their audio—up to 48 tracks plus a 32 track digital capability—with the video studio via a common routing interface. Northwest/Chicago will be bringing to the Windy City Type C one-inch and quad VTRs, Ampex ACE editing system and ADO digital special effects.

In Hollywood, *Crystal Sound* will be sharing its space as well as the one-inch video gear of *In Video*, a new production company run by *Stanley Newton*. *Crystal Sound*, run by Andrew Berliner, boasts a large 40' x 50' audio studio which will be used for live videotaping of promos during recording sessions. The crew at *Crystal* are no strangers to audio-visual productions: studio sequences for the Neil Diamond film, "The Jazz Singer," were shot there.

Optimus in Chicago is resting on its cable laurels after post-producing 23 different concerts for BRAVO, a satellite arts channel. Programs included *Ballet West's* production of Carmena Burana, *Chicago String Quartet*, and the *Milwaukee* and *St. Louis Symphonies*.

"The programs were all shot on location and switched live, and the emphasis was on a live-sounding mix," explained Mike Fayette, director of post-production. "We did little to the mix; we packaged for time, cutting out some music, adding filler, adding voice overs for narration, intros and outros."

The BRAVO programs were all mastered in stereo, using Optimus' Dolby-A encoded Type C VTRs. No separate synchronizer was used; Fayette uses a CMX editing system and relies on SMPTE time code track to mix to picture; "I think it's faster and a lot more flexible," he commented.

Another video firm that's done quite a bit of music programming for cable is *MTS*, the mobile facility perhaps best known now for supplying cameras and crew for the *Rolling Stones* satellite telecast earlier this year. MTS provided location video for Home Box Office specials such as the *Simon & Garfunkel* Central Park concert (produced by Lorne Michaels) and the musicals "Camelot" and "Sherlock Holmes." MTS is based in Cambridge, MA, and will be spending part of its summer supplying video for the PBS broadcasts of the Boston Pops.

NEWS FROM NEW YORK:

Danceteria, a tri-level rock video club has re-opened on 21st Street. Promo clips are shown between bands on an Aquastar video projector on level two; the level three video lounge and bar now shows experimental tapes programmed by *John Sandborn* and *Kit Fitzgerald*... Sandborn and Fitzgerald are currently working on an opera for television with avant-garde director Robert Ashley. BRAVO commissioned the work, called "Perfect Lives (Private Parts)." ■

ISLAND VISUAL ARTS

by
**Bruce
Pilato**

When Chris Blackwell, heir to the Blackwell Jams fortune, began Island Records in England some 15 years ago, it was a label that during the 1970s would break a wide range of innovative talent from Free to Brian Eno, and also launch the career of the late reggae prophet Bob Marley. And though Island is responsible for some monumental music, several hit records all over the world and a major distribution arrangement with Warner Brothers, it has always been regarded as a small record company. All that, however, may soon change.

The company has recently announced a new subsidiary called Island Visual Arts, which will create short and feature length films and will acquire existing films for video cassettes and video disk distribution.

Island feels that for a progressive record company to make the transition into the 1980s, a video operation will be essential as well as profitable. And although Island Visual has only been a reality less than a year, the company has already made bold steps by placing major films under production, acquiring video rights to others and also producing music videos of established and up and coming Island recording artists.

The man in charge of Island Visual Arts is the President of Island's North American operations, Ron Goldstein. Born in Baltimore 38 years ago, Goldstein has been with Island since the Fall of 1980. Prior to that he was President of Chrysalis Records and head of the jazz department

at Warner Brothers. He says that when he first joined Island Records, Chris Blackwell had already laid the groundwork for the visual department.

"The idea was Chris Blackwell's," Goldstein told me from his offices in New York City. "He wanted to initiate this. He's a consumer himself and he's been collecting videos for quite some time and realized that this could be an important step for Island artists and Island products for the future. So he just said, 'We're gonna do this' and, of course, the idea for the video situation came up at the same time. That happened to be simultaneous with the fact that Chris was working on some film projects, as well. So, it just came together at one time."

Goldstein pointed out that Island Visual Arts will not primarily be a non-music division of the company. The main reason for the division is to get behind projects that will blend audio and visual mediums. "There's no doubt," said Goldstein, "we're very interested in that marriage because they go hand in glove. For instance, right now, Chris is producing a film called *Country Man*. The soundtrack of that film is mostly reggae music, or all reggae music. Seventy percent of it is Bob Marley's music. So what we'll eventually end up with is a full length feature film, a video cassette and video disk for home use, as well as a soundtrack album. And I think that kind of explains what our direction is. That's what we're interested in."

"The other thing," Goldstein continued, "is that now there is this music television station or music channel. We will probably be doing more videos of live performances. For instance, we have a band called The Rockats. We recorded an album at The Ritz; a live album. We, at the same time, recorded a video. We taped it and eventually sold it to Warner Amex and its going on their music television channel. So, again, we're using both mediums."

At the time that Blackwell announced the formation of Island Visual Arts, he announced its first five projects. They are four films: the aforementioned *Country Man*, an adventure film set in Jamaica; *No Place Like Home*, a drama by director Perry Hensel; *They Call It An Accident*, a fiction thriller set in

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Ron Goldstein, President of Island's North American Operations.

France; and the authorized film biography of Bob Marley. In addition, they gained the home video rights to the 1972 reggae classic cult film, *The Harder They Come*.

Most of the initial Island Visual projects will be natural tie-ins to the company's record division. Being the foremost reggae label in the world, *Country Man* and *No Place Like Home* with their reggae soundtracks will feature Island reggae recording artists; *The Harder They Come*, besides being a reggae product, will be distributed for Island Visual by Warner Brothers Home Video, which makes sense because Warner Brothers Records distributes Island Records; *They Call It An Accident* will have a music score and soundtrack by Island superstar artist Steve Winwood; and of course, since Blackwell discovered Bob Marley as a teenager and guided his entire career, he is most qualified as the producer of his film bio.

Blackwell recently said of the Marley film, "I'd like people to be able to see the things that always awed me about Bob. He grew up in a small village in a tiny, out-of-the-way country, yet he was able to give people all over the world a hope, a special vision of freedom. In the end, he was buried just 50 yards from where he was born.

But the vision he left behind is something I hope will never die. This film will help keep it alive."

Island records has long had marginal success in the States because most of its artists were somewhat out of the mainstream of pop music and are primarily cult figures. In recent years with the overwhelming success of Robert Palmer, Grace Jones and Steve Winwood, Island has become a major commercial force in the American record industry. Goldstein feels that these recent financial gains had little to do with the idea of getting Island Visual Arts off the ground.

"I think Chris would have pushed ahead with his film and video plans regardless of the success that's happened recently in the States but, believe me, it makes a huge difference in the general feelings of being able to go ahead on a creative level. It's just softened the cushion a bit for everybody."

I mentioned to Goldstein that the concept behind Island Visual Arts has been attempted before by another record industry giant, R.S.O. Records. And although they had a few fantastically successful films, such as *Jesus Christ Superstar*, *Grease* and *Saturday Night Fever*, they went on to back a score of losers, including *Moment To Moment*,

Times Square and others.

"Yeah, I think that in general, on the record side, we're going to be very, very careful about the rate of growth and the size of the growth of this company. I am personally very, very concerned about that, and I think that we want to remain loyal to the people we have on our roster and continue signing very few people, but also very unique people. There is still going to be a lot of reggae; our commitment to that is stronger than ever."

As far as Island Visual Arts is concerned, the company will be "absolutely" selective with any and all projects.

The visual department of Island will obviously take a deep concern in the company's own artists, especially in the area of video clips. However, not all Island artists will be pressured into becoming "more theatrical" in their presentation. "I think it depends on the artist. I mean Grace Jones will *always* be theatrical. But I also think that some of the best live shows are the ones that have less theatrics. Certain artists whose songs and singing capabilities are not as strong as others need some kind of outside help. So they need better lights and scenery and costume changes, and smoke and whatever possible, what have you. Then there are some artists

think there are certain artists who would rather not tour.

They can't make much money by touring anyhow.

It's mostly a promotional tool that helps sell records, and some of them might feel that the video is even more effective and that could very well be."

Videos will be necessary, feels Goldstein, to break new recording artists now and in the future. "Yes, I definitely feel that way. We've used videos on the Rockacts; we shot a live one. And we have a band called the Plastics. They're from Japan and we have video footage on them. We did want to have footage on U-2 for the first album, but the filming didn't work out right. However, we will have a new one on them. So, we're very oriented that way. We do like the videos."

As of yet, no video and film studios have been built for Island Visual Arts. "No, we don't have any plans for that right now," said Goldstein. "At present, we hire a production company to do all that." Being still in its infancy there hasn't even been a separate staff hired as of yet. "We haven't done that yet, I

mean, basically it's the record company executives that are involved with the visual things right now. And that could change."

Goldstein himself, besides being the instrumental figure behind Island Visual Arts, has been almost as busy trying to set up Island Record's new and upcoming jazz department.

Goldstein says there are several plans in the works for both the record company and its visual department. They are looking at other youth oriented cult films (such as movies like *The Rocky Horror Picture Show*) for home video distribution.

"I think we'll definitely start looking at projects like that. Right now, we're very concerned and consumed by these four projects. So actually, we haven't gone outside yet to look for anything. We're trying to build up our credibility. I think a lot of people know we are in that business now, but I haven't received a lot of scripts or calls from people wanting things on disk or cassette just at the moment. As soon as we complete these projects and have them out, I think that we'll start venturing outside of the company for things that are initiated externally, instead of internally."

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artists, Island Visual will

have the video be a

secondary form of presenting

the song and the artist.

The jump into video by Island, at least from the music side of the picture, is also partially because it sees conventional touring by most artists as something that will probably become obsolete in the not to distant future. "I think that that's a real possibility. I

LEGAL ISSUES (PT. II)

(continued from page 60)

through the services of music clearance organizations such as the Mary Williams Music Clearance Corporation, 6223 Soma Ave., Hollywood, CA 90028, (213) 462-6575. For a flat fee, the MWM Clearance Corporation will undertake to represent the producer and contact publishers and their licensing agents to secure clearance rights to use the selected music. The fee paid by the producer to obtain the music rights is in addition to a fee paid to the MWM Clearance Corporation for handling those services.

A series of considerations must be examined in determining the fee to be paid for the use of the music through a negotiated license. Among the issues examined are the following: (1) the nature of the video production—a motion picture, a video disk of a concert, instruction program; (2) the kind of use for the music, such as background or featured, instrumental or vocal; (3) the length of time for the entire production, the amount of time that the music is used in the production, and the total amount of music used in the production; (4) the duration of the license; (5) whether rights with respect to that particular composition have

previously been given; (6) the budget for the production, including the cost of particular items and payments to participants; (7) the manner in which the product is to be distributed, such as rental, home use, industrial or educational in-house; (8) the number of units to be manufactured; (9) the scope territory for distribution; (10) the wholesale price and suggested retail list price of the units, or the rental price and marketing arrangements for the units; and (11) the estimated profit margins. There is no clear formula for weighing these various elements. They are each examined in reviewing the entire package.

There have been different approaches taken in computing these factors to determine the amounts to be paid. For example, some publishers will want an identified figure set, such as between 5 to 7½ cents per title per unit sold when used in a video production that is to be sold to the public. Other publishers may want a percentage of the retail price for the music that in turn could be divided among all of the compositions used in the production on the ratio of the amount of time that a licensed composition is used in the production over the total amount of music in the

production, such as 6% to 10% of retail. Another approach is to charge a synchronization fee in a flat amount to be paid at the beginning of the production with a royalty per unit to be paid later if the production is marketed in units to the public. Often a time limit of three to five years will be imposed, at the end of which a new license will have to be negotiated.

At times, the owners of the music will license its use in a video production for theatrical or broadcast purposes only, reserving until a later time a fee to be paid for the use of the music in video cassettes and disks to be marketed to the home consumers. Most licenses relating to the latter use also are issued for a finite period of time, between two to five years, with a requirement that the fee be renegotiated after the market has developed more information on what fees would be reasonable.

The issues and the variety of answers just on these two topics are plentiful. Take the time to research your position and think out the various approaches. If you have enough information, you should be able to make a fair and sensible deal.

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by N.I. Weinstock

Television broadcasting in the U.S. *will* go stereo, someday. As glacially as the FCC can manage to move, perhaps two years from now by some current guesstimates, we'll be hearing two channel audio on TV. And when it happens, in the words of CBS engineer Robert Fine, "Like it or not, we'll all be involved in this field. The video people will be coming to us for their sound, and our sound industry is becoming part of a larger one."

Actually we're already well on our way towards stereo TV: multitrack video recorders have been around for some time, and stereo home VCR's are slated for release this summer to the U.S. market. The television industry has just recently begun to discover audio recording studios that offer video sweetening services. Partly this is happening because of the TV industry's slow move toward original recording on video. Some 70% of TV programming still originates as film—an important number to keep in mind. Some more important causes are the availability of electronic editing for audiotape and the never-to-be-underestimated quest for quality.

It has been said that TV descends more from radio than from film. Commercials continue to communicate mostly aurally. It should therefore be no surprise to realize the demand for higher quality audio on video comes mainly from two sources: ad agency production people and theatrical filmmakers.

At a panel discussion on Audio Production for video work at a recent AES meeting in New York, Mike Kletter, account executive with Young & Rubicam, an agency production man for many commercial spots, talked about the subject from the client's point of view: "Audio is finally coming into its own right in TV," he said. He modestly disclaimed any technical know-how at all, but then continued, "When the state-of-the-art was to do your initial recording on video and audiotape, and then make a kinescope that could be edited,

STEREO AND TV

the process seemed to create more problems than were solved. Even when originating with film, there were still limitations..."

Kletter's goals may have included spots that were less distinguishable—if not undistinguishable from the programs they interrupted; but he was held back by the quality of video editing. Yet throughout the seventies more and more commercials were shot on video (if 30% of TV originates on video, that figure also now includes a respectable amount of commercials which typically employ higher production standards than programming). Kletter traces the upswing in original video production to improvements in editing technology, such as the videomag system—in which sprocketed videotape is physically cut in the same manner as motion picture film or sprocketed mag audio stock—and digital editing breakthroughs in both audio and video.

Bob Liftin of Regent Sound was also on hand that night. Bob has been working closely with Francis Ford Coppola, helping to develop the Zeotrope film-video-audio editing system we've all heard so much and yet so little about. He has had to completely work out the intricate implications of SMPTE time code to maintain sync between many audio and video tracks. Coppola's, and other, film is transferred to video through a flying spot scanner

(made by either Rank Cintel or RCA), which adjusts the motion picture speed of 24 frames per second to video's 29.975. In the process, Liftin emphasizes the need for a field identification pulse—otherwise, who knows, off-hand which is the first field in any frame?

"You have to resolve to the proper phase of the wave—that's very important for both lip sync and for stereo," says Liftin. "And then you must have an indication, whenever you're recording, an indication to the engineer whether or not you're locked to field." He says that the only way to keep proper wave phase is to run a dual trace oscilloscope and watch both signals throughout the recording: Stereo TV, as do all technological advances, requires its additional hardware.

From among the hash of conflicting opinions and techniques that inevitably ensues whenever audio output is produced by the mouths of audio people, it seems to this observer that Liftin and Kletter symbolized, that night, the ends and the means of better audio (read please, eventually: stereo) on TV. From filmmakers like Coppola and commercial-producers like Kletter come the demands. Liftin, in the forefront of fulfilling those needs, has been busy mapping the territory for us all. Multitrack TV is already with us, from a production standpoint: studios such as Regent have gone as far as they have because, as Dick Mack of National Video Center (one of the top video production facilities in New York) says, "Do your sound at a sound studio—not at a video editing facility. The dual expense may not even add up to more, considering how long you may work to get what you want, and can't get, in the way of sound in a video house."

A word of caution from Mike Kletter: "I only dread that when we do have stereo delivery on TV, some client will call me up and say, 'we all know everybody hears better in their right ears, how come you put that important line of the left channel?'" ■

MUSIC NOTES

Revised Projects for Musicians

An "all-new revised edition" of Craig Anderton's *Electronic Projects for Musicians* is now available from Guitar Player Books (\$14.95). It includes specific plans and assembly instructions for 27 different projects including preamps, phase shifters, noise gates and even instrument cables (not as simple a subject as you might think).

Anderton begins with the very basics—explanations of the fundamental electronic principles at work, the tools you'll need and how to use them, and a discussion of the various types and grades of parts to choose from. Each of the projects is introduced with an explanation of what it does; schematics, parts lists, construction tips and illustrations make everything clear; and there's a section called "how it works" which explains the electronic operation of the circuit.

A soundsheet bound into the book includes demonstrations of the sounds and A/B comparisons of instruments with, and without, the effects in the book. It comes in handy when you've finished building a circuit and you want to know whether it's performing properly.

I think it's possible for someone who's never wielded a soldering iron before to read this book and get right into some of these projects, but that's not to say that *Electronic Projects for Musicians* is for beginners. Anyone who uses things like phase shifters and ring modulators should know how they work, and as Joe Walsh points out in the introduction, "You never reach a stage where you know it all. 'Gadgetry' is a very cumulative study."

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Video Music

Fans of Music Video programming may want to check out the Videofile Newsletter put out by Soft Focus Productions in New York City. In addition to news of the realm, the newsletter includes the Rockamerica Video Chart, a listing of the most popular promo clips played

in clubs, colleges and record stores around the country.

Editor Ed Steinberg tells us that this month's top ten goes like this:

1. DONT YOU WANT ME

by Human League/A&M

2. RADIO CLASH
by The Clash/Epic

3. THE MODEL
by Kraftwerk/Capitol

4. QUESTIONNAIRE
by Chas Jankel/A&M

5. AINT WHAT YOU DO
by Fun Boy Three/Chrysalis

6. SUPERFREAK
by Rich James/Motown

7. GLORIA
by U2/Warner Bros.

8. HOMOSAPIEN
by Pete Shelley/Arista

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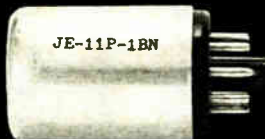
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Roland/Steinberger Collaboration

It hasn't been officially announced yet, but Roland Corporation and Steinberger Sound have been "studying the feasibility" of manufacturing a line of Steinberger basses with pickups and electronics for use with the Roland GR-33B bass synthesizer. The award-winning Steinberger is a reinforced-plastic bass with superior intonation and sustain, making it ideal for use with synthesizers. The GR-33B is already a popular item on the market, with either of two Roland bass guitar controllers.

"Jerry Casale of Devo and Ben Orr of The Cars have both expressed interest in being able to use their Steinberger basses with their GR-33B's," explains Ron Wilkerson of Roland. "The GR-33B may even perform better with the Steinberger." A prototype is in the works; watch this column for further developments.

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Local Musicians Have a Friend in Denver

Sometimes the hardest part of being in the music business is The Business. Single artists and bands are usually too busy making music to worry about promotion, distribution and record sales. But, for musicians in the Denver Colorado area, help is available in the form of *Hummingbird Enterprise*. This small but energetic and dedicated group, led by Larry Kotic, has been working for the better part of the last two years to promote and market local talent and assist artists on their road to success.

"We believe that Colorado is rapidly becoming 'the third coast,' says Jeff Franek, spokesman for the group. "The Denver area is one of the fastest growing areas of the country and it's a hotbed for talented musicians. We've tried to put our energies into supporting the local community of artists." Hummingbird was started as a musicians organization where, for a fee, artists, songwriters, bands, etc., were supplied with computer generated lists of contacts at record companies, booking agencies, recording studios,

producers, publishing companies and other pertinent businesses.

Hummingbird then set up a sophisticated distribution network for local albums in record and music stores all over Colorado. Field reps were sent to stock the stores with local releases and to promote live performances. Distribution was followed up by an intensive market research program using a computer to do demographic breakdowns of the city and surrounding areas to find out which records were selling, where they were selling, who was buying them and what kinds of music were most popular. This information is used to analyze how best to promote each artist they work with. All record sales are closely monitored in each location and every month, each artist receives a notarized printout of sales, sales activity, and a check for his share of the album. The computer printouts can be used to verify local sales when an artist is negotiating with a major label.

One of the Hummingbird's newer clients, Dusty Drapes & The Dusters, serves as a good example of their promotional approach. Dusty's band, an institution in Boulder, recorded their album at Mountain Ears Studio with producer Jim Mason. John Aldridge, owner of Mountain Ears, recommended the band to Hummingbird. After analyzing the band's following and their potential record sales, Hummingbird took on the project. They mounted a thorough and well planned promotional campaign which culminated in a Friday night concert and album release party. The event was held at the Boulder Theater, a former movie theater recently renovated into a music house with a superb sound system installed by Jean-Marc du Mouchel. Local radio station, TV station and newspaper people were feted before the show. The new album was sold at the show while Dusty and the Dusters did their usual rousing country swing performances. Record sales were tracked there and the next day when the band did two half-hour promotional performances at a local shopping mall to introduce their music to a new audience. "Because Dusty's band has such a large following, we feel they can sell at least 15,000 copies of the album," said Jeff Franek. The album will be distributed locally and the band will be able to keep track of how the sales are doing every month. Pete Adams, keyboard and fiddle player for the band said, "If and when the band goes national, it will be because of the help we've gotten from Hummingbird. We couldn't have done it without them." ■

by Bruce Dancis

Judging by their prodigious output, Bernard Edwards and Nile Rodgers haven't gotten much sleep in recent years. As the driving force behind Chic, one of the leading disco/sophisticated funk groups ever since they released their first (gold) single, "Dance, Dance, Dance" in the fall of 1977, they've been working at a non-stop pace for nearly five years. Musicians (on bass and guitar, respectively), songwriters, arrangers, and producers, Edwards and Rodgers not only steered Chic through five albums—*Chic*, *C'est Chic*, *Risque'*, *Real People*, and 1981's *Take it Off*—but also lent their quadruple-threat talents to LP's by Sister Sledge, Diana Ross, and Blondie's Debby Harry.

Like many outstanding musicians, success did not come quickly or easily for Edwards and Rodgers. They began working together in New York City in the early Seventies, when the two were about 18 years old. After playing in bands that performed at parties, bar mitzvahs and the like, they finally got a chance to back top-notch performers—Edwards with Millie Jackson, Rodgers with Aretha Franklin. Yet they were never able to play on records, Bernard Edwards explains, "because there was a clique in New York, musicians like Gordon Edwards, James Jamerson, Chuck Rainey," who got those sessions.

Although their first actual recording experience occurred in 1976, when as members of the Big Apple Band they made four demos with producer Leon Pendarvis, it wasn't until they formed Chic a year later that Edwards and Rodgers were given a chance to produce. "At the time," says Bernard, explaining why he and Rodgers decided to produce Chic themselves rather than using a more experienced producer, "it cost a lot of money to get a producer with a name. It didn't make sense to try a new producer or someone unknown—you might as well do it yourself." According to Edwards, they learned their craft "just by being in the studio and watching friends". They give much credit to engineer Bob Clearmountain, who "had a great respect for black music" and "taught us a lot of things we didn't know anything about". In developing their production style, Edwards says that he and Rodgers were influenced by both Motown and the Philadelphia sound (Gamble & Huff, Thom Bell), and especially Quincy Jones.

Of course, Edwards and Rodgers wouldn't have gotten a chance to

CHIC



Bernard Edwards and Nile Rodgers.

develop a production style at all had not Chic caught on like it did. Explaining Chic's initial concept, Edwards points out that when disco was booming "a lot of the groups that were doing disco hits were the old groups, and the kids couldn't identify with them. So we wanted to dress the way we saw the kids in the disco [dressing]. We wanted to look the part as well as sound the part. We wanted to sound hot, like a city band, but not too funky."

Bernard and Nile's first outside project, a disco hit by singer Norma Jean Wright ("I Can't Wait Till Saturday") that sold about 150,000 copies, occurred right after recording the first Chic album. Following the second Chic LP, they piloted a major international success: Sister Sledge's *We Are Family*. "We felt really good about it when we recorded it," Bernard says, referring to the title cut. Like all the songs on the album, "*We are Family*" was written by Rodgers and Edwards, "but we didn't know or expect it to do what it did." He points out that "a lot of people said that we were crazy in not keeping it for ourselves, but we felt that Kathie's [Sledge] voice really did justice to the song".

Following the success of *We Are Family*, the duo's record for outstanding productions, songs, and musicianship has continued through three more Chic albums, another Sister Sledge LP and solo efforts by Diana Ross and Debby Harry. They have also produced a European hit for Sheila and B. Devotion, a forthcoming Teddy Pendergrass movie soundtrack cut entitled "Dream Girl", and a yet-to-be-released album

by Johnny Mathis.

All of Edwards and Rodgers' work has been done at New York's Power Station. "That's where we started," Bernard explains. "When we went in, there was only one room and cement walls. And now there are five or six studios, and it's the Number One studio in New York. We like the people, we like the sound, and the surroundings are really good for us. So we stick with what we feel good with." The current recession in the music industry has caused them to cut production budgets and economize, but, Edwards says, "We have a good time still."

Even more than the recession, Edwards admits that the decline of disco hurt Chic. "We were more or less considered the Number One disco group. So when disco died, a lot of the stations wouldn't even pick up our records because they didn't want to be associated with disco. But what we're starting to see, of course, is that people are still dancing to music, and dance music is on the rise again."

Based on Chic's latest album, Edwards and Rodgers are adapting to changing tastes with their usual grace and style. *Take It Off* moves away from disco into modern, dapper funk, with a little bit of rock & roll thrown in. And, of course, it is irresistibly danceable. As Edwards puts it, "We want to broaden our whole spectrum as to what we can do and what we're about. We're going step by step, and we expect a rough time. We want to get to a point where we're established and we're considered a consistently good performing and recording act." ■

KEYBOARD ART

by David Gans

Our *Digital Keyboard Report* in the February Mix attempted to bring you up to date on the "leading edge" of synthesizer technology, definitely a moving target. This month we've collected comments from some synthesists working in a variety of styles, touching on their attitudes toward the tools currently available and inviting their opinions on what's to come. We also asked them to name some musicians who've inspired and influenced them and to cite a couple of outstanding recorded examples of the art of synthesis, as well as describing their working setups.

Responses ranged from the self-effacing attitude of Jefferson Starship bassist/keyboardist David Freiberg, who describes himself as "a background player," to Pat Gleeson's total commitment to his Synclavier and the pursuit of pure art. The common denominator among all of these players is thoughtfulness about the role of the instrument, respect for others in the field, and willingness to share their ideas with the rest of us.



TOM COSTER

Fantasy Recording Artist

Tom Coster's signature solo sound is defined by an ARP Pro-DGX, a single-voice, touch-sensitive preset synth with "around 16 patches

and a couple of variables," according to Coster. But Coster uses only one of the DGX's settings, and the sound can be heard on his new album, *TC*, in 'The Prince.' "I tried to get the sound of the DGX on my Minimoog," says Coster, "but the filter system is

different and I can't duplicate it exactly."

Coster and his co-keyboardist for live performance, Tim Gorman, play in the same U-shaped keyboard array in live situations. The instruments include a Yamaha CP-70 piano, a Prophet-5 (Rev 2), the Pro-DGX, a Dyno-My-Piano Rhodes, a new Oberheim OB-Xa, a Minimoog, and an older 4-voice Oberheim. These keyboards are fed through four separate pedalboards and into a 16-input Peavey mixer. The pianos are run through Boss Stereo Chorus units; the Prophet, Mini Moog and the Oberheims use Boss Chorus Echo and Boss Analog Delay. "I found that with rack mounted stuff, I was at the mercy of the settings unless I wanted to keep running back and forth," Coster notes. "So I have Christopher pedalboards, each with its own power supply, for each keyboard area." Countryman and Troupier Series direct boxes are used to interface the keyboards to the mixer.

One half of the mixer's output is used to provide a separate keyboard mix to the other band members, and the other side is the main (monaural) keyboard mix. The house mixer takes a separate feed, though, so that Gorman's and Coster's sound can be balanced from the house.

Coster uses a three-way Peavey system consisting of three CS-800 stereo power amps—with plug-in crossover modules for frequency selection—driving a Peavey Project 4

ITS FORUM

cabinet. "The Project 4 is clean and efficient—tremendous sound from a small enclosure," Coster enthuses. "The 18" bass driver faces down, which saves space; the 12" midrange driver and the horn face forward, as usual."

Coster solos on a Moog Liberation, which he runs through a Peavey MX Series tube power head and two 4-10" cabinets. He uses an Electro-Harmonix Memory Man Deluxe to overdrive the amp with a small amount of delay and chorus. "As a keyboard player, I've always envied instruments such as brass, reeds and guitar, where you can put your own personality into a note by bending it—not in a controlled way with a slider or a wheel, but with heart. The Minimoog put that

dimension into my life," says Coster, "and the Liberation is even better."

Coster had his Liberation modified somewhat, replacing the ribbon controller with a pitch wheel and changing from high- to low-note priority. "When you're going for a guitar sound, high-note priority doesn't sound orthodox," says Coster. "It doesn't make sense."

Asked to name synthesists who've influenced or inspired him, Coster puts Jan Hammer at the top of the list.

"I like the way some players use their synthesizers orchestrally, but I don't like their soloing. You can't approach a synthesizer like a piano—you've got to play string parts like string parts, an organ patch like an organ, and so forth."



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things? What appeals to me are sounds that are unique unto themselves," says Mitchell Froom. "I like sounds that have a lot of depth, that sound like they might be some real instrument, but one that you've never heard before."

Froom's keyboard setup includes a Prophet-5, a Roland Jupiter-8 (his favorite synth), a Vocoder-Plus, and a modified Baldwin Electro Piano. The last, he says, is "the kind of piano they use in schools, with 88 keys but not really designed for serious playing or road use. It's supported in a road case, and that's set into a larger road case. But it has the kind of piano sound I like, which is sibilant and bright. I use that kind of brightness in conjunction with a lot of synthesizer sounds to add a certain kind of depth that you sometimes can't get with a synthesizer alone."

In learning an instrument's capabilities, Froom says, "you have to spend those tough hours at home alone, just messing around with it. I ran the Jupiter through my home stereo and just sat there for hours, moving knobs, trying every combination. Occasionally you'll discover a new pathway; you'll combine this here with that over there and get a whole new branch of sounds."

"It takes hours, but sometimes the difference between a great sound and a terrible sound is just a 20th of an inch on one knob—suddenly a sound comes to life!"

Though the Roland is Froom's favorite synthesizer, he notes that the Prophet's factory presets are "a better indication of what you can get out of the instrument than the Jupiter's." He has completely reprogrammed both instruments, but he says he really only has around 60 sounds from which he works. "If you have 60 basic sounds, you can get to where you're going." He prefers the Prophet for "midrange sounds—bell tones, flutey sounds; it has a better cut. The Jupiter has a more crystal top end and a beefier bottom—really lush sounds," he says.

He was shocked, he says, to learn that none of the sequencers on the market will run from a taped click track. "To use it [on *Gamma 3*], we ran the click track into a Linn Drum Machine, which triggered the sequencer," he says.

Froom prefers to use sequencers, and even the arpeggiators that are built into the synths, in "more unusual ways. I'd prefer to program in a sound that you'd never expect to hear used as a sequencer sound, so you're not quite sure what it is. I've even found a way

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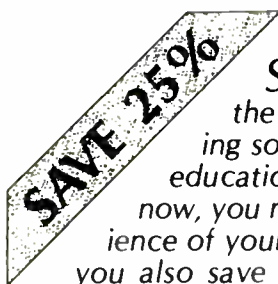
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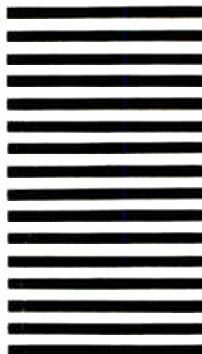
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of using the arpeggiator so it repeats itself on one note really quickly. It sounds like a guy playing bells or something."

Froom has looked at some of the new digital synthesizers, but he hasn't been convinced yet. "With some of them, you're locked into the presets, and the way you can alter them is minimal. I object to that completely," he says. "And the more

sophisticated computer synthesizers require much more technical knowledge. You can't really hold down a note and mess with the sound—you've got to build it, then stop and rebuild it. And synthesizers aren't spontaneous enough to begin with. I love having the ability to get close to a sound, then alter it until it's just perfect."

Ultravox's *Vienna* and Peter

Gabriel's latest album are two recent recorded examples of good synthesizer use, according to Froom. "The records I like best use a lot of depth in the synthesizer sounds," he says. "A lot of bands surprise me with the lack of thought they put into their music, the cheesy sounds they use. Certain bands have an elegance of expression, and others just seem like one-joke acts."



BILL CUOMO

Studio Synthesist, Kim Carnes Band

"These instruments are as good or as bad as the limitations people place on their own thinking," says synthesist Bill Cuomo, whose most recent claim to fame is having arranged Kim Carnes' Grammy-winner, "Bette Davis Eyes." "You can make a \$20,000 digital synthesizer sound great, and you can make it sound equally bad."

Cuomo recently acquired an Oberheim OB-Xa to his performance system, which already includes a Prophet-5. "I'm really getting into using the OB-Xa and the Prophet together," he says, "because they complement one another. The Oberheim has freed me up for soloing; the joysticks give keyboard players the fluid concept that's so nice

about guitars."

Cuomo's Prophet-5 is a three-year-old model which he had modified slightly. The power supply was removed from the cabinet, the connection now being made with an eight-conductor Cannon connector. "There was too much heat right next to the main chips," he explains. "That—and *never* flying that thing as baggage—means that I can rehearse 16 hours a day for a month and that thing won't give me any trouble."

The two synthesizers are mounted in a single rack, along with a Boss Chorus and "either a digital delay or an Echoplex, depending on which one happens to be running at the time," Cuomo says. Amplification is provided by a Roland JC-120

driving a pair of "giant" JBL enclosures. "They give me humongous bottom in live performance situations," he says.

Cuomo sees the new generation of digital synthesizers as potential "moviolas for composers." With their built-in multitrack function, he notes, "you can run your frames by again and again, trying all the parts out. You can play everything into one main storage bank, then hit 'Start' and it'll play your composition back, completely orchestrated." He's not prepared to make the investment yet, though. "I think they're like Pulsar watches when they first came out," he comments. "The technology is brand-new; what if they're obsolete in another year?" His main complaint aside from cost is that the digital synths he's heard sound "a little metallic."

He is very enthusiastic, however, about the new Oberheim 6000 Digital Sequencer and Linn Drum Machine he recently bought. "The sequencer is also a digital recorder, I'm told, so I don't have to fire up my eight-track recorder until the very end," Cuomo observes. "I can put everything I want into the sequencer, then hook it up to the Linn to play it and decide whether or not I like it before I let it go onto tape."

Keith Emerson, Jan Hammer and Joe Zawinul get the nod from Cuomo when asked to name synthesists he admires. But he also cites David Foster, David Paich and other studio players for "the consistency of their work, especially under really adverse conditions." Cuomo was very much impressed with Steve Winwood's *Arc of a Diver*, and his saxophone patch on "While You See a Chance" in particular. "That got me all fired up about solo synthesizers," he says.

Foreigner 4 is another favorite. "There are a couple of songs I'm not wild about," he says, "but the consistency and the way it's engineered are incredible. 'Waiting For a Girl Like You' shows the synthesizer's capacity to blend in and add a lot of nice icing without changing the basic feel of the song."

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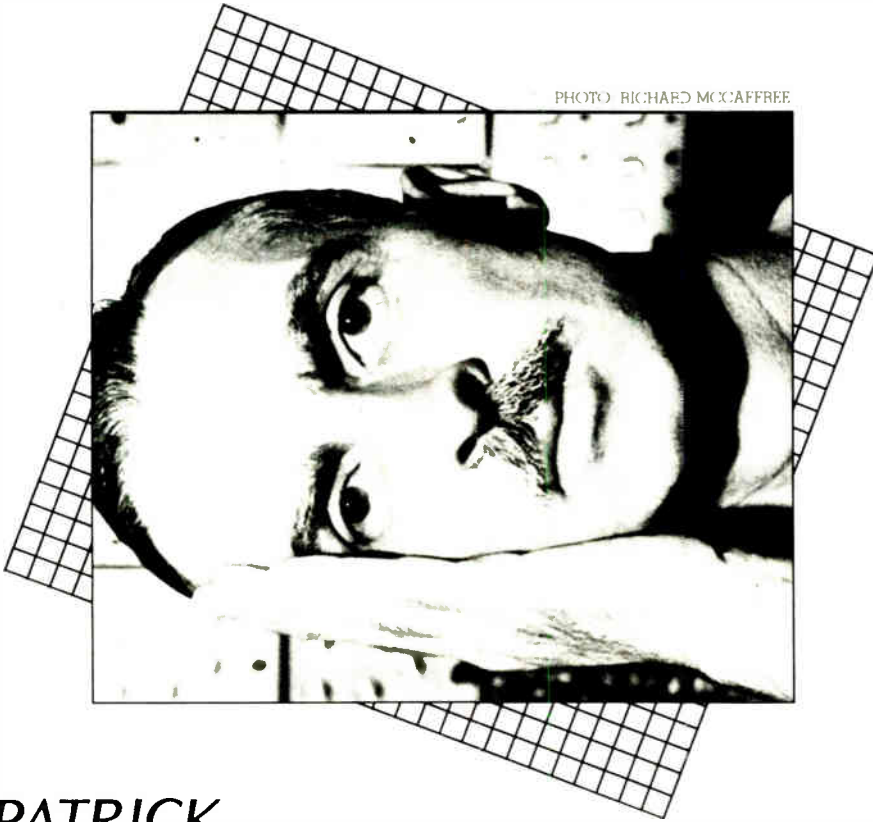
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PATRICK GLEESON

Recording Artist, Studio Owner

Patrick Gleeson sold all his other equipment when he got his Synclavier. "Whenever another 'next stage' comes along, people dabble in it—but it's hard to leave what they've been doing," he says. "So they incorporate it into what they're already doing, and the result is that they don't get as far—musically or technologically—as they could." By removing the familiar instruments from his studio, Gleeson says, "I cut off my supply" and had to plunge into the Synclavier with all his heart and mind.

The instrument Gleeson purchased is a 32-voice version with dual disk drives and a video-display computer terminal. He programmed all the sounds for his realization of Vivaldi's *The Four Seasons* (Varese Sarabande Records) on his Synclavier II, then borrowed a second one. "We linked them up, and I made stereo [computer] disks," he explains. The album was recorded "digital to digital," with the two Synclaviers replaying the complete work from computer memory to a Soundstream digital two-track.

Programming sounds on a digital synthesizer, says Gleeson, is a "classic interactive process. You go after something, and in the process

you are amazed by the machine. They you say, 'I can do better than that—I can do this!' You go back and forth; there's a lot of feedback in the process."

Gleeson's work in synthesis dates back to the Tape Music Center (now on the campus of Mills College, Oakland, CA) and the first Buchla synthesizers in the mid-'60s. Though he has just completed a record that represents the newest in digital music systems, he is turning his attention toward composing for natural instruments in the score for the film *Plague Dogs*, due out later this year. He has used the Synclavier as a visualizing tool—trying out orchestrations using the computer—but, he says, "one should get past that as quickly as one can."

Wendy Carlos' recorded synthesizer work, particularly the music from *A Clockwork Orange*, are classic examples of analog technology, says Gleeson. "There's a piece on the album, 'Time Steps,' which is gorgeous," he says. He points to *The Four Seasons* as proof that digital instruments can be made to sound as good as analog. "We didn't use 24-track recording," Gleeson points out, nor was there any external signal processing between the linked-up Synclaviers and the digital two-track recorder.

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PETE SEARS & DAVID FREIBERG

Jefferson Starship

"The ideal setup would be to have a grand piano—you'll never be able to beat a string piano—and just one synthesizer that can reproduce

the organ, strings, leads, and whatever else you need," says Jefferson Starship multi-instrumentalist Pete Sears, who shares keyboard duties in the band with David Freiberg.

The Starship's stage setup includes a Prophet-10, a Korg BX-3 organ, and a Yamaha CP-80 piano.

"There's a blank space where we used to use an ARP Quadra," says Freiberg. "It's in Pete's house now, because it didn't hold up too well on the road." Both men express interest in replacing it with a Minimoog—which was the Starship's solo synth until the 1976 incident in Germany in which all the band's equipment was destroyed.

"When I play the synthesizer, I use it for backgrounds," says Freiberg. "I don't consider myself a soloist—I'm an accompanist." Asked who his major keyboard influences are, he laughs and says, "Chico Marx! But seriously, folks, I listen to a lot of keyboardists and they all blow my mind. I never really try to imitate anybody, but I'd like to be able to make sounds like Jan Hammer... and Roger Powell, of course, and Joe Zawinul."

Sears played piano and organ during his years in his native England, and didn't encounter a synthesizer until he joined the Starship. "It was a big Oberheim, with an upright panel facing you with sliders and patches," he recalls. "We used it for 'Hyperdrive,' on the first Starship album. It came into the studio, and I fiddled around with it until I found something I liked, recorded it, and

Coming This Fall:

(Note Schedule Change)

SEPTEMBER

- Southern California Studio Listings
 - Film Sound Update
 - Synchronizers
 - Oscar Peterson
 - Narada Michael Walden
 - Tangerine Dream
- ad closing: July 15

OCTOBER

- North Central Studio Listings
 - Special Report: Loudspeaker Technology
 - Stage Monitors
 - Rock Video Update
 - Lionel Ritchie
- ad closing: August 16

NOVEMBER

- AES New Product Listings
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(continued from page 76)

then I never saw it again."

"What comes to mind is getting a string setting and feeling like I can become an orchestra," he says. "But I also love strange noises, like the things I did with the Prophet-10 on 'Alien' [on *Modern Times*]. But I don't like taking away the human element in music; the idea is to create an emotion. If it's a mood-creator, then it's art, in my opinion."

Sears has been playing a prototype of the Syntar, being developed in Oregon by a man named George Mattson. "It's like a

Minimoog that you string around your neck," he says. "You control pitch bend, modulation, sustain and noise with the left hand. It feels like you're holding a guitar."

The Starship's keyboard monitor is a custom cabinet built by Ultra Sound from John Meyer components; there are two 15" and one 12" speakers and a horn. "I think it's called an H-1, and I think there are only two in existence," says Freiberg.

A mix of the vocals is fed into the keyboardists' onstage mixer, says

Freiberg, "and we can control the vocal level right through the same set of speakers." It's a Biamp 8 x 2 mix; the sound men take a split and mixes the keyboards for the house and stage separately.

Regarding their future keyboard plans, Sears points out that the Jefferson Starship is just beginning to make full use of its Prophet-10. "We've got this incredible piece of equipment," he says, "and we're only skimming the surface of it. There are so many presets, and we hardly use any of them—it's kind of a crime."



PHOTO: DAVID ARNOFF

LANCE ONG

Studio Synthesist, Producer

"I use most of the instruments that are available," says studio synthesist Lance Ong. "The art of synthesis encompasses the same basic voice configurations, and patches are pretty much standardized among the synthesizers. It's just a matter of which instrument has certain functions or structures which make it convenient to create the sound that the project calls for.

"Because of the two-pole filter, the OB-X has a more subtle cutoff slope, and that makes it better for strings and some brass sounds," says Ong. "The Prophet-5 has a four-pole filter, which has a sharper cutoff point so you don't have as many high

harmonics as with the Oberheim. I think of the Prophet as sort of a Minimoog expanded over five notes."

Digital synthesizers are great for sound-capturing and playing back stored sounds, Ong notes, but "I'm able to create pretty authentic natural timbres when recreating live instruments with analog synths, and for abstract sounds, it's easier to arrive at a mood with analog than digital. With digital, you have to have it in mind to be able to program it, and even then it's not that flexible in terms of expanding the sound. At least with analog synthesizers, you're starting in the ballpark."

Ong performs most of his

monophonic synthesis with a pair of ARP 2600s which have been modified in various ways, aided by external processors such as parametric equalizers and delays. He says Roland's Jupiter-8 is the "most flexible" of the programmable polyphonics, though he never uses preset patches. "Most of the work I do is walking into the studio and determining what would be the best sounds to put on the tracks," he says. "I find that it works better trying to fit a sound into the track when I do my synthesis from scratch.

"Even in performance, the presets are nice for certain things, but it doesn't bother me to create the sounds live," he continues. "I know my way around the instruments and what certain positions of a knob will give me."

He's using an analog sequencer now, but Ong expects to begin taking advantage of the expanding technology in digital sequencing. "The one-line digital sequencers, and even some of the polyphonic, chordal ones aren't particularly useful for the work that I do," he explains. "It would be more practical for me to use some of the digital recording functions that are available in something like the McLeyvier or Synclavier—that'd be like having a tape recorder in my own house as opposed to having something that plays back chords for me."

Ong's training began at age three with classical piano. He studied composition and music theory at UC Santa Barbara, and played in cover bands that ran the gamut of styles, including the hard rock of Deep Purple and Black Sabbath. His influences include Keith Emerson and Miles Davis—particularly the *Bitches Brew* period, when Herbie Hancock was handling the keyboards. He recommends Tomita's *Snowflakes Are Dancing* and Tangerine Dream's *Thief* soundtrack as outstanding recorded examples of the art of synthesis. ■



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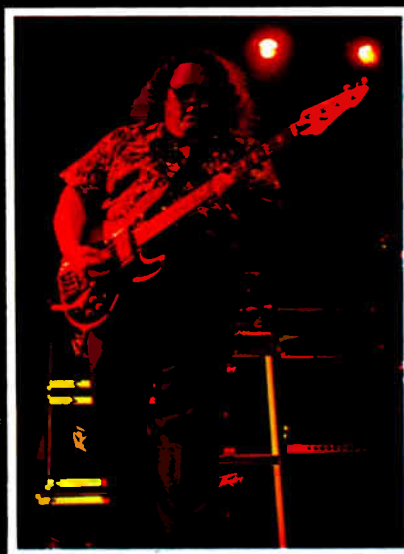
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Off the Record



LAURIE ANDERSON
Big Science
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Produced by Laurie Anderson and Roma Baran; engineered by Leanne Unger; recorded at The Lobby, New York City; mixed at the Hit Factory, New York City; mastered at Mastordisk by Bob Ludwig; plated at Europadisk.

"Performance art" and "new music" becoming mass distributed American pop culture? Think not of the implausible John Cage, but consider the devastatingly appealing Laurie Anderson and her debut LP. Last fall, Warner Bros. took the surprising step of distributing Anderson's "O Superman," eight minutes and 21 seconds of jarring cultural images, gently sweeping electronic music and whole-note rhythms founded on a tape loop of Anderson's voice honking anh, anh, anh. An instant critics' favorite, "O Superman" was so stunning that it just had to be one serendipitous flash of crossover brilliance from the New York avant garde. But it was just a prelude to *Big Science*, and *Big Science* is just one collection of "Songs from 'United States I-IV'."

Since she received her Master of Fine Arts from Columbia in 1972, Laurie Anderson developed from art historian and sculptor into performance artist, violinist and composer, presenting her many works in New York, Europe and at colleges throughout the U.S. She has expressed concern that her creations might not translate to record or endure repeated scrutiny. But with the nine songs on this album, Anderson has successfully transmuted her vocal and sound collages into her own sardonic idioms of pop that resonate in the brain like recurring dreams.

Much of the music will sound familiar to aficionados of Brian Eno and Robert Fripp and the spare but polyrhythmic drums and percussion

are common to the newest wave rock of Talking Heads, Bow Wow Wow and others. The melodies are breathtakingly simple and fall into indelible hooks that underscore the irony of Anderson's lyrics. One listening and you might walk around for days humming "O Superman, O Judge, O Mom and Dad. Mom and Dad." or "Big Science. Hallelujah. Big Science. Yodelayheehoo." or "let X = X" or the frightening, comforting "Here come the planes."

Anderson plays much of the music herself on Farfisa, OBXa, marimba, violin, supplemented by occasional reeds, percussion, bagpipes and handclaps. And her America is modern, technological, jammed with airplanes, telephone answering machines, shopping malls, freeways and drive-in banks; motivated by such bizarre sentiments as "Every man, every man for himself," "Honey you're my one and only, so pay me what you owe me," and "'Cause when love is gone, there's always justice. And when justice is gone, there's always force. And when force is gone, there's always Mom."

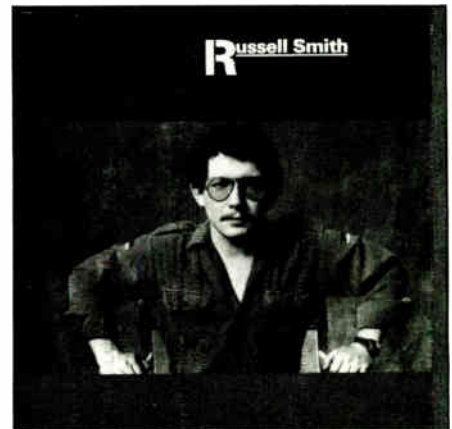
Not only the juxtaposition of everyday images and the use of ordinary language ("This is gonna be some day"), but the textures of Anderson's remarkable voice turn things quite commonplace into messages quite complex and extraordinary. Her judicious use of Vocoder and her emulation of recorded messages and electronic communications ironically emphasize her underlying "we're not really robots" faith. Her singing is often childlike in its directness while her spoken vocals are disturbingly distant. Anderson becomes the perfectly objective voice of pop artificiality and renders what is banal and prosaic alternately harrowing and sublime.

Like any good pop album, *Big Science* has its throwaway cuts, which upon a second or third hearing become little gems. Next to the masterwork proportions of the title song and "O Superman," "Sweaters" and "Walking & Falling" are engaging little miniatures of disaffiliation and despair. All but two of the tunes track under five minutes but you are not likely to hear them popping up on your car radio. Yet the way in which they restructure the stuff of everyday life and play with the ambiguities of meaning and emotion is much more life-affirming and humanly enduring than the trendy syntho-pop of Soft Cell, Depeche Mode and other electro-wave groups.

Anderson is now touring as a fledgling pop star, taking her multimedia presentations into large clubs and small theaters. Having met the challenge of committing her once-in-a-lifetime creations onto a permanent medium, she faces the expectations of a new audience that knows

her by her record. With *Big Science* on her side, it would seem that Laurie Anderson can turn anything around, or over, under, sideways, down. "Why?" the captain asks in "From the Air." "Cause I'm a cavewoman. Why? Cause I've got eyes in the back of my head. Why? It's the heat. Stand-by."

—Derk Richardson



RUSSELL SMITH
Capitol ST 12197

Produced by Barry Beckett and Jimmy Johnson at Muscle Shoals Studios, Sheffield, Alabama; engineered by Gregg Hamm, Steve Melton, Mary Beth McLemore; mastered at Capitol, L.A. by Wally Traugott.

While many may not know the name of Russell Smith right off, there are a few who have not heard his voice: since, as lead vocalist for the Amazing Rhythm Aces, he delivered the seamy tongue-in-cheek drama of "Third Rate Romance (Low Rent Rendezvous)," the beloved motel/signation song that more than a few people could sing in their sleep.

Last year's much-lamented demise of the Aces, generally regarded as the best white soul/country band ever to fly the colors of "Memphis, Ten-O-C" (as they usually wrote it) was another harsh reminder of the realities of the record business. Though the Aces in their five-year recording career put out a string of a half-dozen truly ace albums (plus optional), (containing such marvelous originals as "Burning the Ballroom Down," "The End is Not in Sight," "Dancing the Night Away," "Never Been to the Islands" and "Big Old Brew," and such vibrant covers as "Love and Happiness," "You Left the Water Running" and "Wild Night") they never had a real hit after "Third Rate Romance" and simply could not sustain themselves on the road because the band was a little too big and the business a lot too sour.

So they gave up the ghost; but now at least Smith is back, with an album co-produced at Muscle Shoals by Jimmy Johnson, who had produced the last two Aces albums in the same studios. Smith also co-wrote all the songs (save one he wrote alone) with longtime pen partner James H. Brown, Jr. Thus, since the production, studio and song team are much the same as before, what we have here is something as close to an Aces album as you could get without the Aces; or, put another way, an Aces album that focuses totally on Russell Smith songs and that does away with all the organic inspirations and messiness of

a road group's LP.

The very high class front cover artwork, and the back-cover photos of Smith in spiffy dark blue blazer and tie—an outfit he surely would never have been seen wearing with the raffish Aces—signals the change.

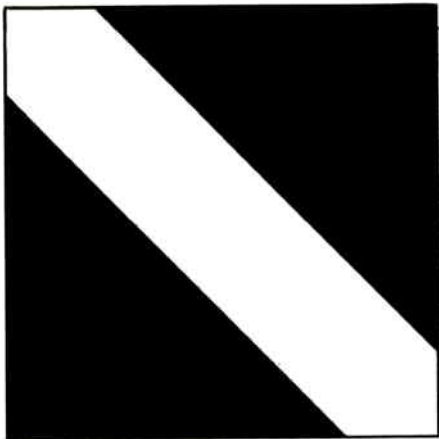
The LP, however, is not a whit less soulful for that, and is indeed one of the finest albums to have appeared this term. The players (co-producer Beckett and James Hooker on keyboards; Pete Carr, guitar and dobro; Larrie Londin, drums; Joe Osborn, bass; plus percussion, backing vocals and strings) provide a tightness, depth, and, most of all, subtly not usually heard on the band's albums. The LP is blessed throughout with haunting tempo and key changes, vocal and string embellishments, and other fine touches, none ever overdone.

Smith's strongest characteristic is the almost overwhelming sense of minor-key tension he is forever able to exploit and then let go of; he seems forever skirting around disaster, but forever strong enough—as the power of the songs themselves symbolized—not only to avoid the danger but to dominate it, creating a delicious sense of resolution that rings in the mind long after the songs have faded.

Suffice it to say that every song, from the beautiful uptempo opener "Your Eyes" to the picture-perfect and inspirational "Someday We Will" to the sensuous "Our Lady of the Blues" to the string-touched anthem "Southern Music," is a masterful blending of elements held together by the masterful and haunting vocalist.

Smith has been touring with an aggregation calling themselves the Muscle Shoals All-Stars, also including Levon Helm. See them if you can; if you can't, get the record. On second thought, get the record no matter what.

—Jack McDonough



DIVER DOWN

Van Halen

Warner Bros. BSK 3677

Produced by Ted Templeman; engineered by Donn Landee.

Producer Ted Templeman may have overstated his case slightly when he likened Edward Van Halen's talent to that of Charlie Parker, but there's no doubt that young EVH is exploring and exploding the boundaries of guitar possibilities. Nearly every cut on *Diver Down* reveals another facet of the guitarist's

phenomenal skill at chording, filling and soloing—plus a couple of decidedly un-heavy-metal interludes: a piece called "Cathedral" sounds as though it's all played with the volume control and left-hand hammering; "Little Guitars (Intro)" features delicate, Spanish-flavored figures played on a classical guitar; and "Intruder," the prelude to "(Oh) Pretty Woman," goes straight for the gonzo sound-effects. The obligatory chainsaw action fills out the rockers, and nobody gets the overtones out of a guitar as effortlessly as Edward does. "Secrets" is a moderate-tempo number, and Van Halen's guitar sounds as clean as a Jeff Baxter line from a Doobie Brothers song.

There are some interesting surprises on *Diver Down*. In addition to "(Oh) Pretty Woman," the Roy Orbison classic released as a single in advance of the album, the band also covers Ray Davies' "Where Have All the Good Times Gone" and the great "Dancing In the Street," giving the latter a slightly more leaden beat than the original but imparting the characteristic Van Halen *fun* quotient. "Big Bad Bill (Is Sweet William Now)" is a swing number from several decades ago, rendered here in good-time fashion with a clarinet line played by Jan Van Halen, the father of Edward and Alex. The song might be a small joke on Edward, who was recently married, since it deals with a boozier-bruiser who gets married and settles down. And the closer of the album is an *a cappella* rendition of "Happy Trails," the Dale Evans-penned closing theme from the old Roy Rogers TV show.

David Lee Roth demonstrates considerable vocal skills on *Diver Down*, shifting registers in his singing as easily as Edward Van Halen does in his guitar playing. "Full Bug" starts out over an acoustic guitar, with Roth wheezing like an old black bluesman, and then explodes into full-throated boogie. He handles "Big Bad Bill" with the good-humored tone it requires, then on the rest of the album returns to the metal shouting that made him and the band famous. Sure, Van Halen ain't The Beatles, but they've certainly demonstrated that there's more to metal than Ozzy Osbourne and Motorhead.

—David Gans



ORNETTE COLEMAN

Of Human Feelings

Island AN-2001

Produced by Ornette Coleman; engineered

by Ron Saint Germain and Harold Jarowsky; recorded on Sony PCM 1600 digital 2-track recorder; recorded at Columbia Recording Studio, New York.

Coleman has been a powerful innovative voice in jazz for the better part of three decades, and with his newest intrusion into funk, he seems to be taking it a step further. The theories of "harmolodics," which he began formulating in the 1950's, are being practiced more today than ever, and could have implications as far as even pop music.

Of Human Feelings was recorded three years ago, and features Coleman's current touring "Prime Time Band." (Record companies have shown a penchant for keeping Coleman albums in the can for about three years before releasing them to the public.) As new as this music seems, it is sometimes surprising how closely the rhythm section straddles the disco fence. Their strong point is the ability to groove—to find it, then sit on it in spite of all the melody, counter melody, and sub-melody whirling all around.

Drummers Demardo Coleman (Ornette's son) and Calvin Weston work well together, often splitting themselves up to attack different parts of the trap set. They kick out decidedly upbeat rhythms, and Jamaaladeen Tacuma, who sometimes sounds like about five bass players, pushes ever forward, maybe even leaning a little ahead of the beat. Listen closely and you'll hear Tacuma playing his own melodies underneath the urgent beat of "What Is The Name Of That Song?" Tacuma starts several of the songs, and there's no mistaking the beat when he does. There are no ballads on *Of Human Feelings*—everything bounces.

Ornette's alto sax is joined by guitarists Bern Nix and Charlie Ellerbee. One of the guitarists usually plays a unison or harmony part with Coleman on a written melody, while the other comps or picks his way, carefully avoiding the melody. The guitar sounds vary from rich, round jazz tones, to crisp funk voicings, to linear Hendrix-like distortion blasts. Nix and Ellerbee have been with Ornette since the historic *Dancing In Your Head* [A&M SP-722] and *Body Meta* [Artists House 9401] sessions, and their work here demonstrates a special chemistry. The songs here are shorter than on the above-mentioned releases, and that works to advantage. The "heads" of the tunes jump out of the grooves with more force, not to mention the fact that it makes for a better party record! It was the surface simplicity of Coleman's writing that struck me upon first hearing *Dancing In Your Head* a few years back, and that style has remained with him. Coleman's sax cries are very human. His music projects a certain non-sophistication (perhaps "anti-sophistication"), but can he ever blow. A couple of the songs here show Coleman at a compositional peak as well.

One of the most enjoyable aspects of this record is the separation between the two drummers, and between the two guitarists. Each player's contribution to the overall music can be easily heard. The recording is super clean, but still full of the feeling of this superior band.

—Robin Tolleson

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