

JANUARY 1981

THE RECORDING INDUSTRY DIRECTORY

\$1.50

Mix



Laservision

New Wave

Theater

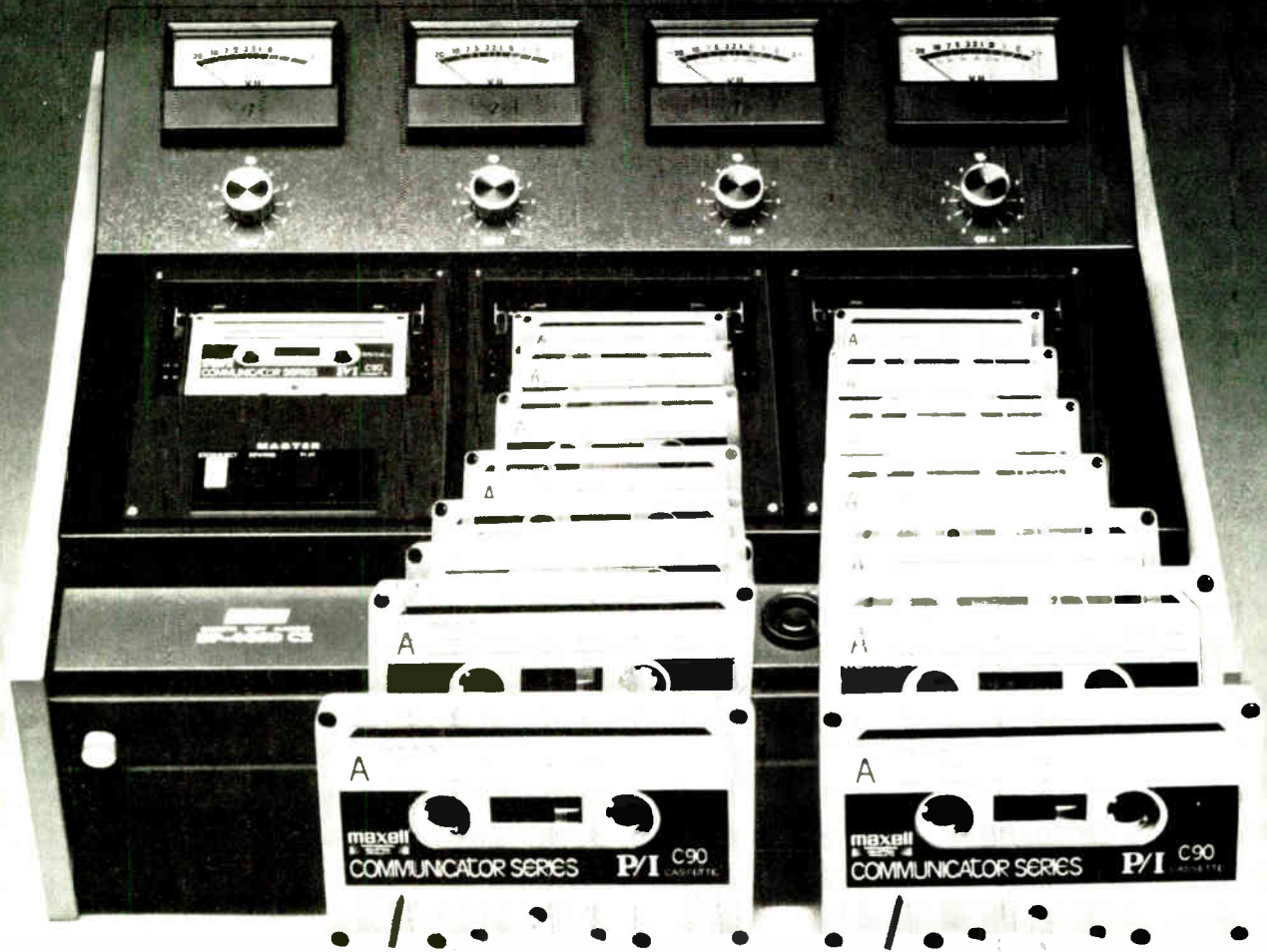
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Recording

**Listings: N. California
and Northwest Studios**

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VOL. 5, ISSUE 1

JANUARY 1981

INSIDE

As we move into our fifth year of publication we'd like to share with you some of our plans for 1981.

The recording studio listings have always been an important part of the Mix and this year, for the first time, we are listing studios throughout the entire United States. To do this, we are dividing the country into six areas. This being January, we are listing the Northwest region; February, Southeast; March, Southwest; April, Northeast; September, Southern California; and October, North Central. For more specific breakdowns on these areas, please write or call us.

As for the rest of the year, each issue will also have a special direction. May and November are AES months and these issues, as usual, will have listings of new audio products.

June will be our first ever Video Focus issue, geared toward providing our audio readers with a custom-tailored package of video information and our newer video readers with an awareness of the importance of audio quality. (But we aren't really waiting until June to deal with the quickly growing video scene, as evidenced by our new monthly column, *Video Interface*, by Ken Fay, and frequent articles like "New Wave Theater" in this issue.)

In July our issue will feature Recording Services, with a variety of listings including remote recording, tape duplication services, independent engineers and producers, recording schools and other valuable information.

August will also be a very special Studio Design issue, spotlighting the latest architectural/acoustical innovations and the people responsible for the most creative recording environments.

Wrapping up the year, December will once again be our Tape-to-Disc issue.

No doubt about it, 1981 will be a year to stay in tune with the Mix.

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CURRENT

Northern California Studios No Building Crunch Here

As 1981 gets under way, the Northern California recording scene, and the Bay Area in particular, appear to be experiencing a renaissance in terms of new and updated facilities. Not since the mid-1970's, when studios were opening left and right, has the area seen such a tremendous surge of growth and change.

Probably the biggest development—at least that which has received the most attention nationally—was the opening last summer of the new *Fantasy Records* studio complex in Berkeley. The capstone of this multi-million dollar project, the Sierra/Hidley-designed Studio D, is the most advanced studio ever built in the Bay Area. The Neve/NECAM and Studer-equipped room is an acoustical and aesthetic feast, which Fantasy hopes will attract an international clientele. The studio's manager, record business veteran Roy Segal, reports that outside bookings are increasing steadily—and markedly so in the case of Fantasy's mastering room, operated by George Horn.

According to new *Automatt* manager Michelle Meisner, their recent Carlos Santana/Herbie Hancock album, "Swing of Delight", bears the distinction of being the first multi-track digitally-recorded LP produced in Northern California. ("Swing was recorded on a 32-track 3M system furnished by San Francisco's Audio-Video Rents.)

The past six months have also seen the completion of the total reconstruction of Pat and Patty

Gleeson's *Different Fur*, a Harrison/MCI facility designed by John Storyk. The former Wally Heider studio complex has reopened under the name of *Hyde Street Studios* with the merger of two local 16-track studios, who have installed their own 24-track equipment—including one of the area's first Otari MTR-90's. Another notable achievement has been the building from the ground up of *Russian Hill Recording*, a two-room 24-track facility designed by Jeff Cooper (and profiled in this issue of *Mix*).

The construction boom continues in San Rafael, north of San Francisco, where work is nearly complete on *Tres Virgos Studio*, a spacious 24-track facility designed by Chips Davis. This I.E.D.E.-certified studio is scheduled to open in early 1981, and will be equipped to do media production as well as music recording.

Also in Marin County, the *Sausalito Record Plant*, one of the Bay Area's first multi-track studios, is undergoing a rebirth of its own. Under new ownership for the past year, Record Plant is about to undertake major acoustical redesign of both Studios A and B—including louvered, tunable trap systems and new isolation booths. Significant equipment additions are also planned, according to Engineer/Administrator Steve Malcolm.

In the South Bay, at Menlo Park, *Music Annex* is continuing the growth that has made it one of the most progressive studios in the area. The Annex

has grown to a three-studio 24/16-track complex (Neve/MCI/Amek) geared to handle the diverse needs of demo, album, and media clientele. At the same time, according to President David Porter, Music Annex is paying close attention to the merging of audio and video technology, and intends to pursue an interface with video.

Further to the south, in San Jose, *Ayre Studios* in mid-1980 became Northern California's first MCI-automated 24-track studio. At last report, Ayre was engaged in an extensive redesign of its control room acoustics. Not far away, in Santa Cruz, *Fane Productions* also acquired automation for its MCI-equipped studio.

Many smaller studios have also been part of the general trend toward growth or upgrading. To borrow from the prose employed by one studio in a recent ad, it seems that "the beat of the hammers sets the rhythm tracks, while drills, saws and sanders/sing harmony..." If studio clients prove as plentiful as the studios' ambitions, 1981 should turn out to be the best year for Bay Area recording in a long, long time.

API Update

In early August, 1980, the assets of Automated Processes, Inc. were sold at public auction. Since that time there has been considerable confusion and false claims concerning both the manufacture of and the legal rights to the API professional audio product line.

Kappa Systems, Inc. of Arlington, Virginia, purchased the company name, all design rights and all manufacturing documentation at the public auction. On September 10, 1980, Kappa Systems executed a licensing agreement with Datatronics, Inc. of Reston, Virginia for the manufacture and marketing of the entire API product line. This is the only licensing agreement in existence.

While this is a new venture for Datatronics, the company is no stranger to the API product line. For the past two years Datatronics has manufactured much of the API product line for both API and API customers. Modules are in production at Datatronics and will be available through a network of national and international distributors. All API drawings, test procedures and test fixtures are in the possession of Datatronics and are being used to insure the exact duplication of the original API product.

Video Show Sets New Directions

Opportunities for professional audio in the video marketplace came further into focus at Billboard's 2nd International Video-Music Conference, November 20th at the Sheraton-Universal Hotel in Los Angeles. Among the major announcements in this rapidly expanding field came news of an association of several videodisc system manufacturers, in order to promote compatibility and acceptance of the laser disc format (see Committee Report.)

The four day event also included a panel discussion where leaders in professional audio recording discussed their plans and opinions on how video might affect their operations. Mack Emerman, president of Criteria Recording Studios, announced a joint venture agreement between Criteria and New York's Unitel. The new status would allow Criteria the ability to do video

productions as well as computerized editing and film to tape processing.

Chris Stone of L.A.'s Record Plant informed the assembly of plans to build a scoring room that would handle 80 to 100 musicians, and would enlarge their capabilities in handling film and video projects. Murray Allen, new SPARS president and head of Universal Recording in Chicago, stressed that studios need to diversify as never before; and International Automated Media's Skip Konte felt that we are entering an area with a larger potential than the peak audio years.

Other convincing opinions and demonstrations by Moogy Klingman, of Moogtown Productions; Michael Wuerigler, of Osmond International Entertainment Center; and Elliot Mazer, of One Pass Audio; reinforced the idea that the 'Golden Age of Video' for audio producers has arrived.

Datatronix is a wholly owned subsidiary of Atlantic Research Corporation, a Northern Virginia based high technology company. Resources available to both.

Raata Audio Systems, Inc., Hollywood, California, has been named West Coast distributor for the Automated Processed, Inc. (API) line of audio products.

Digital Audio Record

The Telefunken Television and Radio Corporation, Hanover, and Teldec (Telefunken-Decca) Record Corporation, Hamburg, have jointly developed a system for a digital phonograph record. Telefunken/TELDEC recently demonstrated their "MD" (Mini-Disk) System before the Digital Audio Disk Conference (DAD) in Tokyo. This conference was convened for the purpose of writing a standard for a digital phonograph record format. The DAD is an organization of about fifty international audio equipment and phonograph record manufacturers, and Telefunken is the sole German entertainment electronics company which belongs to this organization. The standard proposed by Telefunken/TELDEC permits one hour of stereo to be recorded on each side of a 135 mm (5.3") record turning at 250 revolutions per minute. The standard, furthermore, permits up to four discrete wide-band channels to be accommodated in a single groove.

Sheldon to R.F.

Merrill Sheldon has been hired as chief engineer for R.F. Rents & Sells, (A division of Filmways Audio Services.) Prior to this position, Sheldon worked for the White House Communications Agency for 7½ years. In his former job he was in charge of all traveling communications systems all over the world. He will be based in North Hollywood with Filmways Audio Services.

AV/Scharff Digital Pact

Scharff Communications, of New York City, has been granted exclusive rights by San Francisco's Audio Video Rents to supply 3M digital recording systems in the Eastern United States. Scharff will be responsible for bookings, while AV Rents engineers will run and maintain the equipment. AV Rents has also made a reciprocal agreement with Record Plant, in Los Angeles, to handle any bookings on the West Coast that Record Plant cannot fulfill, and vice versa. This combination arrangement allows studios throughout the United States to rent 3M digital equipment and factory trained engineers.

Best Builds TV Audio Van

Best Audio has purchased three Ampex MM-1200 multi-channel recorders and three ATR-100 Series recorders for installation in the

first television audio mobile van. Headquartered in Hollywood, California, Best Audio is designing a custom built mobile unit for recording stereo and bilingual television programs. Laurence H. Estrin, president of Best Audio, said the mobile van will be used by the ABC television network for the live broadcast of the American Music Awards in January and the Academy Awards in March.

"Construction of the first remote truck is just the beginning of a new business. We expect to get involved in recording productions around the world and will record almost exclusively on Ampex equipment," said Estrin.

Kelly Heads New Firm

Klark-Teknik Electronics Inc., is now the exclusive United States distributor for the Klark-Teknik and Statik-Acoustics product lines. The new company will handle all sales and service from their offices at 262 A Eastern Parkway, Farmingdale, NY 11735. (516) 249-3660. Heading up the operation is Mr. Jack Kelly, formerly the Sales Manager for Klark-Teknik products at the previous agent, and most recently located in Chicago as a manufacturers' representative.

Schroeder Appointment at Shure

Shure Brothers Inc., Evanston, Ill., has announced the appointment of Donald "Sandy" Schroeder to the newly created position of marketing manager, loudspeakers—with responsibilities for planning, developing and marketing all of Shure loudspeaker products. Prior to joining Shure, Schroeder was with Jenson Sound Laboratories, in a similar position.

JBL Promotes Feingold

Jerry Feingold has been promoted to Vice President, Manufacturing Services at James B. Lansing Sound, Inc., it was announced by JBL President Jerry Kalov. Feingold's appointment to this newly created post is part of a general staff reorganization within the company's manufacturing division.

Ampex Appointment

Richard Sirinsky has been appointed marketing manager of Ampex Corporation's Audio-Video Systems Division, it was announced by Donald V. Kleffman, vice president-general manager of the division. Sirinsky will develop and implement marketing activities for the division's professional audio and videotape recorders, broadcast cameras, switching systems and computerized editing and video storage systems. He will be located at the corporate headquarters in Redwood City California.

Booth to TDK

TDK Electronics Corp. has announced the ap-

pointment of Douglas G. Boothe to the post of western district industrial/professional sales manager. The announcement was made by corporation vice president and general manager, Ken Kohda, and is effective immediately. Boothe is charged with the responsibility of developing TDK's audio and video industrial/professional sales base throughout the western region of the country.

Ursa Major Loan Program

Ursa Major, Inc. of Belmont, MA has announced the loan of a Space Station SST-282 Digital Reverberation System to each of five schools for use in their audio programs. The schools which submitted successful proposals to the Ursa Major School Loan Program were Fredonia State University College, the University of Iowa, the University of Miami (Florida), Purdue University, and San Francisco State University. Starting in January, 1981, each school will keep the Space Station for the duration of a school term or proposed project, and will then document what it has learned about reverberation and signal processing for Ursa Major.

Altec Appointments

Gary Rilling, National Sales Manager, has announced the appointment of Bill Haddon and Perry Harris to the newly created positions of Regional Sales Manager for Altec Lansing. Bill Haddon will be Western Regional Manager, covering the Western two-thirds of the United States (including Alaska and Hawaii). Perry Harris is to be Eastern Regional Manager, serving the remaining continental United States.

Broadcasting Equipment Show

Audio & Design (Recording) Ltd. has announced that the Sixth Sound Broadcasting Equipment Show will be held on Tuesday, 29th September, 1981, at the Albany Hotel, Birmingham, England. The show will take the same format as other years with admission strictly restricted to invitation only. Full details of space allocations and admission are available from Miss Carol Pottinger, Audio & Design (Recording) Ltd., telephone Reading (0734) 53411. Telex 848722 a/b ADRUK.

Randee International Formed

Howard Massler, President of The Bestway Group, has announced the formation of a new subsidiary, Randee International Productions of New York City, a full-service operation formed to fill the needs of small record companies and individuals. Allen Sherman was named Vice President/Operations. Randee will arrange for minimal single and album pressings at a reasonable cost, 8 track and cassette duplication, artwork, printing, fulfillment and mailing, music publishing, local, national and international distribution and record promotion.

COMMITTEE REPORT

Society of Professional Audio Recording Studios

215 S. Broad Street, 7th Floor, Philadelphia, PA 19107

Murray Allen, of Universal Recording Studios, the newly elected president of **SPARS**, has unveiled details of the new membership structure:

Regular Membership includes those in business at least two years and having at least one 24-track recording facility, and/or a state-of-the-art disc mastering establishment and/or a facility providing audio for video/film with on-line capability of 24 channels. Membership dues are \$1,000 per year.

Affiliate Membership includes all other professional audio/commercial recording facilities. Membership dues are \$500 per year.

Advisory Associate Membership includes any company presently engaged in providing services and/or supplies for the recording industry, not qualified for membership in any of the above categories. Membership dues are \$2,500 per year.

Associate Membership includes any company or individual presently engaged in or utilizing the services of the recording industry, not qualified for membership in any of the above categories. Membership dues are \$250 per year.

Professional Audio Dealers Association

6363 Sunset Blvd., Suite 200, Hollywood, CA 90028

Dave Kelsey, acting as temporary national chairman, has announced the formation of a national trade association for professional audio dealers.

PADA is to be headquartered in Los Angeles, California. Initial membership is limited to dealers of professional audio equipment whose sales exceed one million dollars annually. The purpose of the organization is educational in nature, with emphasis on successful business operation.

A national media campaign will be mounted to help educate consumers on PADA and its members. Interested dealers should contact Mr. Kelsey, in care of Filmways Audio Group, 6363 Sunset Blvd., Suite 200, Hollywood, CA 90028. (213) 466-5474.

Audio Engineering Society

60 E. 42nd St., New York, NY 10017

Leo deGar Kulka, founder and first President of the San Francisco Chapter of National Academy of Recording Arts and Sciences, has been elected Chairman of the Northern California Chapter of the Audio Engineering Society.

Kulka serves as Dean of the San Francisco based College For Recording Arts.

LaserVision Association

c/o Manning, Selvage & Lee, Inc.,
99 Park Avenue, New York, NY 10016

Formation of the LaserVision Association, a trade association to promote consumer recognition of reflective laser optical videodisc technology, was announced November 20, 1980, at the Billboard Video Music Conference in the Sheraton Universal Hotel by the Association's spokesman Frank L. Randall, Jr., Vice Chairman of North American Philips.

The charter members of the Association are companies involved directly in the manufacture, production, marketing and promotion of reflective laser optical videodisc products: DiscoVision Associates, MCA DiscoVision, Magnavox Consumer Electronics Company, and U.S. Pioneer Electronic Corp.

North American Philips' Magnavox and U.S. Pioneer Electronics Corp. both produce LaserVision videodisc players that accept the program

discs produced by MCA. DiscoVision Associates produces discs that are compatible with both players.

"When consumers purchase electrical appliances in the United States, they don't give a moment's thought to whether or not the plug at the end of the wire will fit the socket in their wall," Mr. Randall said. "Likewise, when a consumer buys a player or disc with the LaserVision mark, he or she will not have to be concerned whether our products will fit together and perform at maximum efficiency."

While several corporations are involved in the reflective laser optical videodisc technology, each markets some individual products that are compatible with the others. The system is the playing, through any TV set, of unusually high fidelity programs featuring stereo capability. Videodiscs are played via a low-power laser beam that tracks grooveless permanent discs.

The LaserVision Association's board of directors will consist of James N. Fiedler, President, MCA DiscoVision; Ken Kai, Executive Vice President, U.S. Pioneer Electronics Corp.; John C. Messerschmitt, Vice President, North American Philips Corporation, and Jack Reilly, President, DiscoVision Associates.

Membership in the Association will be open to all others in the field.

Creative Audio and Music Electronics Organization

10 Delmar Ave., Framingham, MA 01701

CAMEO has announced that Harrison Systems of Nashville, TN has recently joined the organization. CAMEO, a non-profit manufacturers association was formed in 1978 with its main focus on the entry level user of professional audio and music electronics equipment. The organization exists to meet the needs of a rapidly growing market and provide materials and programs for the industry that were beyond the abilities of individual manufacturers.

According to Larry Blakely, CAMEO President: "We feel that Harrison's participation in CAMEO is a significant milestone and further illustrates that all professional audio and music electronics manufacturers have a common goal, the growth of a healthy, prosperous and long lasting industry. We look forward to further participation from additional dedicated manufacturers who share our vision in the building for the future of our industry."

CAMEO is currently writing brochures on The Basics Of Multi-track Recording and The Basics Of Sound Reinforcement Systems.

Atlanta Songwriters Association

P.O. Box 1306, Marietta, GA 30060

The Atlanta Songwriters Association recently sponsored a showcase during Georgia Music Week in which finalists in four categories performed before an audience of 500 and a panel of music industry judges. Winners received a quantity of recording tape and six hours of recording time at several Atlanta studios.

The association has received commitments from major publishers and producers, such as Jim Ed Norman, to listen to and consider songs written by its members and submitted through the association. Before a song is played for a publisher or producer, it is screened by an **ASA** critique panel to assure that the song has commercial potential. As ASA board member Don Bryant explains, "We're saving the publisher and/or producer time by, in effect, doing a major part of his job for him. The reason a lot of publishers won't listen to outside material is because they may have to listen to two or three hundred bad songs just to find one or two good ones."

The panel also offers suggestions on how to improve the song and what areas in general the writer needs to concentrate on in order to improve their writing. ■

Why Go Digital... When Digital Can Come to You?

Without question, the era of digital recording is upon us. Digital has become the ultimate technological step for any successful studio or recording artist. Now, through the combined resources of Audio Video Rents, Scharff Communications, and Record Plant of Los Angeles, studios anywhere in the United States can offer the astonishing performance of the 3M 32-track digital recorder to their clients.

As a result of two recently-concluded agreements, studios may now **rent** a 32-track digital recorder and stereo mastering machine, **plus** the services of a factory-trained engineer. Through this unique arrangement, studios EVERYWHERE may enjoy the benefits of digital recording, without bearing the high costs of a purchase commitment.

If you're ready for digital, we'll come to you—wherever you may be located in the United States or Canada. Call today for details.

In San Francisco call:

Audio Video Rents
(415) 781-2603

In New York call:

Scharff Communications, Inc.
(212) 582-7360

In Los Angeles call:

Record Plant
(213) 653-0240

New realms of expression from MXR.

The Pitch Transposer is MXR's newest addition to our professional line. It is one of our most innovative products, and possibly the most revolutionary signal processor in the music industry today. It is a unique, high-quality unit which provides a cost effective and flexible package for today's creative artists.

The Pitch Transposer extends your musical boundaries by creating live instrumental and vocal harmonies. It has 4 presets which allow the artist to predetermine the intervals to be processed. Transposed intervals can be preset anywhere from an octave below to an octave above the original pitch. The chosen interval is activated by means of touch controls or a rugged footswitch. LED indicators display which of the four presets has been selected.

A mix control is provided, enabling the unit to be used in one input of a mixing console, or with musical instrument amplifiers. A regeneration control provides for the recirculation of processed signals, creating more and more notes, depending upon the selected interval. This results in multitudes of voices or instrumental chords. An entire new range of sound effects and musical textures, unattainable with any other type of signal processor, is suddenly at your fingertips.

With many other pitch transposition devices a splicing noise, or glitch, is present. The MXR Pitch Transposer

renders these often offensive noises into a subtle vibrato which blends with the music, and is, in some cases, virtually inaudible. The result is a processed signal which is musical and usable.

We have been able to maintain a high level of sonic integrity in this most versatile signal processor. The frequency response of the processed signal is beyond 10 kHz, with a dynamic range exceeding 80 dB.

A micro computer based display option allows the user to read the created harmonic interval in terms of a pitch ratio, or as a musical interval (in half steps). This unique feature allows the pitch to be expressed in a language meaningful to both musicians and engineers.

We designed our Pitch Transposer as a practical musical tool for those actively involved in creative audio. It reflects our commitment to provide the highest quality signal processors with the features and performance that will satisfy the creative demands of today's musical artist. See your MXR dealer.

MXR Innovations, Inc., 740 Driving Park Ave.,
Rochester, New York 14613. (716) 254-2910





THE A80VU MARK III... ANOTHER UNAPPROACHABLE STUDER!

No other multitrack recording system has ever neared the degree of perfection attained by STUDER, and the new A80VU Mark III represents one more milestone in the decade-long production of this classic machine. As always, STUDER sets and maintains the standard for the industry.

This newest A80 from STUDER has been outfitted with a completely redesigned, "close proximity" headblock for virtually undetectable drop-in/drop-out operations and totally reliable performance in the most demanding situations. Actually, the repositioning of the erase/record/playback heads is one of the few modifications made since the A80's inception, the original design being so advanced that a revision would be meaningless.

The new A80VU Mark III system includes a 20-address memory, microprocessor controlled, programmable autolocator with channel remote, which enables all tape deck functions to be operated within easy reach of the engineer at console position. The autolocator remote control is packaged as a fully-adjustable, freestanding unit.

As with all A80 models, the Mark III functions flawlessly and with satin smoothness—a machine worthy of its name and the absolute confidence professionals place in it.

STUDER A80VU Mk III
Shown with 20-address memory
autolocator and channel remote

STUDER THE VOICE

Studer Revox America, Inc. / 1425 Elm Hill Pike, Nashville, TN 37210 / (615) 254-5651
Offices: Los Angeles (213) 780-4234 / New York (212) 255-4462 / Canada: Studer Revox Canada, Ltd.

SESSIONS

NORTHWEST

Stoneground was at **Calypso Records** in Marin County, CA, recording some new material. Phone Bill, a 13-piece band from the East Bay backing up Tabby, Judge and Bunny from the Mighty Diamonds from Jamaica recording live new reggae material. **Michael Verchiani** and **Dan Ryman** engineering. At **Different Fur** in San Francisco, Tazmanian Devils with **Eric Jacobsen** of Sweet Reliable Productions producing, return to the studio to complete their album for Warner Bros.; **Steve Mantoani** engineering and **Don Mack** assisting.

At **Studio C** in Stockton, California, San Francisco artists **No Sisters** are finishing up their soon to be released single with **Drew Palmer** engineering and **Jim Chen** producing.

SOUTHWEST

Louisiana Recording Services in Alexandria, LA, has incorporated to form a new company, Southern Recording and Video Productions, Inc. Recent sessions at Louisiana Recording Services include a just finished album by Billy O'Con of Natchitoches, LA titled **Empty Pockets**. Material is also being compiled for the first album by **Red Beans and Rice Revue** of Lafayette, LA. This will be a live album recorded at the Grant Street Dance Hall in Lafayette.

In recent activity with **Omega Audio's** 24-track remote truck, based in Dallas, Elektra/Asylum artist **Ronnie Montrose** and **Gamma** cutting 24-track and a live radio simulcast over KZEM-FM, Dallas, at the Bijou Club. **Ronnie Montrose** producing with **Paul Christensen** at the board.

Rainbow Sound, Inc. of Dallas, Texas, is currently putting the finishing touches on the album **Loud And Clear** for gospel singer **Jack Price** and has scheduled release of the album in December.

ACA Recording Studios in Houston, Texas, just finished the **Houston Album For Big Music American Contests**, engineered by **Bill Holtford** and **Andy Bradley** and **David Edney** producing.

NORTH CENTRAL

At **Shade Tree Studios** in Lake Geneva, Wisconsin, the new rock band **Flex** has just completed production of their debut 45 rpm E.P. It was produced by **Jack Le Tourneau** and

engineered by **Andrew Waterman** for the Rude Record label.

The **Roadside Band**, a southern rock group from St. Petersburg, Florida, has just completed recording their debut album titled **A Storm's About To Brew** at **KBK/Earth City Studios** just outside of St. Louis, Missouri. **Billie Kessler** engineered. Kessler also helped to produce along with **Randy Enwright** and the **Roadside Band**.

Recording activity at **Studio A**, Dearborn Heights, MI includes **Ron Banks** producing **Karream** for Baby Dump Productions, **Eric Morgeson** engineering. **Khalid Onyx** laying down tracks for his self-produced project, **Eric Morgeson** engineering.

SOUTHERN CALIFORNIA

At **The Pasha Music House** in L.A., the **Gary English Project**, with **Marko Perko** producing/arranging/writing, with **Gary English** on lead vocals and keyboards. The sessions at the Hollywood studio are engineered by **Duane Baron** with **Mikey Davis** assisting.

The **Houston Recording** remote truck from Cucamonga, CA was in downtown Los Angeles to record the L.A. Street Scene. Groups recorded live include **Cliffie Stone Revue**, **Nightwatch**, **Twisters**, **King Bees**, **Toronto**, **Bogert-Cochran-Errico**, **Michael DesBarres**, **Moaciz Santos**, **Sumner**, **Bus Boys**, **Great Buildings** and **Savoy Brown**. Engineers were **Rich Houston** and **Chris Huston**; stage crew were **Tom Clarke** and **Paul Westerhoff**. **A-1 Audio** provided the sound reinforcement, with **David Danksy** and **Kim King** engineering. At **Sunset Sound** in Hollywood, CA, **Nicolette Larsen's** new album for WB is completed. Produced by **Ted Templeman**, engineered by **Jim Isaacson** with assistance from **Gene Meros**, and **Bill Champlain** is in working on his album for Elektra with **David Foster** producing, **Humberto Gatica** engineering, and **Steve McManus** as assistant.

NORTHEAST

At **M&I Recording** in New York City, **Rodney Jones**, is producing and recording his new album with a group of musicians, including **Fred Lipsius/Woodwinds** and co-producer (formerly with **Blood, Sweat & Tears**), **Buddy Williams**/drums, **Marcus Miller**/bass and **Kenny Kirkland**/keyboards.

At **RPM Sound Studios** in New York City, **Rupert Holmes** recording a new album for MCA with engineer **Mike DeLugg** assisted by

Dominick Malta, and **Crown Heights Affair** recording for De-lite Records with engineering by **Neal Teeman**.

Kewall Records is announcing their newest release of a 45 rpm of the **Old Westbury Ensemble** entitled "No Gas" and "Over And Over". The group consists of alumni and undergraduates of the music department of the State University of New York, College At Old Westbury. The songs were written and produced by **Vincent Lotito** in conjunction with **Keith A. Gutschwager** of **Kewall Records and Recording Studio** in Bayshore, New York. Also at Kewall Recording **Robert Carlton** has just completed the recording and mixing for the new 45 entitled "Going All The Way" and "Punk" for Kewall Records. Engineering was done by Keith and Walter.

SOUTHEAST

Ronny Montrose (of the band **Gamma**) was recently mixing some tracks at **Trilad** in Fort Lauderdale, Fla. with **Peter Yianilos**, of **Artisan Mobile Recorders** engineering and **Vincent Oliveri** assisting. The songs were recorded live and video taped as well at a concert in Tampa.

In at the **CBS Recording Studios** in Nashville recently was **Suzanne Mitchell**, Director of the **Dallas Cowboy Cheerleaders** working on tracks for the first single by the **Cheerleaders** "We Love The Cowboys".

At **Arden Recording** in Memphis, Tennessee, **Joe Simon** has been producing an album with **Porter Wagoner**. The album which will be released on the **Posse Label** was arranged by **Lester Snell**. Engineer for the session was **Robert Jackson**, and "Mon Belle Amour" is the new single by **Ann Peebles** which was recorded for **Creem Records**. **Homer Banks** and **Chuck Brooks** produced the session.

At **Axis Sound Studios** in Atlanta, GA, **Kurt Kingel** is mixing tapes of a **Miami Allman Brothers** concert for an upcoming **King Biscuit** radio show, and 360 with former Cowboy member **Tommy Talton**. **Ovie Sparks** will be working the board.

Don McLean (of "American Pie" fame) was at **Sound Emporium** in Nashville. He and engineer **Billy Sherrill** (not the CBS producer of the same name!) were mixing an album. Don recorded live at several of his European concerts.

At **Studio Four** in Dothan, Alabama, the **Woolvin James Band** is putting the final touches on their first album for the **Raven Records** label. Producing is **Jerry Wise**.

STUDIO NEWS

Ward Archer announces the opening of a new 16-track studio bearing the name **Cotton Row Recording** in Memphis, Tennessee. The studio opened its doors September 1, 1980. Cotton Row Recording was acoustically designed by Phase Audio of Memphis under the supervision of Stephen Durr and Associates of Nashville. It is operated by Ward, owner; and his associate, Nikos Lyras, who has experience as an engineer/producer with a studio in Greece.

At **Salty Dog** in Van Nuys, CA, **Molly Hansen** takes the position of Studio Manager and engineer **Brian Vessa** has been promoted to the position of Chief Engineer.

At **Studio C** in Stockton, California, plans are now being drawn up by Architectural Acoustician **Jeff Cooper** for a new 24-track facility which is planned to break ground in March of 1981.

Artisan Recorders in Fort Lauderdale, Fla. are pleased to announce the recent addition of **Scott Strawbridge** as General Manager of the company.

Five advertising campaigns featuring music composed and recorded at the **Soundshop** in Nashville have received Addy Awards. The awards were presented in October by the American Advertising Federation for competition among advertisers in the central U.S. including Missouri, Kansas, Iowa and Nebraska.

In anticipation of another great year, **Comfort Sound** in Toronto, Ontario, Canada, has now expanded its facilities to 16-track with the purchase of an Ampex MM1200 recorder.

Sensa, an 8-track recording studio in Sunnyvale, CA, is one year old now. It opened for business November 1979 after eight months of construction. During its first year it has specialized in recording local rock and roll bands and song writers demonstration (demo) tapes. Sensa recently added **Stan Cotey** to the engineering staff and Stan has modified and upgraded all of the equipment as well as designing and building custom outboard gear for the studio.

Intersound Inc. has just begun operations of its new ultra high speed **ADR Studios** located at 8746 Sunset Blvd., Los Angeles, CA. The studio features a unique multi-track computerized system for film looping and sound track sweetening. This new facility is capable of handling a project from inception to completion and ensures both speed and quality. Intersound can provide translation, adaptation, talent, dubbing directors, titles, original music scoring and sound effect production.

Soundcastle Recording Studios in Los Angeles, has just installed, after seven months of testing and extensive research, the new 810 Neve 48x32 Mixing Desk.

NOTE: The Mix welcomes press releases on studio activity. Please send to "Sessions," c/o Mix Magazine, P.O. Box 6395, Albany Branch, Berkeley, CA 94706.

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PROGRESSIONS

THE REAL ISSUES

by Larry Blakely

In the last two years digital audio processing has attracted a tremendous amount of press coverage concerning its advantages and future. Recording studio owners and operators are wondering how digital will affect them and others are questioning the effect digital will have on the industry in the short and long term.

We have heard a lot, and have not actually seen much. We have been told of digital's advantages, and shown how it operates, but, in my opinion, most of this talk and published material has not addressed the real issues.

Audible Quality

This is, of course, a very subjective matter. Many respected members of our industry object to the audible quality of digital. What are they hearing that they don't like? Have they become so accustomed to the audible characteristics of the analog process that they prefer it to the different audible characteristics of another process? Or does digital in its current form have some serious problems that have not been identified, addressed or talked about?

The Real Advantages or Disadvantages of Digital

The claims of the digital process that we usually hear are increased signal to noise and dynamic range, extended frequency response, dramatically lower distortion, and no audible noise increase or other normal types of degradation over multiple tape generations. What do the recording engineers have to say about the digital tape recorders after they have lived with them for a while? Are they pleased or displeased with the results and why?

Standardization

What is the attitude of the studio owners, producers and mixing engineers with regard to standardization? Is this consideration important? How compatible are the machines currently available? Will other machines to be introduced soon be compatible with any of those currently

OF digital

available? Are there any plans for standardization? Can digital tape recording ever come into full bloom in the professional recording industry without standardization? Will lack of standardization be the death of digital tape recording?

Affordability

When recording studios obligate themselves for a digital tape recorder costing over \$100,000, how will they pay for it? As the record labels have dramatically cut back on record production costs will they bear the additional cost for digital tape recording? What is the attitude of studio owners and record companies regarding the use and cost of these new machines?

Stage of Development

Is digital processing still in its very early and formative stages and will it improve in the future? How much room for improvement is there? Are the currently "lower cost" digital tape recorders capable of what is considered professional quality recording?

Price Reduction

At the present time, digital multi-track tape recorders are very expensive. Will this always be the case or can we look forward to the day when a digital can be purchased for the same or less than a comparable analog tape recorder? If

lower priced machines will exist, what compromises in quality or features are there likely to be?

Disc Mastering

If there are a number of digital tape recording formats, must disc cutters purchase a digital tape recorder for each format? (Not likely!!) Will the recording studio have to take their digital tape recorder to the disc mastering studio along with their master tape? Will the disc mastering studio find it necessary to rent the specific digital tape machine for each digital master tape?

Electronic Editing

Some digital tape recorders utilize very costly electronic editing systems. Will the studios bear the cost burden of these editing systems? Will the digital tape recorders that feature more conventional editing methods gain greater popularity?

Popular Records

Will there be any perceptible increase in quality for the listener of popular digital recordings on car radios or inexpensive record playing equipment?

Can Analog Get Better?

Have we heard the last from analog? Has it gone the full route? Can it now or in the future be any better? Is digital the kick in the pants that engineers and manufacturers need to further improve the quality of analog tape recording. Would this be desirable or even an advantage for the studio owner?

• • •

In the next few months this column will address these concerns in detail. We will be interviewing various manufacturers of digital tape recorders, recording studio owners, mixing engineers, record companies and record producers to get their feelings. I am sure that you will want to stay tuned in as we attempt to place all of the cards on the table. ■

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STUDIOSCOPE

PRODUCTION Companies

by Dennis Buss and Chris Haseleu

It is just about as difficult to come up with an all-encompassing definition of a production company as it is to define the "best" acoustical design for a studio—each individual situation is unique. Some production companies are formed to produce commercial work: jingles, corporate A-V, etc. Others deal primarily in live music. Still others concern themselves only with remote recording. Some companies are short-lived, project-by-project operations structured primarily to finance a demo session. On the other hand, some have existed for years and ultimately will become the core of a new record label.

Taking all of the above into consideration, our definition of a production company is a legal organization that is structured to coordinate the numerous activities required to complete the recording aspects of a project.

Most mid-size recording studios have in-house production companies specifically designed to produce live music projects—usually on an ongoing basis. The studio owner (or other person in charge) takes on the role of an independent producer—coordinating the activities to record a "hot-group" or to cover a new, dynamite song that was just discovered. Accordingly, the balance of our discussion will cover the functions, organization, and operations of **independent** production companies.

FUNCTIONS

Usually, studios are exposed to a wide variety of new, untried artists or groups—they might be in the studio cutting a demo tape; or someone might introduce the artist or band to the studio owner or another staff member. The independent producer (in our case, the studio owner) functions in discovering which of these artists have commercial potential. Good songs then have to be found, or selected if the artist writes his or her own material. The next activity of the independent is critical in finding that "hit sound": the supervision of the recording session. The creative input by the producer here is what usually makes or breaks the new artist.

ORGANIZATION

Our definition of a production company suggested that it should be structured as a legal organization. This means the company should be considered an on-going, separate entity from the actual studio operations. There are a number of ways this can be done: the studio owner creates a separate company and runs it as a sole proprietorship, or maybe the owner and chief engineer form a general partnership to produce artists. However, the most common is the corporate form of organization. The advantages of this structure are many.

Record production is a high risk business. If unfortunate operational problems arise, the assets of the studio are protected from creditors of the separate production company, and from other legal proceedings against the company. Only the assets of the corporation—the production company—can be touched in these proceedings.

It takes a lot of capital to properly finance recording projects. Production companies that are structured as corporations usually have an easier time securing investment capital from outsiders, since banks and other lending institutions tend to look favorably on this stable type of legal organization. The way corporations are taxed is a common example of a disadvantage of the corporate structure. However, most independent production companies could qualify under the requirements of a "sub-chapter S" corporation. In this case, net income by the corporation is taxed by the IRS as personal income of the owners—thus avoiding double taxation.

OPERATIONS

Independent production companies can operate in a number of ways. Some will produce a master without any record label contract, and then turn around and attempt to lease or sell the master to a label for a high enough price to cover production costs and royalty agreements. The company might enter into an agreement with a label to supply a certain number of masters of new artists, over a specified period of time. Or the

company might coordinate the recording of artists already under contract to a label—or, in other words, act as an outside A&R department for the record company.

Although the above activities are the most common, some independents operate in other areas: producing radio jingles, developing A-V presentations for corporate and agency clients, producing demos of material written by aspiring songwriters, etc.

One area that is crucial to the success of most independent production companies is the contract between the company and the record label. Usually called a "Master Purchase" contract, the terms agreed to in this document will play a significant part in the ultimate success of the new artist's career. We do not have the space in this article to cover all of the terms the producer should be concerned with. However, we'll discuss a few of the most important.

Recording Costs and Royalties. Obviously, producers should try to negotiate favorable financial terms. The usual arrangement is that the costs of production are first reimbursed to the producer. Then a royalty rate is agreed upon. This royalty rate has to be high enough to cover the producer's percentage (commonly 3%) and still leave enough for the artist. The current range for this type of contract is 8-10 percent. It has to be remembered that the costs of production that were reimbursed to the producer have to be **paid back** to the label out of the royalties before anyone makes any money.

Percentage Base. Usually the royalties are figured on 85-90 percent of retail sales. The reason for this is to help cover promotional and packaging costs, giveaways, and returns. The percentage base could be negotiable, depending on the producer and the product.

Union Musicians. Because of the strength of the American Federation of Musicians (A.F. of M.), most major labels require independent producers to use union members in the recording session. Contractually, the agreement must contain a "representation of warranty" clause which states that the producer used union members.

There are numerous other terms of the contract that concern the production company that space forbids us to cover. For an in-depth discussion of this topic, the book **This Business of Music** by Sidney Shemel and M. William Krasilovsky (Billboard Publications) is an excellent resource.

The functions, organization and operations of production companies as they relate to the studio is a complex, multi-dimensional topic, one which is difficult to cover in one article. For further information, please feel free to contact the authors in care of *Mix* Magazine. ■



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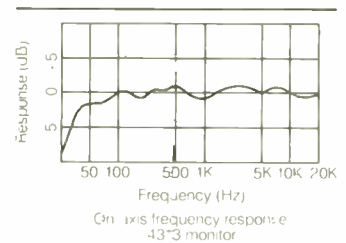
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ness. You can add multi-point search-to-cue and store 20 cue locations. This time-saving tape handling accessory provides tape time readout, cue point readout, "on-the-fly" cueing and more. Other accessories include the PURC™ Record Insert Controller, Search-To-Cue Remote Control, and MSQ-100 Synchronizer for jobs that require more than 24 tracks. Contact your Ampex sales representative for complete details.

AMPEX MAKES IT EXCITING

Ampex Corporation, Audio-Video Systems Division
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Television sound for the Eighties: Stereo Videodisc, Stereo Videocassette, Stereo Television broadcasts... all this and more are creating a new audio marketplace.

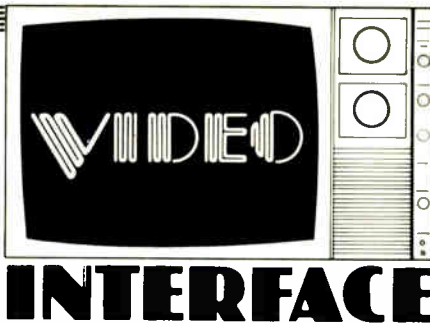
A few factors making audio an important part of the television industry are the MCA Videodisc with two audio channels, a 15 KHz bandwidth and a 65 dB signal-to-noise ratio; the home VHS format having split its mono audio track into stereo and applying noise reduction, thus improving its market position; and the E.I.A. Standards Committee on Stereo Television Audio Transmission Systems currently running field tests for compatibility.

We who are involved in the professional music industry have the ability to get in on the ground floor. This new market is crying for stereo programming right now, and who better to provide quality audio than the ones that have been doing it for years? We have the hardware, and more importantly, we have the skills and personnel. All we need now are the jobs.

So how do we professional music studio people walk into a video production house and get work? We start by learning their language and getting a feel for the techniques that are unique to their industry.

Education

This is free for the asking. Every manufacturer of video equipment would be overjoyed to sell their equipment to us and the more they are able to tell us about their products and how they operate, the better chance they have of making the sale. Manufacturers of video hardware such as Ampex, Sony, JVC, Panasonic, and many others are more than willing to teach what they know. Another source for information is the chief



A New Market Place for Audio

engineer of your friendly neighborhood television station. Not only will he be able to turn you on to local video sales people and reps, but he may be a potential market for your services as he receives the demand for better quality sound and audio projects that are out of his range of expertise.

But let's start at the beginning, before video tape recording, and electronic editing, when all television broadcast was live. The Golden Age of television included all the missed cues, flubbed lines and breakdowns going straight to air.

Then on Saturday, April 14, 1956, Ampex Corporation demonstrated the first video tape recorder. This machine was a 2" quadruplex VTR. It used 2" magnetic tape passing by a rotating head wheel that contained four video heads. It took four complete revolutions of this wheel to complete one full frame of picture. Thus, the commonly used term "two inch quad" arose, (or just "quad," as all quads are 2").

The question may come to mind: Why spinning heads? We sure don't need them in audio. The upper limit in a television, the fine detail, reaches 4.5 MHz. Magnetic tape running at 15 or 30 ips does not have the bandwidth to accept frequencies that high, so the obvious solution was to increase the speed of the tape moving past a fixed set of heads in order to increase the bandwidth. With some very rough calculations you can see that the tape must move at approximately 4000 ips to record a television picture, using a fixed head. As this approach seemed infeasible, the next solution involved moving the head (system) past the tape at 14,400 rpm. To assure maximum contact area the tape was cupped around this revolving head wheel while the heads impacted the tape. As you might guess, this is a fairly hostile situation for magnetic tape.

Another one of the problems was that since sixteen passes were needed to make a full frame, we had to find where the center of each pass was to correctly retrieve the information. We also had to keep the machine running at a constant speed. Enter the control track. By placing a signal linearly on the tape that corresponded to head wheel position vertically, we could accurately predict head wheel positioning as well as speed.

Oh yes, we could also record audio. Well, audio of sorts. There were problems there, too. To record a picture with those vertically oriented spinning heads, the magnetic domains of the tape grain had to also be aligned vertically. But horizontally aligned audio prefers horizontal

Ampex Model AVR 2, quad video tape recorder. Video heads behind cupped tape path left of center, audio heads right of center.





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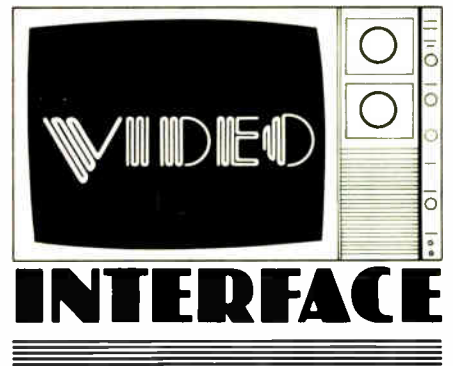
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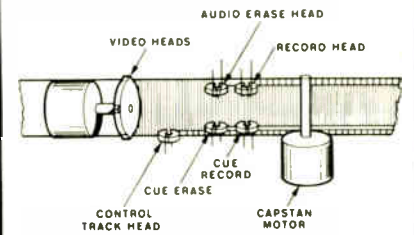


grain. The sacrifice was bandwidth and signal-to-noise ratio. A 5 KHz bandwidth and 38-40 s/n ratio was common, but it had sound in sync with picture. Just like film, but it didn't have to be sent out for processing.

We found out quickly that the format (the way video and audio are physically placed on the tape) was the limiting factor. Audio was horrible, even by 1956 standards, but what could be done?

At this time in history to get a television picture cross country we had to use telephone

Tranverse Recorder



equipment, which at that time consisted of thousands of miles of copper. Tremendous care was necessary to get a video signal anywhere, but we could use standard speech channels for the audio. This seemed to be a chicken/egg syndrome since the quad's audio was not any better than those speech channels. (It wasn't until January 17, 1978 that this chain was broken and the distribution of television audio left the confines of Lo Fi and achieved FM stereo quality.)

The video tape recorder was an overnight success. It would take 25 years, thousands of developments, hundreds of thousands of people dragging, pulling, and scratching to take television to a position where it would be "The Next Great Audio Marketplace."

• • •

Next month we will trace the developments in television and parallel them to audio, to give a perspective on what that "other" industry did for professional audio. Also we'll talk to Charlie Ginsburg, the man who demonstrated the first VTR.

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NEW WAVE

Theater

by David Goggin; all photos by Melanie Bishop

L.A.'s cable *New Wave Theater* opens with the off-camera voice of the show's producer, David Jove:

"All World Stage once again presents the weekly underground TV show *New Wave Theater*, taped live in the Burbank Studios Center—a series dedicated to the changing role and responsibility of music as an art form currently existing under the banner of the exploding New Wave Movement."

The program's host, Peter Ivers, appears in one of his many costumes and delivers a little New Wave philosophy before introducing the first act. We see the performance art ensemble, L.A. DaDa, on our TV screen as a family sitting down at their dinette to a platterful of dollar bills and loose change. They munch the money and quzzle from cans of Penzance as the show moves through a half hour of New Wave groups, dancers, and musical artists.

New Wave is where you find it. In Los Angeles, as a birthplace of this activity, you can find New Wave boutiques like Tiger Rose, Vertigo, and Cowboys and Poodles; New Wave furniture stores like Skank World; New Wave hairstylists that work with sculpted and shaved creations; New Wave galleries that have performances and objets d'art, and of course, the most documented form of New Wave: the Los Angeles music scene.



Above: Peter Ivers interviews Daphne Vendetta, manager of Mad Society. When asked *where she found the band*, she answered, "Where did I find them) I bred them."

Right: Steve (age 11), lead singer for Mad Society, sings "Crisis Time."

Below: David Jove aims his camera and comments at Peter Ivers and a band called The Clients.



Two years ago there were only a handful of New Wave nightclubs in L.A. Now there are about thirty-five. New Wave groups have formed their own record labels and are selling lots of records. The New Wave phenomenon is more than the product of a powerful marketing and demographic corporation. It flips the finger to the entertainment industry and takes a shortcut to the audience.

New Wave Theater is a weekly cable TV show devoted to exposing musicians who have no other access to television. Performing groups come from the local clubs, garages, boardwalks, and theaters. Each half-hour program has four bands, some bright and blabby chatter, interviews, outrageous art, and humor. The show has a strong following and is undoubtedly sneaking into the homes of record executives. As a sign of this underground power, New Wave Theater is planning a swap of material with *Manhattan Alley* (Moogy Klingman's New York cable outburst) and Video West's *Backstage Pass* (San Francisco's rough equivalent).

The important story here is how New Wave Theater is put together. It is the outrageous brainchild of David Jove. Jove is the producer/director/cameraman and he rides herd on the unbridled madness. He has a few acting awards, is a songwriter and underground filmmaker, and as an artist designed the 1976 Jerry Brown presidential poster campaign. Jove chooses the material for the show and the content is his major criterion. Some of the groups have strong local followings; others have never performed outside of their garage laboratories. He books the show and with the help of Richard Skidmore, Tequila Mockingbird, and other good scouts he has auditioned over 1500 acts since the inception of New Wave Theater in the Spring of 1980.

While some of the acts are taped on location at the clubs, most of the program is shot in one frenetic night at a studio in Burbank. In a large 50' x 80' hall, the bands set up where they can find space, and Jove wheels his cameras and recorders up to the action. Never appearing on camera himself, he delegates emcee responsibilities to Peter Ivers. Ivers is a Harvard grad with a couple of albums and filmscores under his belt, the music for David Lynch's *Eraserhead* among them. Jove has a microphone mounted on his camera dolly and together with Ivers they introduce, interview, and interrogate the performers.

Some of the upcoming *New Wave Theater* programs will utilize Paradise Studios mobile units for taping and post production. (See Mix, December, 1980.)

After viewing the show on the air and seeing it taped in Burbank, I was invited by Jove to his storefront/production office/studio. He has theater seating for fifteen, a small stage, tapes stacked to the ceiling, and it is a New Wave Theater in itself. I asked Jove and Ivers about their television show.

How long have you been on the air?

Jove: Since March. We've done about forty shows so far. There are about 150,000 subscribers to the cable here, and many of them are in the music business. We get pretty good coverage in the local papers, we've been written up in *Billboard*, and they used some of our footage on the Tomorrow program. It was horrendous... they have no idea what's going on. They think that Punk is what's happening. Punk is just one of the many types of bands that are under the umbrella known as New Wave music.

What are some of the other categories?

Jove: Well, there's a performance art category—bands that are musical yet have a distinct visual message. There are Techno-bands, which are computer-synthesizer-electronic bands... there are Beach Punk bands... bands that border on being psychedelic and are influenced by the '60s...

Ivers: There's also a pop New Wave... bands like the Beatnik Allstars.

Jove: And there's the hard core New Wave like Suburban Lawns and X... bands that are mainstream New Wave, but still advanced beyond '60s and '70s rock 'n' roll... etc.

Most of the groups are involved in meaningful lyrics. They are all reacting. They are the effect of a social condition that has disillusioned them. It's like the '50s again, where art can exist alongside music.

Who are the people you work with on the show?

Jove: Stan Endersby runs the sound. He uses a Cerwin-Vega console, a Phase Linear power amp, and the standard Shure stage mikes. We go for a live concert sound and feed that directly to the VTR. Takashi and Tim Sassoon are the second unit using the hand-held camera. Hisao Shinagawa is our long-running ghost host and mascot. Tequila and Marcie Weinberg are my production assistants. I write the show with Ed Oaks, a former music editor of *Billboard* and well known "word-wizard" in the music field.

What is your typical production schedule?

Jove: We tape for four or five hours each week at the studio. We spend a couple of hours here doing various inserts, and about four hours shooting the monologues with Peter. We shoot the monologues after the bands have been viewed and I try to correlate everything so that there is some kind of line that goes through the whole show.

We have as wide a variety of bands as possible. There is always one "savage" punk band... and then the opposite, maybe a Techno-band. We are committed to monitoring the entire experience of the L.A. music renaissance. Some of the groups are more commercial than others. We shoot the show in segments and then assemble it. All the material is fresh and on the air as soon as possible.

How long do you spend in editing and post-production?

Jove: About half a day.

It sounds like you've designed your own type of production style.

Ivers: We don't have to wait for someone to give us permission or give us a big budget. David has the vision and the skills to organize a system that we can all work under. We can do a show much faster, much more immediate, and more spontaneous, with a much lower budget than a network show. It's pre-production and organization, basically, that allows us to do it.

What kind of equipment have you been using?

Jove: Takashi uses a Hitachi one-tube Vidicon camera and I use the fabulous 4400, which is the JVC camera that they took off the market. It's a Saticon 2-tube camera, has good resolution, and can be used in the extremely low light. It has none of that lag that you usually get when you go from a light source to a dark area... the comet-trailing effect.

What kind of recorder do you use?

Jove: The 4400 3/4" Porta-pak recorder. We'll be moving to a 1" format soon, but I don't want to lose our portable, flexible approach. There would be more people doing shows like this, but it's almost impossible to tape these people. They really don't want to have anything to do with the establishment and the establishment doesn't want to have anything to do with them. Consequently, they have formed their own world, their own dress, their own lifestyle, their own entertainment, and their own technology. They even have their own underground record distribution and that's why the growth of this movement isn't recognized by the record companies. They use the conventional methods of checking record sales.

Is your show affecting the music industry?

Jove: Well, Suburban Lawns was on *Saturday Night Live*...

Were they on your show first?

Jove: Oh, yeah... this is the only true New Wave show around. There are other shows but they are lip-sync, vinyl substitutes. The industry watches this show. About fourteen bands have been signed to labels since they've been on. They appeared when they were unsigned, because we only have unsigned bands... or bands that have their own labels. If they do sign a major deal they usually disappear. Their lifestyles change, they're off recording or on tour... the only time you see them when it's really happening is when they are in the club circuit and that's where we get them. Some we get before that... right out of a garage in West Covina...

Ivers: A lot of the people on the show have nothing to do with the music business... that's one of the exciting things.

Do you have plans for the show to be seen in other cities?



Legal Weapon is fighting the "wimp" trend in New Wave bands.

Jove: Yes, we are going to be on Manhattan Cable and in San Francisco within a couple of weeks. We are forming the EWEE alliance (East/West Eyes & Ears) to exchange segments with New York and San Francisco. Our show is different from the magazine format... we are more topical in a mental and spiritual sense. We deal with things that no one can ignore. I want people to be awake and aware, and I think that the entertainment medium is the last bastion of freedom left, something that is not completely under the control of people playing dangerous, selfish games. There is a lot that can be done and New Wave is making a lot of noise... these performers are disillusioned and they don't like what's been handed to them. They're the citizens of tomorrow and they have nothing but contempt for the establishment.

But as this show becomes more successful won't you have to deal with the establishment... the music and TV industry?

Jove: It won't affect me. The industry is just an extension of the equipment and the tools. We'll continue doing our show this way as long as the New Wave is happening. It's important what these people are doing: the music, the writing, the painting... there are even New Wave ballet troupes...

Ivers: ...movements you've never seen before, drawing on this spastic, anti-establishment flow.

Jove: You have no idea what force these bands have, and how completely aggressive they are. There's no doubt that they are gonna get heard. It's like when rock 'n' roll first came in. People were horrified, they joked about it on TV... and then finally the fans started growing up and they took their rock 'n' roll with them. It has become a major cultural movement. New Wave is in its infancy now, but it's already doing \$100,000 a month in record sales here, and about \$80,000 a week in the clubs. There are New Wave clothing stores all the way from La Brea to Doheny...

Ivers: For me, what is the most fun, is when you have six or seven of these aggressive bands and you get to ride their raw energy and explore with them. It's a challenge. I change my costumes a lot, and that's entertain-

ment-oriented. Some of the punks are very pure and against entertainment, so part of my role as host is to be an object of scorn. It creates something exciting for an audience to see. I let them pull me off center, or I go with them... sometimes I attack them and challenge them.

I've noticed that some of the more interesting interviews had obvious antagonism between you and the groups...

Ivers: By asking very direct questions and allowing them to hoot exposes the vacuity and sometimes the seriousness of their vision. It monitors their minds. If you read some of the promos on some of these guys you find that to be pure punk you have to be willing to be completely drunk, stoned out, humiliate yourself... have none of the old pride values. It's almost an egolessness. Most of these people are doing it for the art. There's a discipline necessary when you face an audience that doesn't like you. They don't make much money at the clubs, and while there may be a dream of "making it," on another level they feel an importance about what they are saying and feeling. It forces them to challenge everything around them and take risks that most straight, establishment bands won't take.

Jove: Sometimes they do the exact opposite of "promoting" themselves. But there is definitely an artistic style... they even have their own typeface for their flyers and ads.

Ivers: They do their own record artwork... color-xerox, cut-outs from magazines... it's an important element in the movement

I see a correlation between the antagonistic, anti-promotion aspect of New Wave and the Dada movement...

Ivers: These artists are in such an intense state of resonance with their material that it vibrates the whole studio. "Fear" was great. They came in completely antagonistic and it was a total dramatic rendering of their life. Johanna Went, a performance artist, comes in and throws mud around, makes a mess... but she does it on a cloth and when she leaves you don't even know she was there. There is a professional element within the framework of their alledged lack of discipline that is very interesting. There's a self-conscious, artistic sensibility that runs through it... it's not just random ugliness.

Jove: In any movement you will find the leading exponents of the essential thought behind it all, and then you find the imitators and the bad ones. This show tries to show the very best, and the most poignant statements. The definitive New Wave bands are what we are dealing with... we are monitoring the overall quality of experience of this movement

Ivers: Within the contempt for society is quite often an optimism and a hopefulness... within everything is contained its opposite.

Jove: They're forced to be this way because of the way they are being dealt with. They don't have any choice. Unlike the '60s where people tuned out to leave, they tune out to be here. We are showing artists that are aware. Major changes have to be made... everybody knows it... but it starts with the individual. It might be the performer in a small town who really reaches his audience. Everyone has to do their part where they find themselves. It is important that these groups are seen. We need life-supporting stuff... we need to awaken the audiences. We have the resources to make everything run like a top... it's only the small minds that are holding on, holding back.

• • •

By virtue of its immediacy, *New Wave Theater* is almost a news program. It documents the undefinable, multi-media characters who are entertaining Los Angeles. Bands like the Marina Swingers, the Surf Punks, "X", the Sheiks of Shake, the Nu-Beams, and Ivy and the Eaters are just a few who have made their TV debut on the show. To add to the excitement, Tim Curry, Deborah Winger, Van Dyke Parks, Doug Kenny, and other jokers have dropped in to co-host with Ivers.

Most television programs have contractual logjams, programming setbacks, and production machinery that gets in the way of the action. *New Wave Theater* accommodates the elusive elements of the entertainment fringe. It is rough, coarse, and far from slick, but its verite style does capture the energy and the essence "currently existing under the banner of the exploding New Wave Movement."

New Wave Theater airs Sunday nights at 10 PM in Los Angeles on Channel 3, Theta Cable's public access station. ■

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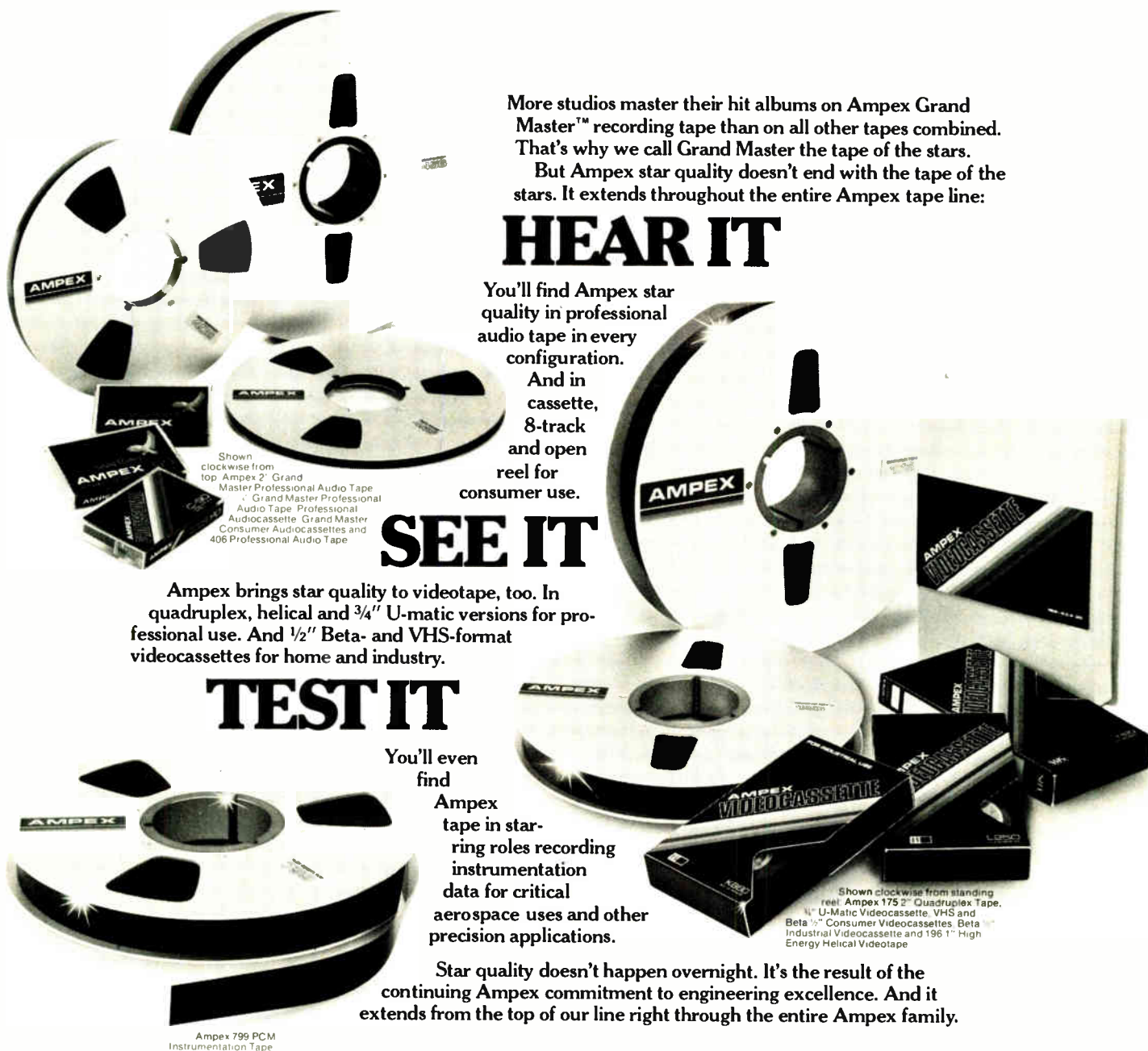
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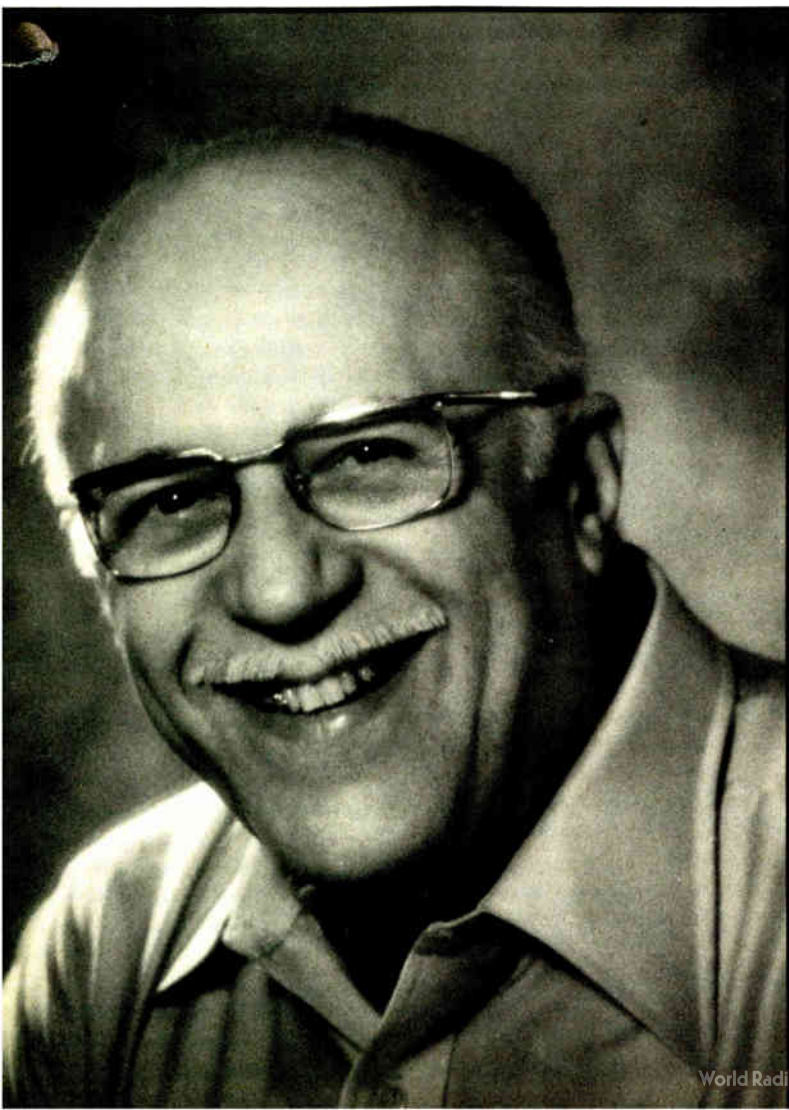
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Leo de Gar Kulka

Continuing to Experiment



by Tom Donald

Leo de Gar Kulka has been a fixture on the San Francisco recording scene for nearly twenty years. He is an innovative pioneer in many areas, whose expertise in mastering and recording has become world-reknown. He is also President of the College For The Recording Arts in San Francisco, the first school of its kind in the world. Covering a wide variety of related subjects in addition to courses in audio engineering, the College is well known for its job placement rate. Nearly eighty percent of its graduates are gainfully employed in recording or related fields.

Leo is an eloquent, genial man who obviously loves his life and his work.

How did your recording career begin?

I've always been interested in sound and have always been a great music lover. I played the violin but never quite made it, and so, I suppose out of frustration, became interested in sound recording. My first real training came during World War II when I did some recording for the intelligence unit I was with. Then later, after the war, I worked in Germany on some motion pictures. Finally I returned to the States in 1948 and was obliged to take over the family business due to my father's illness. When Korea came along I was called back into the service. It was there that I again came into contact with the machinery and upon my return to civilian status, I made a career decision. Recording was to be the field for me.

I had been hanging around studios in Hollywood until one day, in the middle of a date, the engineer suddenly had a severe attack of stomach cramps. I took over, did the job and the client was very pleased. The next day I signed on at the studio as a part-time engineer. Around 1957 I opened my own studio on Sunset Blvd. in Hollywood.

What brought you to San Francisco?

In 1961 my studio in Los Angeles experienced some financial difficulties with a couple of new partners that had been brought in. It was at that time, after falling in love with the town while here on vacation, that I decided to move to San Francisco. I built a successful business designing and manufacturing consoles and, in addition, I was continuing to engineer various sessions in Los Angeles.

There were very few studios here at that time, about 1964 or so. It was an exciting time; things were happening and there was a lot of talent, music and energy. I kept thinking San Francisco would be a great place to have a studio.

Well, circumstances seemed to fall into place for me. In September, 1965, after months of looking for the proper space, we moved into our current location here on Harrison Street. Our first clients were Sly Stone, Tom Donahue, Grace Slick and the Great Society, the Beau Brummels... I can't think of them all, there were so many fantastic new groups and artists coming through at the time. Later we entered into production deals with record labels and did work for Mercury, Columbia and a couple of others.

I remember when we recorded the first Sons Of Champlin album for Capitol. It was done on eight-track and I mixed it all in one day. It was a lot of fun and I think it's a great record.

How did the recording school come into existence?

Let me digress for a moment with a story that relates to how we began the college. One day Mike Bloomfield was in the studio and the Columbia engineers working on the project couldn't quite get the sound he wanted. When they left the room, Mike asked me to see if I could do it. So I sat down at the console in my studio and proceeded to get the sound. Well, when the Columbia guys came back and found that I had not only adjusted their mix but also achieved the desired effect, there was a terrible row. The end result was that I lost a little business but it got me to thinking about teaching the recording arts.

When I first arrived in San Francisco, a professor friend at San Francisco State asked me to give a guest lecture to one of the broadcasting arts classes. I talked a little about radio and some about recording. I had done some teaching previously at UCLA and so going back to the classroom was a very gratifying experience. After that I began on a part-time basis at State.

I think anyone connected in any way with recording or the record business is constantly asked the same questions: How do I get my start?

How do I become an engineer? After a while it occurred to me to do some teaching right in the studio. I drew up an entire curriculum, covering all aspects of the industry. There is a lot of emphasis on audio engineering, of course, but we have also included material on music theory, electronics theory, business, financing, even record promotion and marketing, since all these come into play in one way or another when one is a professional engineer or studio owner. Basically I wanted to impart to my students some of the lessons I've learned from hard experience. I've made a few mistakes along the way, some quite costly, and there were many times when I could have used the kind of information we're now giving our students.

After months of refining the program further and getting feedback on our ideas from people in the industry, we finally opened the College in January, 1974. The basic curriculum has remained the same over the years, although we have added courses in such areas as synthesizers, advanced electronics theory and studio maintenance. We also added a disc mastering course. I had a Neumann disc cutter and that field has always been a favorite of mine.

Let's talk about disc mastering. You have a facility called the Mastering Room...

Around 1976 I felt it was a good time to get back into disc mastering, which as I mentioned is something I've always enjoyed. I did the first 33 rpm direct-to-disc recording in the States back in 1960 with Victor Majorca in Hollywood.

At about the same time that I returned to mastering I perceived a need for a record label that specialized in two general types of records: First, the super high-fidelity record using recording methods and technology on the leading edge of the art; things like pressure zone microphones, binaural recording, digital recording and of course direct-to-disc. We've been able to experiment a great deal and we've achieved some very interesting and satisfying results. The other kind of record is geared to a segment of the population that is largely ignored by the record industry, the middle-aged consumer. No one really makes records for this audience and yet there is

significant interest and buying power there. I had to come up with a new way of marketing the product in order to successfully enter this market. Everything in the record business today is geared toward what I call the youth market. There would probably be disagreements as to the actual age parameters of that market, but the real point is that the only means by which the industry has to promote their product is through radio airplay. We all know that broadcasters are not in the business of record promotion.

I decided to stop trying to use radio to promote our records and at the same time we stopped selling through distributors and stores. We went to mail-order sales only. Not surprisingly, that decision resulted in our accounts receivable situation being alleviated considerably. By way of example, we've just made a theater organ record that we're promoting through the Theater Organ Association membership. In this way, we're not just throwing these highly specialized and diverse records out there to be considered by the public as a whole, but instead marketing them to that segment of the audience that is most interested and likely to buy.

That's essentially the story of our label, Sonic Arts. We also release product on Laboratory Series, for instance *Stephan Kates, Tribute to Piatigorsky*. It's an exceedingly beautiful and delicate recording of five pieces for cello and piano. It was done on a Sony PCM digital machine here in the studio. It's such beautiful music and is so deserving of a place in the market.

What does the future hold for you?

I want to play around! Seriously there is so much I feel I've yet to touch upon, yet to learn. I want to continue to experiment with new ideas, new techniques. I'd like to try and solve some of the problems in record manufacturing. I really want to make better and better sounding records.

I remain very confident about the business in general. San Francisco is a fantastic place to live and work, both in terms of the climate and the overall lifestyle of the area. It's the ideal environment for creativity and I really feel we're just beginning a new age for recording and music as well. I intend to be a part of all that. ■

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This article evolved from a San Francisco NARAS seminar discussion led by Fred Catero on "Ergonomics in the Recording Studio." Ergonomics has to do with the human elements in the design of an engineering system. As chief recording engineer at San Francisco's Automatt, and with 30 years of experience in the control room, Fred is well qualified to discuss those topics.



by Fred Catero

ERGONOMICS in the Recording Studio

The studio consists of two main rooms, the studio proper and, equally as important, the control room or "booth." Several considerations must apply when selecting the design of these two interdependent rooms. A brief outline follows.

Dimension and Size. Will it be large enough for today's large control boards, speaker systems, tape machines and associated equipment, not to mention the producer, engineer, second engineer, assorted guests, and musicians? Sometimes the control room can be bigger than the studio itself. It must also be large enough to allow the engineer and the producer to have the proper acoustic and visual vantage point from which to operate effectively and comfortably. The room must allow the sound from the monitor speakers to be heard as naturally as possible without setting up standing waves that would make it almost impossible to achieve a linear response at the critical listening areas, even with baffles or equalization. An optimum working environment is one in which the best working, visual, and listening locations in the room occur in the same spot.

Access. Since the producer and musician are constantly moving between studio and control room, it is advisable that easy access to and from the studio be provided without intersecting the above mentioned "critical working areas." A separate, equally discrete entrance from the hall is important and should be lockable without impeding movement between control room and studio.

Lighting. It should be possible to independently adjust the intensity of all the light banks. There should also be strategically located lights in splicing areas, record keeping areas, patching areas and wherever hard to see, heavily used areas exist. Position these lights to avoid as much glare as possible. The dimmers must be able to handle the load of all the lights assigned to

them without overheating and must be of a sufficient quality to avoid introducing hum into the audio system, or the environment.

Carpeting... must be static free and of such pile that it allows rolling stock to move over it as effortlessly as possible.

Stairs... up or down throughout the studio complex must be as few as possible and must be clearly marked to avoid accidents in dimly lit situations. This also applies to all protrusions, such as speaker cabinets, desks, equipment, and the like.

The Window... should be glare-free in either direction and should afford equally good visibility from both the control room and the studio. The construction should be such that cleaning the window is as simple as possible. This includes easy removal of the glass itself.

Soundproofing... needs to be of sufficient strength to allow totally different work to go in each room independently. The construction of the walls, ceilings and floor must be as resonance free as possible. If the acoustical properties of the control room can be altered slightly to accommodate particular needs, this will be of great value.

Seating... must be comfortable, must move about easily (except for couches) and provide good visibility and as much accessibility to

controls as possible. Everything in the control room should reflect as little sound as possible and this includes the chairs. Guest seating, if it has to be in the control room, must be where the activity does not interfere with the work at hand. All seating must be free of squeaks and other noises.

Air Conditioning... should be as uniform as possible without drafts, and capable of handling a room full of people with all equipment on. Needless to say, it must be placed where its noise cannot interfere with the work at hand. Controls for the unit must be placed where only authorized personnel can operate them. Both the studio and control room should have air conditioning systems that are independent of one another.

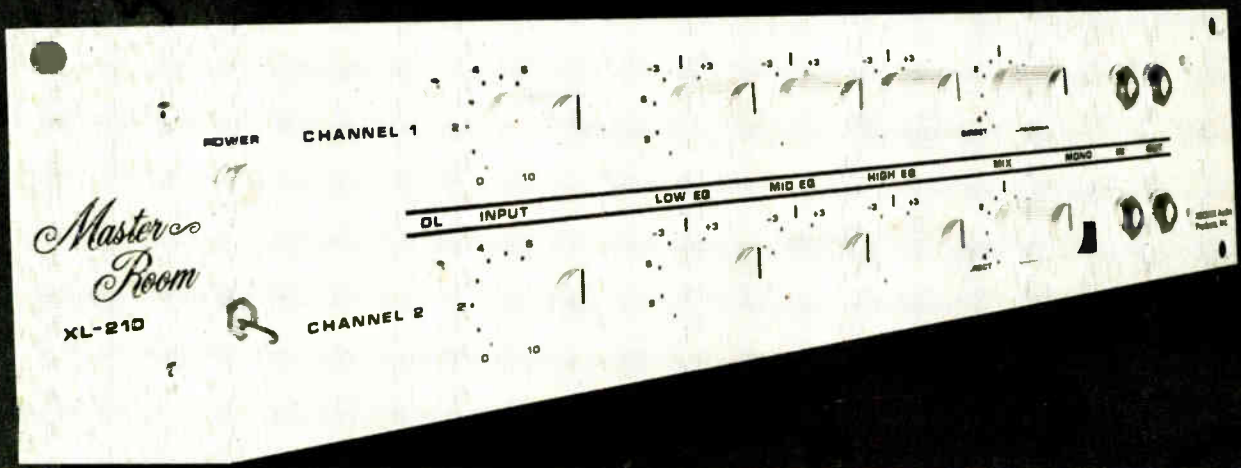
Positioning of Equipment. The control board should be situated in such a way that when the operator sits at his most used location on the board, he is also at the optimum visual, and audible area in the room. If at all possible, the producer should also be situated in a similar location. Equipment that tends to generate mechanical noises, such as tape machines, should be placed where their whirring, clicking and humming will least blend with the speaker sounds. However, tape machines must be located where they are easily visible to the engineer at the board, so a compromise might result. All equipment must be positioned where it will not impede movement to and from other equipment. All equipment must be located where the engineer can comfortably get to it during his performance. The engineer must also be able to see all meters, switches, lights, etc. from his vantage point.

Loudspeakers should fit the room both physically and acoustically, and space for auxiliary speakers should be provided. Speakers must never obstruct the view into the studio or access to much used equipment. Space must be provided for outboard gear (cassette machines, rented equipment, etc.). An area for tape in use and record keeping prevents clutter and makes life much easier in the control room. Patch cords and cables should be easily accessible and orderly enough to locate those needed in the least amount of time. They should be out of the way of active areas. Remember, non-glare, reflection free surfaces are best. The producer's desk should have sufficient space for all record keeping needs. A stop clock or timing device is a must, as well as a telephone with an earpiece amplifying device so he can hear above the work being done. If possible, places should be provided to hold coffee cups, glasses, etc. where they cannot be tipped over. These are advisable both for the producer and engineer.

The Control Board. Things should be laid out in such a way that they may be operated from a comfortable position. Visibility of controls is essential. The most used controls should be situated closest to the engineer's ideal vantage point. Each separate control function (cue system, echo sends, master volumes, equalization, etc.) must be clearly defined. The more metering, the better (Echo sends, cue sends, aux. sends, etc.) Light indicators for various functions are also very helpful. (On-off functions, phase reverse, mike-line, solo, etc.) The meter bridge should be laid out in a logical manner with provision to switch between bus channel outs and the tape machine channel outs. Lights on each channel meter to indicate recording on that track is of

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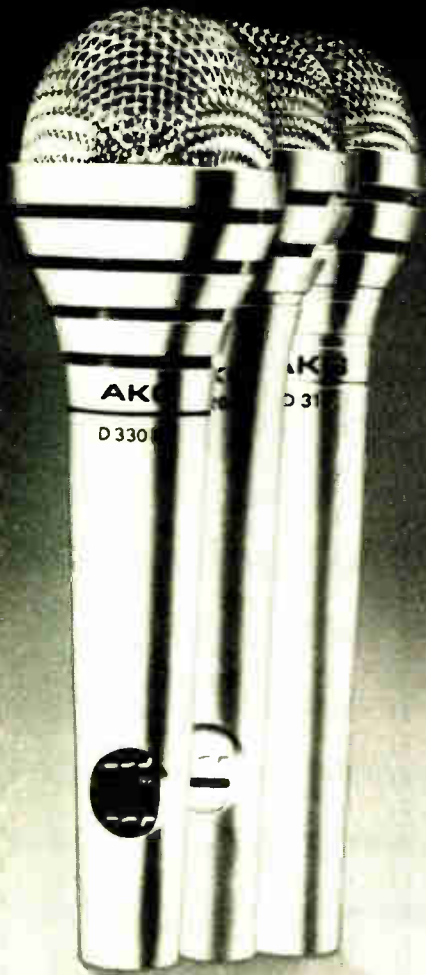
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great advantage when punching in on multi-track recordings. A control to adjust the intensity of the meter lights is also helpful to be able to adjust the brightness of the meters to the lighting in the room. If there is an optional peak reading feature available on the meters, that too should be included.

Reciprocal equalization is a must. On and off switches on the E.Q. are useful. They should be flexible enough to allow the engineer to alter the sound to his liking. Solos should be provided for as many functions as possible. (Before and after the E.Q., echo sends and returns, cue system sends, even to monitor the cue system amplifier output.) An independent solo level adjust is recommended as well as an independent mute level. All modules must have on-off keys. Both mike and line inputs should have trims.

A multiple channel cue system allows for several different cue mixes to exist simultaneously. A means to substitute the stereo (two track) mix to the cue system can be useful. The talkback system should go to the studio, headphone cue system, and the tape machine in any desired combination. Individual level sends for each are essential. A cue system that allows communication from the studio into the control room can be an invaluable aid. Both cue systems will work best if the talkback mikes are limited or compressed. The control room cue system must be easily accessible from various places in the room. A switch on a long cable has been found to work best. Several switches strategically located are advised. A timer-stopwatch is essential, preferably one with several on-going functions. The function controls for the timer should also be available from several different locations in the booth. Large, bright, easily readable numerals are recommended.

The telephone system could have something other than a bell for a signal—a light perhaps. A telephone close at hand, right at the control board, is good. Patch points are a must—the more, the better. Try to get a board with subgroup capability. Automation is also extremely helpful in mixdown. Be sure the control board has plenty of headroom (24 dB or more) and that the signal to noise and cross leakage are way, way down.

Maintenance on the board, as with all equipment, must be easy, inexpensive, and be possible without putting the control room out of service for long periods of time. Ready accessibility of key parts and components must exist. Interchangeability with similar components of different manufacture can be of great advantage. Comprehensive documentation should accompany all equipment. Provision for and ease of upgrading and expanding the board to meet future needs and developments must be considered.

Last, but not least, is the equipment's resale value. Technology advances at such an incredible pace these days that the equipment is usually obsolete before the last payments on it are made. Be sure you are not stuck with a worthless piece of gear.

Speakers. Don't install more speakers than the room can handle. They should sound right at the critical areas of work at all volumes you will be using. The less a speaker is affected by its surroundings the better. Proper installation is a must, and qualified, professional help in this regard is crucial. Proper balance, linearity, phasing, coup-

ling, etc. are essential. At least one small set of speakers should be available for comparison, contrast, and to assure that the work being done will sound good on several different systems. Outlets and provisions for mounting outboard (customer's) speakers should be available. Fuse protection on speakers is also recommended.

Other Equipment. Several limiters should be available. Try to get devices with ample flexibility, such as variable threshold, attack and release times, choice of limiting, compression or expansion. An old, tube type RCA limiter, if you can find one, can do things none of the newer limiters can. Equalizers should be as different from those provided on the control board as possible. Graphics, parametrics, peak and shelving controls, variable hi-lo cut-offs, and sharp notch filters all come in very handy. Noise gates with lots of variables are also recommended.

Delay devices are essential in today's modern control room. Digital delays and plate reverbs are the most common, although there are various other types available, including a natural echo chamber. I recommend at least one plate and one digital delay for starters. Effect devices too numerous to mention are available and continue to hit the market weekly—so choose wisely. Select devices that will offer the widest variety of effects and give the best service. Try to avoid devices that duplicate functions already available to you.

Echo devices are also varied and, like the delay lines, should be selected to satisfy the needs of the user. Those that can recreate various acoustical environments are most useful. An electronic metronome is another useful tool. To repeat, rack space should be available for additional devices as they become available. All the rack-mounted equipment must be accessible and easily visible from the optimum vantage point at the control board. All equipment must be well ventilated to avoid overheating and/or breakdown. The racks should be positioned in such a way as to prevent sound bouncing off their hard surfaces from interfering with the critical listening areas.

Tape Machines. Should be as high quality as possible, with easy access to all mechanical and electrical areas. Alignment and calibration controls should be readily available with a minimum of fuss. Sufficient light should be provided at these areas with enough room to conduct maintenance. A rack-mounted switching array to provide switching of any tape track to any module will save hours of work and tons of patch cords. One multi-track (8, 16, 24, etc.) and two stereo (2 trk.) machines are recommended as a minimum complement to a control room. Also recommended is at least one high quality cassette machine for reference copies of the recorded material and one equally high quality turntable to allow auditioning test cuts and A.B.ing them with master tapes right where they were mixed.

Finally. Remember that the control room, like the studio, is primarily a place of work. To achieve the best performed, best sounding recordings is the goal and anything that hinders this effort should be avoided. Parties and hype can be conducted in a separate room or at a different time, and every effort should be made to maintain a high standard of professionalism both in the studio and in the control room. ■

CONGRATULATIONS!

to all of you at



Russian Hill Recording

and especially

JACK LEAHY

BOB SHOTLAND

We liked you back when you were a "Funky" sixteen. Thanks for letting us help you come together as a World Class twenty-four.

We think you got some fine equipment . . . Lexicon 224 Digital Reverb, ADR Vocal Stressor,

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ADDENDUM

AUDIO & RECORDING PROGRAMS

Last August (Vol. 4, No. 7) we published a list of recording arts programs and promised to follow it up in a few months with an addendum of those that missed our copy deadline. Following is that update, although we stress that this is not a conclusive list.

Next July, in our Recording Services issue, we will again publish a list of all programs responding to our questionnaires. If you know of a recording program that we have not yet listed, please get in touch with us so that we can include them in our July issue.

AAA/TRIANGLE RECORDING STUDIO
4230 Leary Way, N.W., Seattle, WA 98107
(206) 783-3869
Chief Administrator: Wm. Stuber.
Type of Program: Beginning and Advanced Recording Classes; PA Seminar.
Prerequisites: None.
Accreditation or Degree Offered: None.
Class Size: 10 or less.
Application Deadline: Jan. 15, 1981.
Tuition: \$195.00 for beginning classes, \$150 for advanced classes.

ASPEN AUDIO INSTITUTE
Box AA, Aspen, CO 81611
(303) 925-3254
Chief Administrator: Harold Boxer, Alan P. Kefauver.
Type of Program: Basic Recording Techniques.
Class Size: 14 x 3 sessions.
Prerequisites: None.
Accreditation Offered: University of Colorado.
Application Deadline: June 1st, 1981.
Tuition: \$450 for 3 weeks.

AUDIO RECORDING TECHNOLOGY INSTITUTE
756 Main St., Farmingdale, NY 11735
(516) 454-8999
Chief Administrator: James J. Bernard.
Type of Program: Audio Engineering, Theory & Practical Application.
Class Size: 7 students (maximum).
Prerequisites: None.
Accreditation Offered: None.
Application Deadline: New classes start each month.
Tuition: \$1050 for full 30 week course.

THE AUDIO WORKSHOP SCHOOL OF SOUND
1 River Rd., Carlisle, MA 01741
(617) 369-1711 or 369-2202

Chief Administrator: Steve Langstaff.
Type of Program: Audio Production—Studio and Space.
Class Size: Max. 20.
Prerequisites: High School Education.
Accreditation Offered: Certificate.
Application Deadline: February 25, 1980.
Tuition: \$860 for 115 hour program.

BLUE BEAR SCHOOL OF MUSIC
Bldg. D, Fort Mason Center,
San Francisco, CA 94123
(415) 673-3600
Chief Administrator: Steve Savage.
Instructor: Jim Coe, formerly head audio engineer for the Jefferson Starship.
Type of Program: Intensive beginning class in Audio Theory and Practice for musicians, audio workers, and audio salespeople. Underlying principles of audio theory are covered, from Wave Theory to amps and sound system components to on-stage set-up, mixing and monitoring.
Class Size: Variable between 10 and 20.
Accreditation or Degree Offered: None.
Application Deadline: Class occurs on a quarterly basis. Winter quarter registration deadline is January 12th.
Tuition: \$350.00 for ten weeks, six hours a week. Sixty hours total class time.

CALIFORNIA PROFESSIONAL MUSIC BUSINESS ACADEMY
3175 DeLaCruz Blvd, Santa Clara, CA 95050
(408) 727-3232
Chief Administrator: Hewlett Crist, Executive Director.
Type of Program: Four music business and recording curriculums: 1) Artist Development, for musicians, songwriters or performers seeking to turn their talent and aspirations into successful careers; 2) Songwriter Development, to help songwriters protect, and exploit their material and make fair deals; 3) Record Engineering, for basic hands-on training in a multi-track facility;

and 4) Music Business Development, for artists, or people seeking careers in artists' management, concert production or publicity and PR.
Prerequisites: None. Extensive vocational counseling during the enrollment process ensures that all programs are individually tailored to each student's needs.
Accreditation Offered: Certificate.
Application Deadline: Four 13-week sessions a year. Spring Session begins in late February 1981.
Tuition: Programs start at \$1900 per year. Financing available. Please write for brochure and curriculum catalog.

CEDAR VALLEY COLLEGE
3030 N. Dallas Ave., Lancaster, TX 75146
(214) 746-7475
Chief Administrator: Dr. Mary Davidson.
Type of Program: Multitrack Recording Practices and Applications.
Class Size: 20-30 Lecture, 2-3 Laboratory.
Prerequisites: None.
Accreditation Offered: Associate Degree or Certificate.
Application Deadline: August 21, 1981.
Tuition: Dependent upon residency status, write the office of admissions for details.

HILLSBORO RECORDING PROGRAM
Hillsboro High School
3812 Hillsboro Rd., Nashville, TN 37215
(615) 383-5511
Chief Administrator: Vic Gabony.
Type of Program: Basic Recording Techniques: 8 track facility.
Class Size: 28.
Prerequisites: None.
Accreditation Offered: Accreditation Certificate.
Application Deadline: Program offered to 10th, 11th and 12th grade students. Night class instruction for adults also provided.
Tuition: None.

INSTITUTE OF AUDIO RESEARCH
64 University Place, New York, NY 10003
(212) 677-7580
Chief Administrator: Albert B. Grundy, Philip Stein.
Type of Program: 1 year.
Class Size: 7 to 30.
Prerequisites: High School Algebra.
Accreditation Offered: BS in conjunction with NYU.

INSTITUTE OF AUDIO/VIDEO ENGINEERING
1831 Hyperion Ave., Hollywood, CA 90027
(213) 666-3003
Chief Administrator: Lydia E. Tawner.
Type of Program: Recording Engineering, Video Engineering, Sound Reinforcement/Maintenance. (Each is an 8-month program, including Internship.)
Class Size: Max. 10 in workshops.
Prerequisites: High School grad. or equiv., and entrance exam.
Accreditation Offered: Diploma.
Application Deadline: New sessions begin every two months.
Tuition: \$2900 to \$4400, depending on program.

MELON STUDIO HANDS-ON RECORDING WORKSHOPS
P.O. Box 2168, San Francisco, CA 94126
(415) 665-6566
Chief Administrator: Robin Woodland.
Type of Program: 30-hour hands-on recording production workshop with two instructors.
Class Size: 5.
Prerequisites: None.
Accreditation Offered: None.
Application Deadline: Next course begins February. Call for details.
Tuition: \$265.00

MIRA COSTA COLLEGE
1 Barnard Dr., Oceanside, CA 92054
(714) 757-2121, Ext. 248, 269
Chief Administrator: David W. Megill.
Type of Program: Basic Studio Recording Techniques.
Class Size: 30 to 40.
Prerequisites: None.
Accreditation Offered: AA in Music.
Application Deadline: January 28, 1981.
Tuition: Free if California resident. \$144/semester for non-residents.

MUSICAL ARTS CENTER
680 West Tennyson Rd., Hayward, CA 94544
(415) 886-8742
Chief Administrator: Ms. Patricia Rasmuss.
Type of Program: Musical Skills Training.
Class Size: 15 participants.
Prerequisites: Some facility on a musical instrument and musical background.
Accreditation Offered: None.
Application Deadline: January 16, 1981.
Tuition: None.

NEW SCHOOL FOR SOCIAL RESEARCH
Composers Theatre Program
66 West 12th St., New York, NY 10011
(212) 925-3721
Chief Administrator: John Watts.
Type of Program: Electronic Music/Audio Engineering Program.
Class Size: Limited to 16 for studio classes.
Prerequisites: None for beginning courses.
Accreditation Offered: Credit offered.
Application Deadline: February 1981.
Tuition: \$190 plus lab fees.

ORANGE COAST COLLEGE
2701 Fairview Rd., Costa Mesa, CA 92626
(714) 556-5523 or 556-5629
Chief Administrator: Howard Judkins.
Type of Program: (Numerous) Careers In Music.
Class Size: (Many) 10 to 50.
Prerequisites: None for entry.
Accreditation Offered: (Various vocational) AA.
Application Deadline: First week in Feb. 1981.
Tuition: None for Calif. residents; or \$53/semester unit.

PEABODY INSTITUTE OF THE JOHNS HOPKINS UNIVERSITY
1 E. Mt. Vernon Place, Baltimore, MD 21218
(301) 837-0600, Ext. 36
Chief Administrator: Alan P. Kefauver.
Type of Program: Basic Recording Course.
Class Size: 25 to 30.
Prerequisites: Entrance to Conservatory.
Accreditation Offered: Graduate Credit.
Tuition: \$4750/year.

THE RECORDING CENTER, INC.
25 Van Zant, East Norwalk, CT 06855
(203) 853-3433
Chief Administrator: Ilene Braunstein, General Mgr., Ethan Winer, Instructor.
Type of Program: Recording Engineering and Consultation in related areas.
Class Size: 10 maximum. Private and semi-private instruction also available.
Prerequisites: A high degree of motivation.
Accreditation Offered: Certificate of completion.
Tuition: \$325 for the regular ten week class. The cost for private and semi-private instruction varies.

RECORDING ENGINEERING WORKSHOP
317 S. Harbor Blvd., LaHabra, CA 92631
(213) 691-4191, (714) 773-1971
Chief Administrator: Ted Vegvari.
Type of Program: All hands-on training.
Class Size: 10/class, and private instruction.
Prerequisites: High School Diploma.
Accreditation Offered: Certificate upon completion.
Application Deadline: On going.
Tuition: \$300.00 per level.

RECORDING INSTITUTE OF AMERICA
220 Westbury Ave., Carle Place, NY 11514
(516) 334-7750
Chief Administrator: Chas Kimbrell.
Type of Program: 10 week Basic (30 hr.) and Advanced (60 hr.) Operational Instruction courses in 16 track or larger. Studios in 38 cities in U.S. and Canada.
Class Size: 15.
Prerequisites: None.
Accreditation Offered: Certificate of Completion.
Application Deadline: Varies from location to location.
Tuition: \$395 Basic. \$495 Advanced.

RECORDING INSTITUTE OF DETROIT
Division of Superdisc, Inc.
14611 East Nine Mile, East Detroit, MI 48021
(313) 779-1380
Chief Administrator: John Jaszc.
Type of Program: "In-Studio" classes for

(24-track) Recording Techniques I & II. Includes theory and hands-on experience.
Class Size: 6 to 12 per class.
Prerequisites: Interest in music industry.
Accreditation Offered: Licensed Michigan trade school, Certificate from Recording Institute of America.
Application Deadline: Call or write for information.
Tuition: \$425 (Techniques I) and \$525 (Techniques II).

RHYTHM SECTION LAB
130 W. 42nd St., New York, NY 10036
(212) 840-0433
Chief Administrator: Robert Wallis, Paul Siegel.
Type of Program: Studio Rhythm Section Ensemble.
Class Size: 6 to 8.
Prerequisites: None.
Accreditation Offered: None.
Application Deadline: January 5.
Tuition: \$175 for 12 weeks.

ROCKLAND INSTITUTE OF RECORDING
73 North Main St., Spring Valley, NY 10977
(914) 425-0018
Chief Administrator: Jim Henning.
Type of Program: Emphasizes hands-on experience.
Class Size: 4.
Prerequisites: None.
Accreditation Offered: Certificate.
Application Deadline: August 31, 1980.
Tuition: \$350.

SOUND RECORDING TECHNOLOGY
Mason Hall, SUNY, Fredonia, NY 14063
(716) 673-3221 or 3151 (Dept. Office)
Chief Administrator: David Moulton.
Type of Program: 4-yr. Bachelor Degree in Sound Recording (Tonmeister Studies).
Class Size: 80 total, twenty each annual class.
Prerequisites: Audition, H.S. Diploma, SATs, etc.
Accreditation Offered: B.S. and M.A.S.S.
Application Deadline: N.A.
Tuition: \$900 annual (NY State res.), \$1500 all others.

TEXAS MUSIC ARTS COLLEGE
8375 Westview Dr., Houston, TX 77055
(713) 465-6554
Chief Administrator: Dale Mullins.
Type of Program: Instruction in Recording Engineering, Music Education.
Class Size: 12 to 15.
Prerequisites: None (by audition).
Accreditation Offered: Completion Diploma.
Application Deadline: January 1, 1981.
Tuition: Varies.

UCLA FINE ARTS EXTENSION
RECORDING ENGINEERING THEORY AND PRACTICE
10995 Le Conte Ave., Westwood, CA 90024
(213) 825-9064
Chief Administrator: Van Webster.
Type of Program: Certificate Program in Recording Engineering.
Class Size: Lectures: 30; Workshops: 4 to 10.
Prerequisites: Math through Trig.
Accreditation Offered: UCLA Certificate.
Application Deadline: Sept 1, 1981.
Tuition: Varies per class; 9 courses. From \$125 to \$650.

Your future may hinge on this decision!

...if you have been thinking about your future, and have decided on a career in the **recording and music industry**, then you owe it to yourself to investigate the career opportunities that are open to you through the:



College for Recording Arts

In the course of one year and up to 800 hours of concentrated study and hands-on experience, you will learn about the **business, the laws, ethics and economics** of the industry. You will learn about **recording, engineering, electronics, studio maintenance, synthesizers, audiovisual production techniques**, and much more! ...No wonder, 80% of our graduates have found jobs within the industry! Call or write for full information to:

COLLEGE FOR RECORDING ARTS

665 Harrison Str., San Francisco, Calif. 94107; Tel.: (415) 781-6306

SEMESTER STARTS JANUARY, MAY AND SEPTEMBER

The school is accredited by the Accreditation Commission of the National Association of Trade and Technical School, (NATTS), approved by the Calif. Superintendent of Public Instruction, approved for Veteran Training, and authorized under Federal law to enroll non-immigrant alien students. It is also endorsed by the National Academy for Recording Arts and Sciences Training Institute.



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ADDENDUM

AUDIO & RECORDING PROGRAMS

UNIVERSITY OF MIAMI SCHOOL OF MUSIC MUSIC ENGINEERING TECHNOLOGY PROGRAM

P.O. Box 248165, Coral Gables, FL 33124
(305) 284-2433

Chief Administrator: Billy R. Parter, Director,
Kenneth Pahlmann, Assistant Director.

Type of Program: 4 year program to train musicians to become sound engineers. This program culminates in the degree: Bachelor of Music with a major in Music Engineering Technology and a minor in Electrical Engineering.

Class Size: Limited to approximately 15 to 25 new students each fall (total enrollment is currently 100 majors).

Prerequisites: Strong background in mathematics (calculus is required in the freshman year), music performance (competitive performance audition required), and an excellent academic record.

Accreditation Offered: National Association of Schools of Music/Engineers Council for Professional Development, National Academy of Recording Arts & Sciences, Southern Association of Colleges and Schools.

Application Deadline: April 1 for fall semester.
Tuition: \$4,340 per academic year.

UNIVERSITY OF NORTH ALABAMA Wesleyan Ave., Florence, AL 35630 (205) 766-4100

Chief Administrator: Dr. James K. Simpson.

Type of Program: Commercial Music (a comprehensive survey of the music business).

Class Size: Average 50.

Prerequisites: High School graduation or equivalent and ACT scores.

Accreditation Offered: Bachelor of Arts and Bachelor of Science degrees.

Application Deadline: Two weeks prior to the beginning of the term for which application is made.

Tuition: Estimated \$365.00 (varies depending on courses. Contact admissions office).

UNIVERSITY OF TENNESSEE MUSIC DEPT. 1741 Volunteer Blvd., Knoxville, TN 37916 (615) 974-5489 or 974-3241

Chief Administrator: Dr. Kenneth Jacobs.

Type of Program: Courses in Recording Techniques, Degree Program in Electronic Music.

Class Size: Varies.

Prerequisites: None.

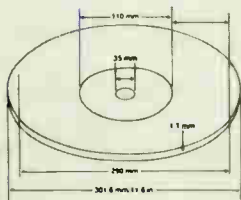
Accreditation Offered: B.A., B.M. (Composition or Electronic Music), M.M.

Tuition: None for in-state (\$19/credit hr. maintenance fee, max. of \$161). Out of state \$334/quarter or \$43/credit hour.

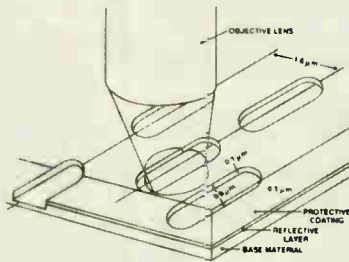
LaserVision

VIDEODISC CONSTRUCTION

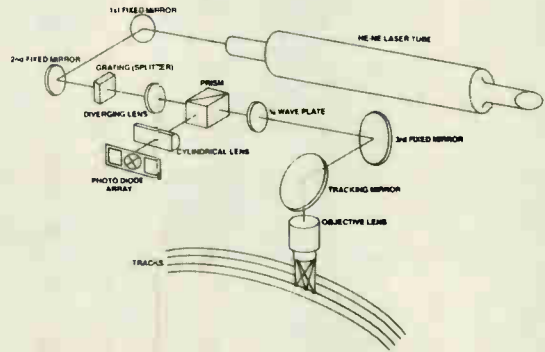
VIDEODISC DIMENSIONS



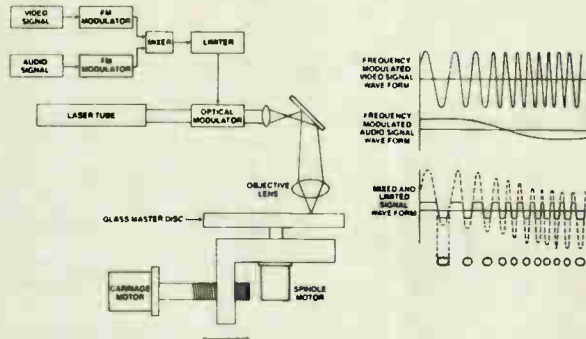
MAGNIFIED VIEW OF A VIDEODISC



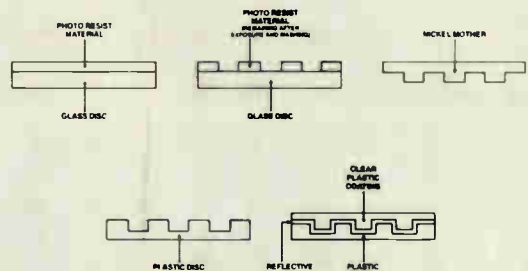
PLAYBACK LASER PATH



VIDEODISC RECORDING SYSTEM



VIDEODISC MASTERING PROCESS



Ed. Note: Recently several major manufacturers of videodisc systems announced an association (see this month's Committee Report) "...to further consumer awareness and understanding of the capabilities, characteristics and advantages of the reflective laser optical videodisc system, to emphasize the compatibility of the system's products and to promote the development of reflective laser optical videodisc technology for consumer use." LaserVision Association, Inc. has supplied us with the following explanation of their systems.

How does the laservision system work?

The videodisc player is hooked up easily to any standard television. The low-powered laser beam converts the audio and the video signals imbedded in the disc into high quality pictures and sound on the television. Two distinct audio tracks are carried on the disc that allows for stereo programming or even dual sound tracks. Whether or not a program was recorded in stereo, audio fidelity can be improved by attaching the player to a high quality sound system through a simple audio jack on the back of the player.

What is the playing time of a videodisc?

There are two play modes: standard and extended play. In the standard play mode, one side of a videodisc can play up to 30 minutes of program material. The videodisc rotates at 1800 rpm and provides one separate image on each revolution. This allows for freeze-frame and slow-motion capabilities.

In the extended play mode, the disc can play up to 60 minutes of program material per side, but without freeze-frame and slow-motion capabilities. Signals on the disc instruct the player to play either the extended play or standard play format automatically so the viewer need not make any adjustments.

What are the special features of the laservision system?

The videodisc won't wear out—it is coated with a clear durable plastic protecting it from dust, fingerprints, scratching and other handling hazards. Storage and handling is safe and easy. There is no physical contact on the videodisc during usage since the system uses a laser beam. As a result, the disc can be used over and over without any wear. The 1,000th play of a program will produce a picture as sharp and clear as the first play.

The videodisc player's special features include slow motion, random access, fast forward scanner, reverse, fast reverse, freeze frame, frame stepping, and pause capabilities. The dual sound track allows dual language capabilities. For instance, a viewer could listen to the sound of a Walt Disney movie in either Spanish or Japanese or listen to the music of Mozart while hearing his biography read. If viewers are watching "How to Play Tennis" a frame showing a backhand might be frozen or put into slow motion for easier understanding.

How much does it cost?

Discs retail for anywhere between \$5.95 for NFL films such as "They Call It Pro Football" to \$24.95 for full-length feature films such as *Jaws 2*.

Videodisc players retail between \$700 to \$800.

How does the laser optical system work?

Program information is stored in billions of microscopic indentations etched beneath the surface of the disc. The information is arranged in 54,000 circular tracks, each constituting a separate video "frame" for continuous or individual display. The indentations and the reflective surface of the disc produce a "rainbow" effect when viewed in ordinary light. However, when exposed to the light beam of the low-power laser pickup, they reflect high density audio/video signals for reproduction.

RUSSIAN HILL RECORDING

Building the Great Wall of Chinatown

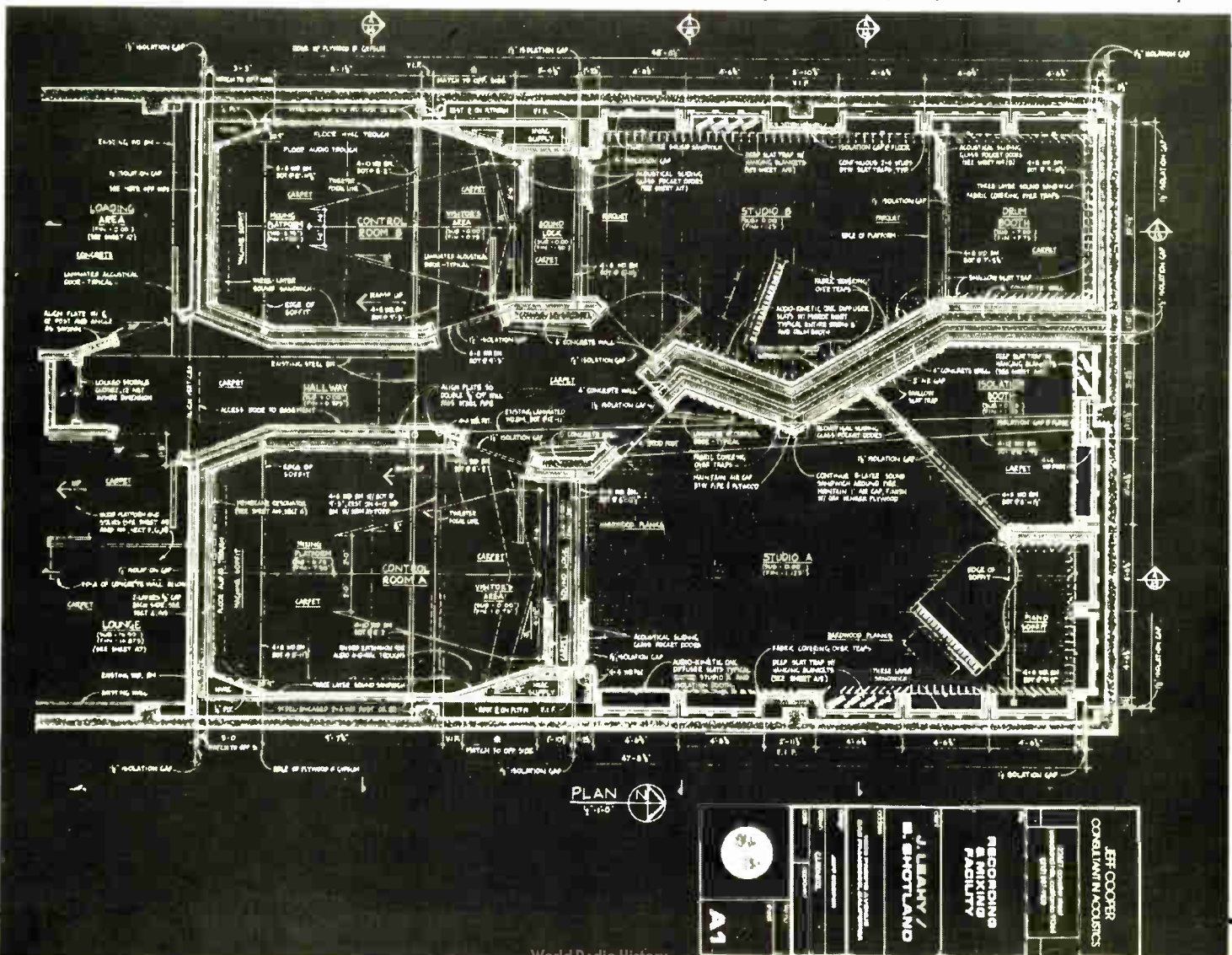
by Tom Lubin and Al Jaychek

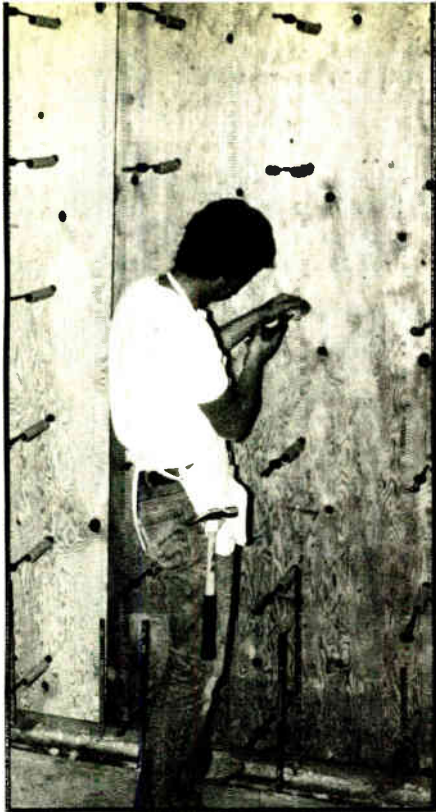
Some ten years ago, Jack Leahy grew tired of the graphics business he and two partners had begun a few years earlier and decided to cash out. Funky Features had grown from a small basement-operated silkscreen operation into a minor phenomenon printing and distributing poster graphics to thousands of "head shops"

around the world, and it had become too much of a business chore managing the details. Since he was living in a rented three story "Victorian" in the Haight-Ashbury district of San Francisco, he contemplated the leftover space from the communal days and determined that the entire second floor could more-or-less easily be converted into, yes, a recording studio—private, mind you,

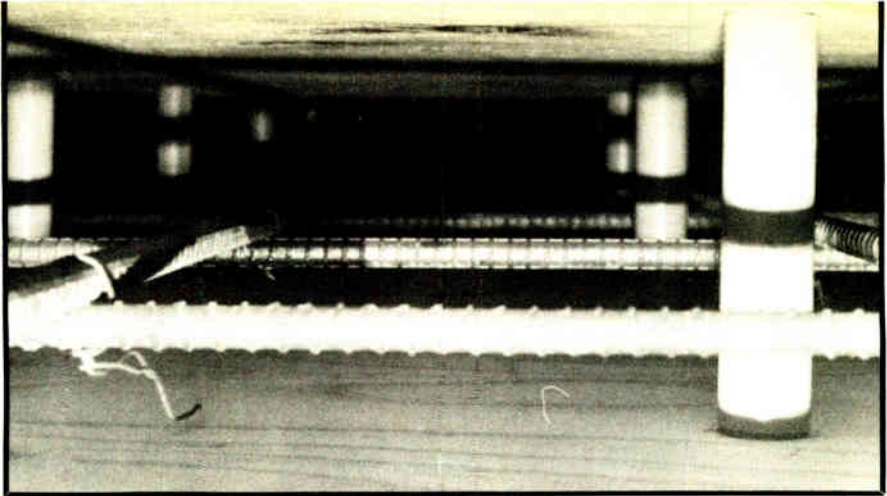
only for working on pet musical projects with a few friends.

A year later, his head swimming from reading Rettinger and scrounging equipment and building materials, he opened his new studio for his first paying clients. Paying clients? Well, it seemed that Leahy had no idea of the cost of recording equipment and was forced to delay





ALL PHOTOS: JACK LEAHY



Left: Starting with the outside form wall of $\frac{3}{4}$ " plywood, Stearns places the snap-ties through, and braces them on the outside. On the inside, he fits on the 4" PVC conduits and seals them with wads of polyurethane foam. The $\frac{1}{4}$ " inner form wall will follow, then 2" styrofoam blankets, then $\frac{1}{4}$ " inner 6" form, PVC sleeve, outer $\frac{3}{4}$ " plywood, and snap-tie locks. Note the channel between the wall footings.

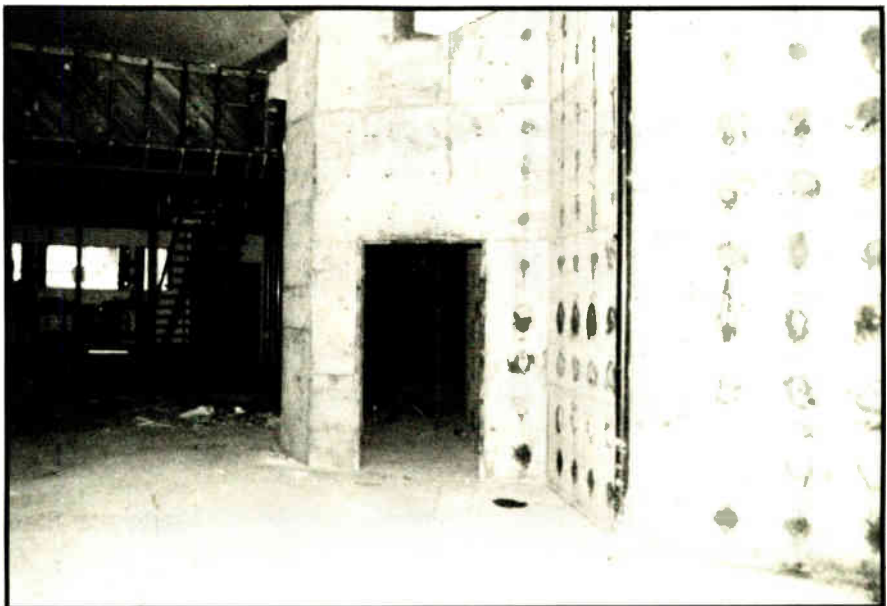
Above: Looking inside the wall form from above, the 6" PVC tubes separate the forms and provide a watertight conduit for the snap-ties, $\frac{1}{2}$ " re-bar is used throughout, and the 4" wall is formed similarly on the other side of a 2" blanket of styrofoam.

Below: The completed "Great Wall of Chinatown." Note the newly gyped sound shell ceiling, the angles of the wall, and the plugged holes, left by the PVC conduits.

one or two of those personal projects for a while, and build up some capital. A couple of years and a few hundred sessions later, there was a complete 16 track studio up and running in his home.

Business was always steady and good, but the fact that the name artists chose the downtown rooms kept Leahy dreaming of eventually building the Great Room. In 1973 he purchased another house, this time on commercially zoned property, to build a brand new studio. But the financing dried up in the recession of 1974 and the plans remained on the shelf until Bob Shotland, a Julliard escapee in the mountaineering business, met Leahy and they decided to join forces. About a year later they came across a photographer's studio on Pacific Avenue in the north part of San Francisco. The building itself was not large, maybe even a bit too small but they couldn't resist the location—great weather, restaurants, shops, views—and the deal was made. Leahy and Shotland were the new owners of a "potential" recording studio.

In 1974, Jack met Jeff Cooper, who at the time was a draftsman for Tom Hidley at Westlake Audio. As Hidley's career led him to Europe and Eastlake, Cooper began to freelance, and he and Leahy began kicking around a number of studio design schemes. When the property was acquired, it was with Cooper's blessing as being a good shell for the dream studio, and Cooper worked up some preliminary plans. Leahy wanted all the trimmings: tunable rooms, spaces for rhythm, brass, drums and strings, a huge control room, drive-in loading, and no stairs. (He'd been walking up two flights to work for too many years.) While Cooper toiled with the drawings, however, economic realities began to emerge, and a major decision was reached. Two small studios simply made more sense to a commercial venture than one large one. The biggest remaining problem was to figure out how to put two studios into a 2500 square foot space, side by side, and isolate them. (Imagine a rock 'n' roll



drummer, six sheets to the wind, eighteen inches away from the announcer doing copy for Levi's in the next room.) Cooper sharpened his pencils and dug out the acoustical transmission tables.

The building on Pacific Avenue was pretty well built. It was an open concrete shell with walls eight inches thick, a concrete slab floor and a ceiling system truss fifteen feet overhead. There were only minor structural annoyances: an uneven slab, designed mainly for drainage, would have to be capped level and sawed into sections before the floating slabs could be formed and poured. There was a post in the middle of the open space (approx. 35' x 50') which would have to be moved slightly. There was a mezzanine floor that intruded on the ceiling height at one end of the proposed studio space, but the architect could work around that. The critical problems were how to divide up the space so that there would be

no transmission between the adjacent studios while making use of the absolute maximum of available volume for the rooms. Cooper's calculations led him to believe that it could be done, but he was very nervous. Recording studios do not prove out until the first sessions are completed. Decisions on structural matters are as good as forever, and design mistakes would not be easy to live with after construction. Cooper decided to split the space into two studios using a zig-zag wall down the center. The design provided studios of equal size, non-parallel walls, and congruent control rooms separated by a four foot hallway for isolation assistance. So far so good, but how to do the dividing wall between the studios? A twelve inch concrete wall was suggested, so was a double stud wall system with plywood, celotex and gypsum facing on each wall. Cinder blocks filled with sand were consid-

ered, but each option had risks. The wall that Jeff wanted might not be buildable, certainly he'd never seen it done before. He refrained from committing it to paper until he could talk to the building contractor.

Dennis P. Stearns had been on the city scene for a long while. He built the legendary Straight Theatre, and survived the hippie days... then he greened out to the Siskiyou Mountains for a few years. Once back in the Bay Area, he began to build again, but found that he had lost interest in right angles. He started building domes and geodesic structures, polyangular solids for fixtures, anything you wanted, unless it was a box. When Stearns and Leahy met one weekend up on the Klamath River while staying with mutual friends, their long and convoluted conversation ran a litany of shared experiences and perceptions. Leahy knew that his emerging plans would be irresistible to Stearns, so he made a note to remember him.

• • •

It was June of 1979, and Cooper, Leahy and Stearns, among others, were meeting on the roof of 1520 Pacific Ave. Down in the studio space Stearns' crew were beginning to remove some of the floor slab in order to even it out. It was very hot and dusty, but it wasn't the weather that had Cooper sweating. He was about to present his wall scheme to the builder.

He told Stearns that he wanted two concrete walls, one four inches thick, the other six inches thick. They would zig-zag their way through the building. They would be fifteen feet high and they would be... two inches apart!! And their footings would be discreet too. Stearns began to scratch a drawing out on a piece of paper to make sure he had the idea, and said, "Okay, let's do it, yes it can be done, draw it up." (Somehow, Leahy later learned, Stearns had developed a mystical approach to construction that involved doing something because he found it interesting, never mind impossible.

At least temporarily satisfied that his wall system was buildable, Cooper relaxed and began to explain that sound energy forced to penetrate a variety of media in order to get from point A to point B does much more poorly than when it penetrates only one kind of barrier, even though the combination wall is no thicker or more massive than the solid one. Thus a sound generated in, say, Studio B, when presented with a thick concrete wall, still has a chance to move and "penetrate" the barrier. But the same sound on its way from Studio B to Studio A, when it has to travel through the specified fiberglass (1 1/2"), gypsum (5/8"), celotex (1/2"), plywood (3/4"), stud wall filled with R-11 insulation (3 1/2"), air space (1 1/2"), concrete wall (6"), air space (2"), concrete wall (4"), air space (1 1/2"), stud wall filled with R-11 (3 1/2"), plywood (3/4"), celotex (1/2"), gypsum (5/8"), R-703 fiberglass (1 1/2"), and the air in Studio A, would most likely be very much exhausted. In fact the two concrete wall systems (air between) would stop sound transmission better than a solid 48" inch concrete wall. Stearns nodded in absolute non-comprehension while he watched ships moving in and out of the Golden Gate. One of ten crew foreman, Tom Winfree, appeared on the roof. There was a problem below, did we want to

take a look? The party descended into the building.

The idea that day was to remove some of the highest area of the old concrete slab. Initial cores had shown it to be four to five inches, and that the trouble areas would be out in a day. As Tom led the design team downstairs, he toyed with a broken jackhammer bit, the heavy-duty 2" thick kind.

The interior of the building was airless: The dust was so thick even visibility was badly impaired. In the far corner, three of the laborers had blasted out a circle some eight feet across, and were excavating dirt from it. They were uncovering something, some buried treasure. Upon reaching the site, the treasure revealed itself. Another concrete slab lay beneath the top one, and it was older and much thicker. By the end of the day it was determined to be as much as two and a half feet thick, with lots of big square steel bars in it, and it extended across the entire back of the building, under both of the future studios.

There was, of course, no choice but to remove the sleeping monster, commitments had been made, money was on the line. The slab would have acoustically coupled the rooms had it gone undiscovered, so it may have been a blessing in disguise. A look at the brighter side showed that there would be no more level problems to deal with, a chance to build from scratch, and more ceiling height for trapping and also for headroom in the areas beneath the mezzanine. Only that those jackhammer bits kept breaking, and before the slab was completely removed some ninety odd yards of concrete, steel and earth had been removed, a month had passed, and the interior level of the studio had dropped nearly three feet. Cooper's latest set of drawings were once again rendered worthless. He left for Los Angeles to begin a new set of drawings based on the new interior dimensions, while the construction crew set about beefing up the building.

All existing wood posts were removed and replaced with slender three inch steel members. I-beams twelve inches high were placed to clear the spaces. One load bearing wall down the center of the building had to be moved slightly. Unfortunately, it was a balloon-framed wall that held the second-story ceiling up as well. The crew set about bracing the entire building, both floors. When it was entirely shored up, they removed the ground floor portion of the wall and rigged up a pair of mechanical hoists to raise and roll a 20' x 20" steel I-beam into position. The monstrous beam, with a second story wall plate fastened atop it, brackets welded to either end, and numerous cuts and facets rendered into it, was slowly elevated. With an audible clank it set into its space like a glove, the last piece of the structural puzzle. It was late August, the excavation and demolition had been accomplished, the structural work completed, and the crew prepared to build the wall.

Cooper sent the drawings for the double concrete wall, now known as the Great Wall of Chinatown. With all the geometry precisely indicated, Stearns took stakes, string and transit, and recorded and set each vertex in the soil inside the building. Above, the old truss ceiling had smooth plaster, and to this white ceiling Stearns projected via plumb lines all vertices and wall lines. A per-

manent road map thus established, the footing system was excavated.

Leahy and Shotland had once speculated that it would be a race to see whether the studio would begin its life before the arrival of his wife Susan's baby. One afternoon in mid September, Leahy staggered onto the site to announce the arrival of Christopher Brian Leahy, but nobody was concerned about the race anymore. The wall footings were to be poured the next day. The forms were in place: a double trough with a kind of removable centerboard that would separate the two footings by two inches. After the pour, preparations were made to form the base slabs for the two studio spaces. In order to isolate the wall completely, Cooper insisted that its concrete footing be jacketed with 2 inches of machine rubber, then covered with 2 inches of fine pea gravel, then a visqueen moisture barrier. Around the perimeter of the slabs a one and a half inch thick slice of R-705 fiberglass twelve inches wide was placed to hold the concrete off the wall, and also off the building's external wall footings. The studio slab and the iso room slab were also separated by R-705 board.

There were fourteen separate slabs poured in the building. Each studio had three discreet areas: control room, studio, and the iso room. Once these base slabs were poured and cured, matching floating slabs were poured on top of them, held off by a sandwich of vapor barrier (1/2"), celotex (1 1/2"), compressed fiberglass (1/2"), celotex and a second vapor barrier. Both base and floating slabs were six inches thick with a triple dose of reinforcing rod, especially dense along the perimeters, where the stud walls would be constructed. Pour days were coming at least once a week, and Stearns and Winfree's crew put in many fourteen hour days working with the concrete, getting it absolutely level and smooth. Slabs were poured in the hallways and loading areas... the latter after a massive copper earth ground was placed in the wetted and salted soil. By mid October, the base slabs were in and the wall could be finished.

When the footings for the wall were poured, a form was designed to handle the construction of the double wall system. It would be done in three pours: the footings, the wall to approximately 8 feet and the final 7 feet anchoring the top to the truss system. Stearns designed the wall form thusly: four feet by eight feet by two inch sheets of hard styrofoam (styrofoam is the acoustical equivalent of air) were used to separate the two walls. These sheets were clad in 1/4" plywood and centered on the footings. The plywood was to be the inside form of each wall. The problem was to construct a form that would prevent any concrete from leaking from one form to another, yet maintain enough structural strength to handle the pour. Stearns used a conventional snap-tie system.

Snap-ties are rods that pierce a form, with an attaching mechanism on either end exposed outside the form to which form braces are attached. After the poured concrete hardens, the tie ends are snapped off, the metal shafts remaining in the hard concrete. The form is then removed.

In Stearns' walls the snap-ties could not be left in the concrete because they would consequently couple the two walls. In order that they

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be removable after the pour, he made hundreds of PVC sleeves for them, half were four inches long, and the rest six inches long. These sleeves were placed inside the wall forms. They accomplished two things: they provided insulation for the snap-ties, rendering them removable, and they served as stand-offs for the forms, holding the inner and outer sheets of each wall at the proper dimension. When the outside plywood forms were in place, Stearns literally stitched them together with mechanic's wire at their angle joints to insure their integrity, then taped each joint with ducting tape to prevent any concrete leakage. A lattice of re-bar was twined inside each form. The bracing for the forms filled the entire building and on the morning of the first pour Stearns assembled a team of Mashers to stuff the concrete down into the form from above and a platoon of Beaters who whacked at the sides of the form to help the concrete pack in solidly. The pour was on Friday. Everyone took the weekend off.

On Monday, the form was "slipped" up and the Great Wall was revealed... perfect—no problem. Stearns and Winfree danced around the wall knocking out the PVC conduits with a sledge and a length of pipe. The world's first swiss cheese wall system had been created. Before the wall could be finished, however, more demolition had to be done. The wall was to go up to the old truss ceiling space of the building shell, where it would anchor to the trusses with special isolating concrete anchor bolts designed by Stearns. Furthermore, the truss space itself had to be divided above the wall to prevent the eventual leakage of sound from one studio's air conditioning system to the other's. So the old plaster ceiling frescoed with the projection of Jeff Cooper's wall geometry was pulled down, the foam slipped up, and in late November, the final wall pour was made. The form was removed, the holes filled with concrete plugs (made on the site by the San Francisco Concrete Dildo Supply Company,) the shell ceiling replaced with a double layer of $\frac{5}{8}$ " gypsum, the place cleared out, and Stearns and Leahy waited to see what Cooper in Los Angeles would have for them.

On December 10th, Jeff Cooper and his draftsman Charlie Konkol arrived at the studio and ceremoniously distributed sets of plans—20 odd sheets per set—to Stearns, Winfree, Shotland, and David Wirt, the electronics mastermind from Berkeley. It was, as they say, good news and bad news. Magnificent drawings to be sure (in fact the studio still uses them for promotional graphics) but the cost had gone up pretty high, especially in light of the fact that nearly 100% of the structural work done over the previous five months had not been anticipated in the budget. While Leahy and Shotland sent for Maalox to cool out, Cooper swept through his bound set of plans like a conductor sawing through a long score, explaining every scintillating detail.

He had gone after the problem with a vengeance. For example, it was discovered during excavating that the building's wall footings sloped inward as they dug deeper, so every inch further down, the footings ate up much more valuable floor space. The studios were shrinking, so Cooper designed special modular cantilevered walls that allowed deep traps to be employed (for broadband absorption) without having to move the walls inboard on the slabs. These traps were



Top: Studio B. Note the Audio Kinetic™ oak slat diffusers.

Above Right: Jack behind the Neotek in the just opened Studio B.

fourteen inches deep and eight feet high, four feet wide, with hanging blankets of celotex and R-11 fiberglass suspending inside them. Furthermore, they were to be covered with moveable 8' x 5 1/2" oak louvers, dubbed "Audio Kinetic Oak Diffuser Slats" by their creator. Somehow Cooper had managed to get enough volume inside ceilings, floors and walls to provide low-velocity air conditioning. Certain stud walls were drawn with studs edge to edge to save floor space. All surfaces were kinetic: moveable glass walls, membrane resonators in the ceiling coves and behind walls—the works. It was an interesting meeting—Cooper bright and happy with his latest masterpiece, Stearns blitzed after pumping 100 yards of concrete into the old building, Leahy and Shotland wondering how their banker would want them cooked. When the participants left that day it would be the last progress made on the job site for nearly six months.

Stearns and Leahy got together after New Years to try and tighten the job down. Stearns specified every nail, every detail. The budget was drawn up, financial arrangements made, schedules set. Then, in early February, the bottom dropped out of the commercial loan market, and by the end of the month interest rates had become a national disaster. Shotland, who had been overseeing the company's finances, was spending so many hours continually revising the cash flow projections, that he went out and purchased an apple computer and programmed it to run the projections for him. Rather than borrow at the

going rates, the partners sat on their hands. Stearns went to build another dome.

By midsummer everything was back on track. Ads announcing the studio had been running in the Mix for over six months, but with the hammers ringing once again, Jack didn't feel quite as crazy as a few months earlier.

Framing studios is very exciting. The rooms seem to go up in minutes. One day there's a concrete interior, cold and grey, with that awful smell of dungeons, and then—presto!—it's fresh wood, and there are walls, and ceiling joists, and framing going on all around. Stearns was now really in his element. Everything—studs, plates, beams—was mitered or compound mitered. The floating rooms within the large room were up, and framed instantly... a gigantic birth taking place. The tempo slowed with the next phases, because of the exhaustive acoustical demands for strength and soundproofing. After the framing was completed (R-19 insulation stapled inside all walls and ceilings,) all interior surfaces were sheathed with $\frac{3}{4}$ " plywood, all seams taped and mudded, all bottom edges caulked. The plywood provides sheer strength, preventing the rooms from racking and also providing mass to help soundproof. Following this, each surface was covered with half inch celotex and finally with $\frac{5}{8}$ " gypsum, also taped, mudded, and caulked. The hallway walls on separate slabs from the control rooms, were double-gyped on both sides of the studs for mass. Every surface was done three or four times. Stearns estimated that enough

material went into the project to build four 25,000 sq. ft. homes.

Once the wall treatments were completed, attention was tuned to details such as the interior coves that provide plenums for the air system. On the roof Stearns placed four 2.2½ ton air conditioning compressors. In order to quiet the air going to and from the studios and control rooms he built enormous boxes, 8' x 4' x 2" with labyrinths inside to muffle the moving air and to dampen any sound—planes, trucks, bombs, etc.—that might enter a room from outside. The requirement for the rooms was 350 c.f.m. which required enormous ducts in order to keep the velocity low. To get to the studios, Cooper designed a cove system which acts as a low frequency absorber on the outside, an architectural cornice detail for appearance, and a soffit for playback speakers. Stearns further turned it into an air conditioning plenum, giving the equivalent space of, say, 30" ducting for the system. But the control rooms, with their near total lack of available ceiling height, presented much more of a problem. This was dealt with by running the air through troughs in the control room floor platforms, accessed through a vertical plenum inside one of the walls, and again rising inside a back wall to a slot diffuser over the tape machines at the rear end of each control room. While this circuitous route helped quiet the air some, bottlenecks created by tight spaces increased the control air velocity to nearly 700 c.f.m. (In practice the air flow has proven inaudible.)

Risers were built for iso room B, constructed of 2" x 8" joists on edge, and filled with kiln dried sand. Risers were also built into each control room, for velocity over the visitors area, and to provide chases for the audio wiring to the consoles and equipment.

The rooms use several sliding glass door systems. Each of these 3-door systems uses special thermo-pane (2-panes of glass with ¾" air between) frames. They are mounted on angles approximately ten degrees from perpendicular to the floor to avoid any parallelism and tendency to create standing wave phenomena. The "acoustical" doors for the studios consist of two solid core doors, one 1½", the other 1⅞", laminated together with machine rubber between them, with a special lock-joint arrangement that nests them into their jambs for an air-tight seal. Each door has a mechanical rubber seal mortised into its bottom surface. The door weighs over 300 lbs. and each entrance to studios or control rooms uses two doors, creating an airlock between.

As fall approached Stearns' company began the finishing work. Hardwood floors were installed in each studio. The iso rooms received 2" plywood floors with snap out carpeting enabling the engineers to opt for a live floor in the drum areas, and also allowing musicians to nail into the floor when necessary.

Over the interior wall and ceiling surfaces, 2" x 2" fir framing was applied, and 2" R-703 fiberglass was glued to the surfaces between the frames. These frames provided anchor points for the velvet fabric that lines the ceiling and walls of the studio, allowing sound to enter broad traps. The aforementioned oak slats were installed next, resting on an oak trough housing all audio and video lines in the studios. Above the slats a lighting trough runs the entire perimeter of the

studio. All finishing materials used were velvet, oak, and polished brass.

As the fabric and trim were installed, the consoles for the rooms arrived, and the monitor soffits were completed. These boxes were built to enclose UREI 813 Time-Align® systems set horizontally, and therefore must conform to the volume requirements of the UREI system even though they are trapezoid based cubes (again, no right angles anywhere). Local resident Ed Long, creator of Time-Align®, took an interest in the custom project and helped with the necessary modifications.

At the first of October, Leahy shut down Funky Features on Central St. After more than ten years of recording there, it took only two days to move out. It was a rather quiet passing away, not many people noticed, as anticipation of the Russian Hill facility increased. On November 15, Dennis and Jack sat in Control Room B and kicked it on. Loud. Somehow it wasn't important how it sounded. They left the monitors up to the max and split to Studio A and listened. Hard. It was a very curious moment. Eighteen months of effort had gone into the project construction, another year before that in the planning. And after that seemingly eternal gestation period there were two new studios, and damnit, that wall worked! It was quiet next door. But only for a couple of seconds—Stearns and Leahy were laughing.

• • •

The following days proved that it all worked. There was no apparent sound transmission between the studios, maybe 80 dB of isolation, it's still to be measured.

Once the wall had proven effective, the design features were analyzed systematically and, amazingly enough, there were no problems. The consoles—a Neotek 28 x 24 Series III for the small studio and a Helios/GSM 32 x 24 in the big one, checked out as promised by their manufacturers. The UREI systems built into the custom enclosures performed beautifully, indeed no equalization at all was required for the rooms. The concept of the tunable room has worked out successfully. The studio is rapidly changed from very live to dead without doing anything more than manipulating the movable slat walls. The drum booth, with its sliding glass doors and slat-trap system was the biggest surprise. The sound is uncompressed and natural with the doors closed, yet even with them open there is very little leakage from the room into the studio. Further, the room has worked out to be a high quality room for woodwinds, acoustical guitars, and other instruments in the high midrange portion of the spectrum. Even the isolated pan-through between Control Room B and its studio, designed mainly as a space for scratch live vocals, has amazingly good sound and a high degree of isolation. Leahy designed PZM-type microphones into the ceilings of both studios and iso rooms and is doing successful string and horn sections with nearly no setup. Cooper's design incorporating oak, brass and velvets, gives the studios an elegant, classic feeling that Russian Hill's clients have found to be pleasant and comfortable. More than just a long time coming, the finished studios have proven more than worth the effort. ■

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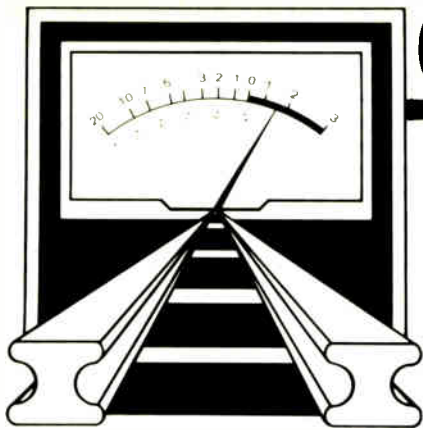
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Other Side of the Tracks

WORKING VOCALS

The situations and characterizations in this column are purely fictional and do not reflect anything relating even vaguely to reality, living or dead.

by Mr. Bonzai

Talk about a recording slump. We hadn't had a good booking in months. We were feeling as obsolete as Billy Carter jokes.

Cart Ryan, our owner/engineer, dropped his head on the desk like nap time in kindergarten. Layla, our receptionist, was penciling in fake sessions on our wall chart. Smilin' Deaf Eddie was degaussing his screwdriver. It was all part of the familiar ritual, try to look busy, keep up the charade, hope for an album project. We stared at the phone like prisoners at a keyhole. Help! We love music, we love recording; we do a good job. Don't let us go down the dumper...

The phone rang. We never answer on the first ring. Layla turned on a cassette machine real loud and picked up the receiver.

"Hello, Ryan Recording... one moment please." She held the phone up to the speaker, then pushed "hold." She then switched off the music and punched the phone back on. "Yes, may I help you?"

I looked at Layla expectantly. She smiled and made a dollar sign in the air. Ah, the universal language. "It's for you, Mr. Bonzai... it's Horris Edward."

Horris Edward! We hadn't seen him since the recording sessions for his comeback hit "Really." Unfortunately, Horris didn't come back. He was still sliding on his first and only hit, the fluke smash of the '70s: "Whatever." He had recorded it on eight tracks at his home in Italy, and it had eventually sold 30 million copies.

Horris explained to me over the phone that he had just signed a big deal with Omniglot Records for a new album and he wanted to do it at our studio. The only hitch was that he wanted us to put in a new control room, and he wanted the new Voyager transformerless console and the Alice in Wonderland Automation. He was willing to pay for half of everything, plus the session time. I told him to give me an hour to arrange things.

We called a huddle. We decided to make the commitment to update. Cart and Eddie got on the phone to Zurich and Cincinnati to make the arrangements for the console and the automation. I called up the Modzilla Audio Team, the pro-studio builders. (Their logo, the gorilla standing atop a stack of Murphy amplifiers with Ted Nugent in his fist, is familiar to lovers of good loud music.) Actually, Modzilla specialized in sound-reinforcement, but they were looking for a client to build their first studio. We got a great deal.

We received firm commitments from the equipment distributor for delivery within eight weeks. Hal Sampson, the president of Modzilla, said he could build the room in seven. He lined up his contractor, "Nifty" Montgomery, to handle the job. We were guaranteed that the carpenters would be available as soon as they finished building the custom, oak-enclosed sound system for "Two Guys Who Are Brothers," a new theme restaurant in Laguna Beach.

The deposit from Omniglot arrived and we put every penny on the line. Construction became a sudden comedy of errors and the joke was on us. There were permit delays, the carpet arrived while the concrete was wet, and the telephone company accidentally switched our number with a poodle parlor. Hal Sampson took his first vacation in twelve years and it was impossible to reach him at his bungalow in Bora Bora. How could he afford a vacation in the South Seas? OHMIGOD it hit like a crystal fastball. He was vacationing on our construction deposit. That left "Nifty" in charge.

Nifty began spending a lot of time at a chiropractor/masseuse getting his union relief after dropping a two-by-four on his foot. The "boys" didn't know what to do next. They drank beer and played target practice with the nail gun while awaiting orders. We got a little behind schedule.

With no sessions, the cash flow went in reverse and we started feeling the crunch. The Sparkletts man took his water away, our tape supplier cancelled our contract, and our pinball machines were repossessed.

Horris Edward arrived unexpectedly with his band and stumbled into our gutted control room. He smiled and said, "Well, where do we set up? How about putting the drummer behind that pile of boards over there and I'll just sing on this sandpile."

What a gentleman this Italian was. "How long do you have to finish the album before Omniglot can cancel your contract?" I quizzed Horris.

"Oh, we got about three weeks. Do you think you can hang the doors and put in the control room window soon?"

"No problem, Horris," I reassured him. "And in the meantime, we'll just tell the Modzilla workers to be quiet during the important takes." This was crazy, but Horris seemed to be buying it.

We were cutting it close, but we got the

basic tracks done in four days. Horris layed down working vocals in the unisolated reception and woodworking area. There were buzz saws and power sanders on some of the rough vocals, a few phones ringing, a couple of salesmen and bill collectors arguing, and the workers singing along, but after overdubs and sweetening we still had a good week for the final vocals and mixing.

Then Horris got laryngitis from the sawdust. He croaked. He whinned, he gargled with honey and ginseng; he garbled and gasped. He couldn't sing. We tried again the next day and came up with zilch, left with nothing but the rough vocals on the day of the deadline. The executives and talent developers from Omniglot rolled up in their limousines and sports cars for the album preview.

We put on a rough mix of the album and explained the reason for the "working" vocals. We apologized for the construction noises and offered Perrier...

After hearing the first tune, the executives sat in their usual state of critical paralysis. We played another and got a non-committal "Nice" and thoughtful "Hmmm." These guys wouldn't show excitement if Elvis returned from the dead and brought them his new single. The stony reception continued until Horris's updated version of "Whatever." His vocal was good, but the workers singing back-up were horrifying. On his love ballad "Really," we had buzz saws and nail guns for instrumental accompaniment. We sat small in the saddle and held on for a bumpy ride.

Suddenly, "Spliff" Johnson, the New Wave A&R guy for Omniglot, jumped up and began to rave.

"This stuff is incredible! Those sound effects are brilliant... let's release it just the way it is. It's perfect! I was thinking of doing a New Wave album with some has-been and Horris here is gonna be our bullet to the charts."

Omniglot really pushed the new album. They took Horris and dressed him in day-glo knickers, a bow tie that lit up and spelled "Ciao, Baby", and booked him at the Whisky as "Horris and the Workers." His back-up band wore overalls and sang proletarian outrage, using power saws and jackhammers to punctuate the music. The audience loved it and Horris's career went into overtime. We got the dough to finish the control room, it somehow ended up sounding great, and once again we enjoyed the success of "Whatever." ■

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Other Outboard Equipment: UREI 535 graphic EQ, patch bay
Microphones: Sony ECM 23Fs, Beyer M400 88, Shure SM 57's, SM-58's, Sennheiser 421
Instruments Available: Fender Rhode: 8f, Crumar Performer, Micro Moog Rogers trap set, various handmade percussion instruments
Rates: Call for rates

• **ADULT STUDIOS**

also *REMOTE RECORDING*
42 Haas Ave, San Leandro, CA 94577
(415) 838-3888

Owner: The Crowd Pleasers®
Studio Manager: Jeff St. Paul
Engineers: Jeff St. Paul, Jeff Johnson, B.J.
Dimensions of Studios: Main studio 13' x 26', drum room 16' x 13', isolation booth 6' x 14', vocal booth 6' x 7', reverb room: 6' x 9'
Dimensions of Control Rooms: 13' x 9'
Tape Recorders: TEAC 3340s 4 track; Aiwa 6900 2 track, Toshiba PC 6030 cassette, Reference cassette, Superscope cassette
Mixing Consoles: TEAC Model 5, 8 in x 4 out, Tangent 8 in x 2 (for drum submix) out
Monitor Amplifiers: Marantz 510, 3600; Yamaha 2201, BGW 250E
Monitor Speakers: JBL 4343's; Auratones; Beyer DT-100 headphones; \$15,000 JBL custom built PA
Echo, Reverb, and Delay Systems: 2-stage mono reverb units, special reverb vocal room
Other Outboard Equipment: 2 Yamaha 4130 3-way crossover networks, videotape system
Microphones: Sony EM56, ECM 33, Beyer M50Gs, Electro-Voice PL76, Shure and others
Instruments Available: Oberheim 4-voice w/programmer and tape interface, Wurlitzer studio grand and spinet pianos, Slingerland drum set, Boogie amp, 1952, '53 and '64 Telecasters, 1958, '60, '61 and '63 Stratocasters, 1954 and '57 Les Pauls, SG, 1952 ES 125, custom acoustic
Rates: \$100 per 6 hour session with 2 hours free set-up. Block time only.

• **A&J'S REELS ON WHEELS**

also *REMOTE RECORDING*
1745 Washington St., San Mateo, CA 94403
(415) 348-1880
Owner: Jesse Feliciano.
Studio Manager: Jesse Feliciano, Mike Fermer.



*A&J's Reels on Wheels
San Mateo, CA*

Extras: Besides what you see in the picture of Studio A (Studio B is the remote recording van) we also have a wide range of effects such as flangers, doublers, compressors, etc., and tape dup service
Direction: Our work with local talent as well as commercial work for 9 local radio stations, has contributed to the greatest satisfaction of every artist project. And with our low rates and, most of all, the relaxed studio atmosphere, our customers have found it easy to be creative and imaginative

• **ANTOMAR PRODUCTIONS**

Oakland, CA 94606
(415) 763-2589
Owner: Tony Pashuco
Studio Manager: Tony Pashuco

• **ARTICHOKE PRODUCTIONS**

(Formerly Extraneous Static Refinement Systems)
4114 Linden St., Oakland, CA 94608
(415) 655-1283 Please phone for appointment.
Owner: Paul Kalbach
Studio Manager: Paul Kalbach, synthesizer specialist

• **BIG EAR RECORDING STUDIO**

also *REMOTE RECORDING*
801 McClay Rd., Novato, CA 94947
(415) 892-5811
Owner: Mel Martin
Studio Manager: Mel Martin

• **BODACIOUS AUDIO INC.**

REMOTE RECORDING
4114 George Ave., #1, San Mateo, CA 94403
(415) 573-5297
Studio Manager: Herb Pallant

Engineers: David Haynes

Dimensions of Studios: The World
Dimensions of Control Rooms: 6' x 14'
Tape Recorders: Ampex ATR 104 4 track, Ampex ATR 102 2 track, Ampex ATR 700 2 track, Sony 850 2 track, Pioneer CTF 1250 2 track
Mixing Consoles: Custom Magma 5000, 24 in x 4 out, Bi-Amp 1521, 12 in x 2 out
Monitor Amplifiers: Custom Threshold, Leach
Monitor Speakers: Ringes LS 3/5A, Advents, Dayton Wright XG-8 MK3
Other Outboard Equipment: dbx 160 compressor/limiters, dbx 117 Logical Systems compressor/limiters, Dolby A, Dolby B, Logical Systems EQ, dbx type 1, J, Soundcraftsmen EQ
Microphones: Custom P2M, Shure SM-81, AKG 451E, Electro Voice RE-20, RCA, Sennheiser.
Rates: Furnished upon request
Extras: 300 ft. time division multiplex snake, closed circuit TV system, synchronization equipment for video, electro-acoustically realized LFE control room. We have complete packages including disc mastering and pressing. Other services include post production editing and real-time duplication
Direction: We bring out the excitement of the "live performance." Classical, jazz, bluegrass to new wave are among our specialties. With a creative staff of musician oriented personnel we are dedicated to providing the best remote recording service in the bay area.

• **BRAINSTORM PRODUCTIONS**

2450 Charleston, Mountain View, CA 94040
(415) 965-2233, 858-2039
Owner: Jack Levy
Studio Manager: Jack Levy and Doug Hopping

• **CAE SOUND**

REMOTE RECORDING
1150 E. Santa Inez, San Mateo, CA 94401
(415) 348-2737
Owner: Peter Miller
Studio Manager: Michael Morales

• **CHONK MOONHUNTER**

also *REMOTE RECORDING*
2721 Bellaire Place, Oakland, CA 94601
(415) 221-9488
Owner: Curtis Choy
Studio Manager: Curtis Choy

• **COMMAND PRODUCTIONS**

Industrial Center Building, Suite 107,
Harbour Dr., Sausalito, CA 94565
(415) 332-3161.
Owner: Warren Waagant
Studio Manager: Anr Arnott

• **CRINKLE MUSIC CO.**

also *REMOTE RECORDING*
15708 Bothell Way S.E. #12, Bothell, WA 98011
(206) 743-2391
Owner: Fred C Taylor.
Studio Manager: Fred C Taylor

• **DAYSRING RECORDING & TAPE DUPLICATION**

also *REMOTE RECORDING*
P.O. Box 30012, Seattle, WA 98103
(206) 634-2580
Owner: Jan Allen & Rinnie Lind
Studio Manager: Jan Allen Lind

• **DRAPERDUCTIONS STUDIO**

P.O. Box 17443, Seattle, WA 98107
(206) 782-8838
Owner: Gary Draper.
Studio Manager: Terry Draper.

• **HARBOR CENTER GUITARS**
also REMOTE RECORDING
 555 Francisco Blvd., San Rafael, CA 94901
 (415) 459-0280
 Owner: Bo Bryant

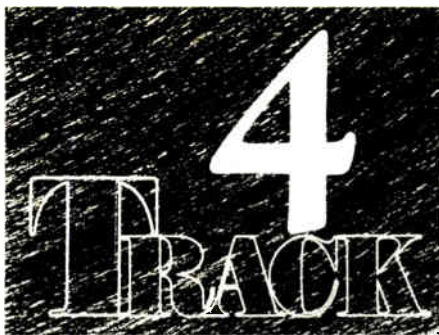
• **HI SPEED TAPE**
also REMOTE RECORDING
 940 Howard St., San Francisco, CA 94103
 (415) 543-7393
 Owner: Mieuli & Associates
 Studio Manager: Michael Baird, Michael Thomas

• **INSTANT MUSIC SERVICE**
 P.O. Box 1248, El Cerrito, CA 94530
 (415) 533-6070
 Owner: Lincoln Warren
 Studio Manager: Calvin Harrell Walker III, Allred Eaton
 Engineers: Lincoln Warren, Calvin Harrell, III and Allred Eaton
Dimensions of Studios: 18' x 12'
Dimensions of Control Rooms: 14' x 8'
Tape Recorders: Reel to reel TEAC/Tascam 40-4 with dbx noise reduction devices (cassette TEAC 124, Marantz SD 1000 2 speed Others available)
Mixing Consoles: TEAC/Tascam Model 3 with 8 inputs and 4 outputs TEAC/Tascam Model 2 (interface) with 6 inputs and 4 outputs
Monitor Amplifiers: Yamaha P2050
Monitor Speakers: JBL 4301 BWX (2), pair of custom designed 3 way speaker system pair of full range Auratone Equivalents, Quadrallex RS4 (2), headphones Sennheisers and Koss
Echo, Reverb, and Delay Systems: Tapco reverb, 2 channel, MXR Doubler
Other Outboard Equipment: MXR Flanger, dbx compressor/limiters (2), Bi Amp 2-channel 10 band EQ
Microphones: Shure and Sony
Instruments Available: Ludwig drums (studio tuned) Rhodes electric piano, Farfisa organ, Kora synthesizer, miscellaneous percussion Acoustic bass amp and Master Rhythm unit
Rates: \$13.50/hr Block rates and project rates available Hebeah sal rates \$7/hr

• **IN WITHOUT KNOCKING**
also REMOTE RECORDING
 14536 Eastern Ave., Guerneville, CA 95446
 (707) 887-2328
 Owner: Jack Ellis
 Studio Manager: Frank Eli

• **THE LAST RECORDING STUDIO, LTD.**
also REMOTE RECORDING
 P.O. Box 8050, 2539 Pearl St., Boulder, CO 80306
 (303) 442-1158
 Owner: Mark Barnett
 Studio Manager: Dick Jenkins

• **LEW'S RECORDING PLACE**
also REMOTE RECORDING
 1219 Westlake Ave. N., #115, Seattle, WA 98109
 (206) 285-7550
 Owner: Lew J Lathrop
 Studio Manager: Cary R Wakeley



Teresa Woodland and Mark Wysling
Dimensions of Studios: 20' x 20' x 8'
Dimensions of Control Rooms: 8' x 16'
Tape Recorders: (2) TEAC A3340s 4 track, TEAC 1230 1/4 track stereo, (4) Pioneer CT F500 stereo cassette decks, Revox custom A-7J 2 track
Mixing Consoles: TEAC/Tascam Model 3, 8 in x 4 out
Monitor Amplifiers: Dynaco SCA-80Q integrated amp. Eno tube amp (headphones)
Monitor Speakers: Dynaco A-25XLS, Auratones
Echo, Reverb, and Delay Systems: Hammond custom stereo reverb, tape delay, MXR stereo chorus
Other Outboard Equipment: dbx 124 and 122 noise reduction (10 channels), ADC graphic EQ (6 channels), dbx 160 compressor/limiter 2 channels, Pioneer PL-12D-II turntable, Pioneer SE 405 headphones
Microphones: Sennheiser 421s, Shure SM 57s, SM 58s AKG SE 5Es, direct boxes
Instruments Available: Krakauer 6' grand piano, Traynor "Twin" amp, Kira bass guitar, Rhythm Ace Rhythm Machine, Kora electronic tuner, Small Stone phase shifter, Morley Echoplex, onyas
Rates: Recording editing mixing copying \$14/hr, days, \$16/hr evenings & weekends, \$12/hr, 50 hrs or more Extra fee for Revox 2 track mixing and rental equipment Call for our special real-time cassette duplicating
Extras: Free production consultation, including session planning and budgeting, arranging, record manufacturing and distribution into Great discount price for blank tape Referrals for top quality studio musicians
Direction: We're celebrating our 10th Anniversary this year! Still double 4 track (did you know the Beatles *Sgt. Pepper* is a 4 track recording?)—and still making high-quality albums, singles, radio spots, soundtracks and demos. Come see and hear for yourself. One of San Francisco's first "cheapie" studios, Melon is a comfortable place providing quality tape production in a friendly, supportive and educational atmosphere. Call for an appointment to inspect our facilities and plan your project. Also, check out our super-duper cassette duplicating and our Hands-On Recording Workshop!

• **MIX-NUT RECORDING STUDIO INC.**
 3810 Twin-Oaks Way, Oakland, CA 94605
 (415) 568-7398
 Owner: Kenneth A Cole, Prof Serv Corp
 Studio Manager: Kenny Cole
 Engineers: Er Richie Moore is on call with others for special projects assignments
Dimensions of Studios: One, 22' x 30', special Mix-Nut design by Paoletti & Lewitz Audiotronic & Architectural consultants 40 Gold St., S F
Dimensions of Control Rooms: 20' across front, 15' across rear, 12' deep
Tape Recorders: Otari MTA 90 24 track, 16 track head assembly, remote control, Autolocator 16 track, (2) Ampex ATR 102, VS 10 Vanspeed w/display, multi-point search to cue, 2 track
Mixing Consoles: Sound Workshop 1636, 36 in x 24 out, VCA equipped high resolution metering, ARMS automation with super grouping, SGP custom phantom supply
Monitor Amplifiers: A3 Systems 410A power amps
Monitor Speakers: UREI 813 Time Align, JBL 4311 BWX, Auratone 5C
Echo, Reverb, and Delay Systems: Lexicon 224 digital reverb with 4 programs, UREI LA4 compressor/limiter, UREI 1178 LN 2-channel peak limiter, Lexicon Model 93 Prime Time with MEQ-93, Eventide H949 Harmonizer, UREI 546 dual parametric EQ, Scamp S-23 pan, SC-524, J-100's
Other Outboard Equipment: UREI 539 1/2 octave room EQ's
Microphones: Neumann U87Z, U-89Z, U-47, EA47, KM 84, EA21, AKG C-414EB, C 452 EB, D-12E, Sennheiser MD-421U, 441, Beyer M-500, Electro-Voice RE-20's
Instruments Available: Sennheiser Vocoder, and other synthesizer keyboards
Rates: Construction to be finished early 1981, call for information 568-7398
Extras: Mix Nut Studio is located in a small ranch style estate, nestled on the down slope of an oak tree/pine tree creek-split canyon. Virtually all the comforts of living the good life, hot tub, etc. Lodging by special arrangements
Direction: State of the art electronics, enthusiastic creative atmosphere, plus the personal touch one can only achieve by one

living one's business, is ingredient mix we applied in creating the Mix Nut Architectonic & Acoustical design Paoletti & Lewitz Assoc. Consultant electronic scientist Dr. Richie Moore, Cole Prof Serv Corp

• **PALADIN RECORDING**
also REMOTE RECORDING
 4390 Montgomery St., Oakland, CA 94611
 (415) 652-0255
 Owner: Tim Underwood
 Studio Manager: Tim Underwood
Direction: Paladin records at an hourly rate of \$6 for solo artists and \$8.50 for groups. This allows you the "reel" freedom to work on your music and make it sound just right. An upright grand is available for your acoustic piano needs. Remote and studio facilities are available. Whatever your special acoustic needs are, PALADIN can meet them.

• **PINE APPLE STUDIOS**
also REMOTE RECORDING
 P.O. Box 1192, Philomath, OR 97370
 Owner: Clayton Ashley
 Studio Manager: Henry Zellers

• **REAL TO REEL RECORDING STUDIOS**
also REMOTE RECORDING
 1135 Mill St., Eugene, Oregon 97401
 (503) 485-5977
 Owner: Cliff Nagler
 Studio Manager: Cliff Nagler

• **RIPCORD RECORDING SERVICES**
also REMOTE RECORDING
 P.O. Box 2098, Vancouver, WA 98661
 (206) 895-2112
 Owner: Blaine Allen
 Studio Manager: Blaine Allen

• **SILVER LABEL RECORDING**
also REMOTE RECORDING
 305 Melville, Palo Alto, CA 94301
 (415) 321-5776
 Owner: Cherry Productions
 Studio Manager: John R DiLoreto, M Eng

• **SOUND CONSCIOUSNESS STUDIOS**
also REMOTE RECORDING
 725 Loma Verde, Palo Alto, CA 94308
 (415) 493-1385
 Owner: Phillip Greek
 Studio Manager: Phillip Greek

• **SOUND PRODUCTIONS UNLIMITED**
also REMOTE RECORDING
 P.O. Box 835, Saratoga, CA 95070
 (408) 867-1830 for Saratoga operations,
 (805) 928-2701 for Santa Maria operations.
 Owner: Andrew Hecker
 Studio Manager: Andrew Hecker

• **THE SOUND SERVICE**
also REMOTE RECORDING
 860 Second St., San Francisco, CA 94107
 (415) 433-3874
 Owner: David Dobkin, Steven Pinsky

• **SUNSHINE WIZARD PRODUCTIONS**
also REMOTE RECORDING
 7935 Fremont Ave., Ben Lomond, CA 95005
 (408) 338-2494
 Owner: Errol G. Specter
 Studio Manager: Errol G. Specter

• **TAKE A CHANCE PRODUCTIONS**
also REMOTE RECORDING
 P.O. Box 6, Orinda, CA 94563
 (415) 254-2744
 Owner: Michael Zeitsoff
 Studio Manager: Amy Osterholm
 Engineers: Michael Zeitsoff, Michael Gardner, Jack Clark
Dimensions of Studio: 13' x 16'
Dimensions of Control Room: 7' x 10'
Tape Recorders: TEAC 3440 w/variable speed, TEAC 5300 (2 track), TEAC A103 cassette, Superscope C205 cassette
Mixing Consoles: TEAC Model 2, 6 in x 4 out, Tascam Model 1, 8 in x 2 out
Monitor Amplifiers: Marantz 140, Advent 300
Monitor Speakers: JBL 4311, Auratones, custom
Echo, Reverb and Delay Systems: Roland Space Echo (on request)
Other Outboard Equipment: Intersound RV100 parametric EQ and reverb, Soundcraftsmen 20-12A 10 band EQ, Roland Rhythm Arranger, compressors, 4-channel dbx
Microphones: SM-56, SM-58, AKG D 1000E, RE-20's, Special mikes on request

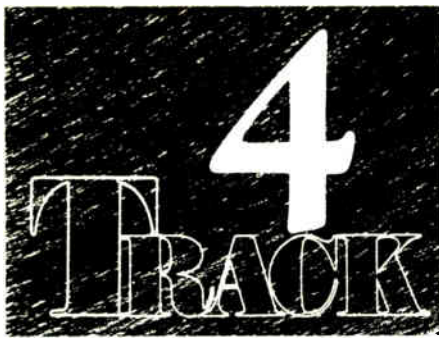
Melon Studio



Quality Recording
Cassette Duplicating
Recording Workshops

Melon Studio
 San Francisco, CA

• **MELON STUDIO**
 P.O. Box 2168, San Francisco, CA 94126
 (415) 865-8586
 Owner: Robin Woodland
 Studio Manager: Teresa Woodland
 Engineers: Robin Woodland Set up and production consultation, workshop instructor Bob Ohlsson. Cassette duplicating by



Instruments Available: Wonderful 1893 Whitney upright, Fender Rhodes 77 stage piano MKII, Guild F112 (12-string)
Rates: \$15/hr, block rates available

Extras: Mobile recording available for bands wishing to make "club demos", lead sheets, session musicians, and production assistance available on all projects, kitchen, fireplace, and serenity behind the Berkeley Hills, homemade Trail Mix to heighten creativity

Direction: Take A Chance Productions is run by award winning musicians and songwriters so we can take an experienced and expert involvement in your project, large or small. If you are a beginning band we can help you with a club demo that will get you gigs! If you are a songwriter, we offer production assistance in bringing together session musicians best suited to getting your material into the contests or down to the publisher in L.A. For experienced bands and musicians, we offer the highest quality recording at a most reasonable rate in a comfortable and creative environment. Inquire about our \$100 demo. Take A Chance! This is the highest quality 4 track in Northern California.

• **TAPE SERVICE UNLIMITED. (DICK VANCE STUDIO)**
 also REMOTE RECORDING
 3249 Grand Ave., Oakland, CA 94610
 (415) 834-6912.
 Owner: Walt Lee
 Studio Manager: Walt Lee

• **TELEMATION PRODUCTIONS, INC.**
 also REMOTE RECORDING
 1200 Stewart Street, Seattle, WA 98101
 (206) 823-5934
 Owner: Telemation, Inc.
 Studio Manager: Peter B. Lewis

• **3-B PRODUCTIONS**
 also REMOTE RECORDING
 701-16B Kings Row, San Jose, CA 95112
 (408) 289-1383
 Owner: Kevin Boone
 Studio Manager: Alan Lyon, Phil Goldworth.

• **TRANSMEDIA, INC.**
 also REMOTE RECORDING
 445 Bryant St., San Francisco, CA 94107
 (415) 495-REEL
 Owner: David B. Adams
 Studio Manager: Kathy Braun
Engineers: David Adams, Roger Stout, Cliff Foote, Dane Grant
Dimensions of Studios: A: 15' x 10'; B: 10' x 15'; C: (music) 25' x 30'
Dimensions of Control Rooms: A: 25' x 15'; B & C: 25' x 15'
Tape Recorders: Otari 5050 MK II 1/2 inch 4 track; (3) Otari 5050 MK II 2 track; (2) Revox A77 2 track; (3) Ampex PR-10 full track; TEAC 3300 2 track; Akai X355-D 1/4 track 2 track; (5) Sparta MC-104 mono cartridge
Mixing Consoles: Spec 800-C customized, 16 in x 8 out; Tascam Model 3, 8 in x 4 out; RCA 76 B-2, 6 in x 2 out
Monitor Amplifiers: Yamaha P-2100, Fisher 400 tube
Monitor Speakers: A: JBL 4311, B: Fisher ST 750, Auratone 5C Cubes
Echo, Reverb, and Delay Systems: Fairchild spring reverb, Master-Room MICMIX XL-210 stereo reverb.
Other Outboard Equipment: dbx 161 compression, CBS Audimax comp/limiter, various outboard graphic EQ's, turntables; slide chain, 1/2" VCR
Microphones: AKG 414, Sennheiser MD-421; Electro-Voice 668, Calrad 10-6, and various
Rates: \$50/hr

Extras: Complete multiple "real time" duplication facilities for both reel to reel and cassette masters. Luno service for ad agency personnel. Kitchen facilities, crash pad for late nite sessions. Complete talent agency on premises. Rehearsal space available. Complete music and sound effects libraries.

Direction: Directed exclusively at the advertising industry. We have moved into the Number 2 position among Bay Area advertising studios. Simple voice overs to complete jingle production. We have numerous awards for excellence in recording/production. Regular clients include Record Factory, Saweway, Emponum/Capwell, Rainbow Records, and many more. Our 8 track studio under construction now will be completed March of '81.

• **ULTRA SOUND STUDIOS**
 also REMOTE RECORDING
 P.O. Box 1346, Campbell, CA 95009
 (408) 371-4064
 Owner: Derek L. Jones
 Studio Manager: Vickie M. Saulsbury

• **AL VEDRO ASSOCIATES, INC.**
 also REMOTE RECORDING
 725 Second Street, San Francisco, CA 94107
 (415) 957-1131
 Owner: Al Vedro
 Studio Manager: Dave DeMontluzan

• **WALKERSOUND**
 1874 Carollita Drive, Concord, CA 94519
 (415) 886-4347
 Owner: David L. Hodtwalker
 Studio Manager: David L. Hodtwalker

• **DEMOLAB**
 298 Arlington St., San Francisco, CA 94131
 (415) 641-1094
 Owner: Jim Johnson
 Studio Manager: Chantal Vachet Johnson.

Engineers: Jim Johnson, Richard Rose, Independents
Dimensions of Studios: 15' x 20' with 8' x 8' drum iso.
Dimensions of Control Rooms: 9' x 15'
Tape Recorders: A3340 S, TEAC 32-2B, Aiwa cassette.
Mixing Consoles: Bi-Amp 1642, 16 x 16 x 4.
Monitor Amplifiers: Bi-Amp TC-120, Sansui AU-217.
Monitor Speakers: JBL 4313 B, Altec Model 5, Auratones, Gollehon PA.
Echo, Reverb, and Delay Systems: Yamaha analog delay Model E1010, acoustical reverb chamber.
Other Outboard Equipment: 6 channel dbx, Bi-Amp quad limiter, dbx Over-Easy compression, Tapco graphic EQ
Microphones: AKG C-414EB; Electro-Voice RE-20, PL-5's; Audio Technica ATM-10's, AT-813; Shure SM-57's and 58's
Instruments Available: Upright piano, Korg polyphonic ensemble/synthesizer, Fender jazz bass, Fender and Gibson guitars, Yamaha amp, studio drum set, assorted percussion.
Rates: \$20.00 per hour, discounts for block time, free set up, studio musician pool available upon request
Direction: Demolab specializes in high quality 4-track demos stressing a cleanly recorded, well mixed sound. A conducive recording atmosphere and a talented staff of engineers will give you an accurate sound of you or your band, (using half the tracks you probably thought you needed). Demolab is also an excellent place for pre-production work, jingles, commercials, and voice tapes. 8 tracks are available with prior notice and slightly higher rates. Kitchen on premises. Demolab invites you to have a listen. Call for appointment.



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The New Workhorse

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 San Carlos, California 94070 (415) 592-8311 Telex: (910-376-4890)



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8 TRACK



Bay Sound Reproduction
Oakland, CA

•• BAY SOUND REPRODUCTION

5 Yorkshire Drive, Oakland, CA 94618
(415) 855-4885

Owner: Glenn Oey and Gene Mick
Studio Manager: Gene Mick
Engineers: Chief Glenn Oey, Assistant Gene Mick
Dimensions of Studios: 30' x 19'
Dimensions of Control Rooms: 16' x 14'
Tape Recorders: Otari MX 5050 2, 4 and 8 track, Nakamichi 700II 550 cassette decks
Mixing Consoles: Soundcraft Series II, 16 in x 8 cut with sweep EQ on all inputs
Monitor Amplifiers: Nakamichi 620 and 420, Marantz 4070 phones
Monitor Speakers: Ed Long TA-3 Time Align (flashed mounted in softie) Auratones, ADS 2001 JBL 4311
Echo, Reverb, and Delay Systems: Orban/Parasound 111B reverb, MXR digital delay, DeltaLab DL 2 Acousticomputer
Other Outboard Equipment: (2) UREI LA-4 & dbx 160 comp/limiters, Orban 245E stereo synthesizer, UREI 1176 peak limiter, ADR Scamp S-23 pan effect, F 100 dual noise gates, SO1 peak limiter, 12 channels of dbx noise reduction, SAE 2700 1/2 octave graphic equalizer, SAE 1800 parametric EQ, Phase Linear auto-rotator, Nakamichi 610 control pre-amp, Irie spectrum analyzer, electronic metronome Digi-Tune 110 instrument tuner, patchbay
Microphones: Beyer, Sennheiser, Shure, AKG, Neumann, Nakamichi, Electro-Voice, FRAP guitar pick-up, Countryman, 2 Trouper Uni-Sync direct boxes
Instruments Available: Yamaha C-5 conservatory grand piano 6'6", Martin 000-19 and Epiphone Zephyr guitars, 5-piece old Camro drums w/Zildjian cymbals, Roto-toms, Synare Sensor, MESA/Boogie amp with JBL speaker, various percussion instruments, Oberheim 4 voice synthesizer (extra charge)
Rates: \$ track \$25/hr, 4 track: \$20/hr, 2 track \$20/hr, tape duplication \$17/hr, all rates include everything but cost of tape. Also possible to rent tapes. Special rates are available for block booking. One hour free set-up. Excellent facilities for recording and mixdown.

•• BEAR CREEK RECORDING STUDIO

20711 Bear Creek Rd., Los Gatos, CA 95030
(408) 354-2351

Owner: Justin Mayer
Studio Manager: Justin Mayer
Engineers: Justin Mayer
Dimensions of Studio: 12' x 12'
Dimensions of Control Rooms: 10' x 10'
Tape Recorders: Tascam 80-8 8 track, TEAC A3340S 4 track, TEAC A3300SX 2T 2 track, Technics M63 2 track cassette deck
Mixing Consoles: Tascam Model 3, 8 in x 8 out, Tascam Model 1, 8 in x 2 out
Monitor Amplifiers: SAE, Bogen
Monitor Speakers: JBL 4311, Auratone 5C
Echo, Reverb, and Delay Systems: Orban/Parasound reverb, Advent digital delay
Other Outboard Equipment: 8 channels dbx noise reduction, (2) dbx 161 compressor/limiters, MXR stereo 10-band EQ
Microphones: Electro-Voice PL 20, Sennheiser 421, AKG D11000E, Sony condenser
Instruments Available: Chamberlin M1 with violin, cello, pipe organ, female voices, oboe, flute, French horn, Steinway piano, Brodr. Iorgensen acoustic piano, Gibson ES335, Gibson Hummingbird, Takamine classical guitars, Fender Bandmaster reverb amp
Rates: \$15/hr, block rates available.

•• BENT NAIL STUDIOS

2375 Cory Avenue, San Jose, CA 95128
(408) 244-0786

Owner: Dave Morris, Bill Morris
Studio Manager: Dave Morris

Fairchild spring

Other Outboard Equipment: UREI LA4 limiters, Furman parametric EQ, and many others on request.

Microphones: Neumann L 87, E V RE 20, DS 35, Shure SM-57, 53 545, AKG 451-E, RCA DX-77, Sony C-22 C-37A C-55

Instruments Available: Wurliitzer baby grand bass, guitars, Fender Twin, Tremolux, Peavey Backstages, Dwarf, drums

Rates: Very Reasonable, based on project

Extras: Nice quiet relaxed atmosphere for the artist to exercise creative freedom. You tell us what you need

Direction: This is a totally new facility located in Contra Costa County. The musical and engineering was brought together for the client knowing that it takes more than just a building to make good music for others. We strive to get the best attitude on tape for all concerned. This one studio is but a start toward the quest of the lasting musical heritage.

•• BAY RECORDS

1516 Oak St., Suite 328, Alameda, CA 94501
(415) 885-2040

Owner: Michael Cogan

Studio Manager: Michael Cogan

Engineers: Michael Cogan

Dimensions of Studio: 30' x 40'

Dimensions of Control Rooms: 18' x 12'

Tape Recorders: Ampex MM1000-8 8 track, Ampex AG350-2 2 track, Sony 854-4S 4 track

Mixing Consoles: Custom built

Monitor Amplifiers: McIntosh MC 60

Monitor Speakers: JBL 4311

Echo, Reverb, and Delay Systems: MICMIX Super C

Other Outboard Equipment: dbx 160 compressor, SAE graphic, Metrotech graphic

Microphones: Neumann L-87s, AKG D224E, C451E, Beyer M260 E V RE-15, etc.

Instruments Available: Grand piano

Rates: \$25/hr plus tape in the studio. Or: location 8 track remotes: \$800 per day, \$1500 for a weekend. 1000 LPs from your tape and artwork for \$2600 including color covers, everything 1000 45's, \$650 total.

•• BAYSHORE STUDIOS

871-F Industrial Rd., San Carlos, CA 94070

(415) 591-3503

Owner: D. Kent Bancroft, Keith Hatschek

Studio Manager: Keith Hatschek

Engineers: Kent Bancroft, Keith Hatschek, Jap, J Singh Khalsa, Carlton Ball

Dimensions of Studio: 32' x 26' x 18' ceiling

Dimensions of Control Rooms: 20' x 18'

Tape Recorders: Otari MX 5050-B 8 track; Otari MX 5050 2 track; Revox B77 2 track; TEAC A3340S 4 track; TEAC 3340 4 track, Yamaha and Sansui cassettes

Mixing Consoles: Tascam Model 5, Tascam Model 3, 14 in x 4 out

Monitor Amplifiers: BGW, Sansui, Marantz

Monitor Speakers: JBL 4311B's, Auratones

Other Outboard Equipment: Delta Lab DL-4 DDL, Delta-graph stereo EQ, dbx RM 155, Bi-Amp quad-limiter, tape delay, Sound Workshop 242-A stereo reverb, Tapco 220 stereo EQ, etc.

Microphones: Sennheiser, Sony, MB, Electro-Voice, Shure, Neumann, Beyer, AKG all available

Instruments Available: Neumeier 1908 grand piano, Hammond M-3 organ, spinet piano, Ampeg bass amp, and more.

Rates: \$25/hr 8 track; \$13/hr 4 and 2 track.

•• ACE TUNEL SOUND CO.
9944 S.W. 37th, Portland, OR 97219
(503) 248-5048

Owner: Zack Zaccaria, Seth Staeger
Studio Manager: Zack Zaccaria

•• ALTA MIRA RECORDING

744 Remo St., San Jose, CA 95116
(408) 280-1329

Owner: Joe Trujillo

Studio Manager: Joe Trujillo

•• AMERICAN MUSIC RECORDING STUDIO

also REMOTE RECORDING

4450 Fremont Ave. N., Seattle, WA 98103
(206) 833-1774

Owner: American Musical Retailers Corp

Studio Manager: Bradley Spurr

•• APPLEWOOD RECORDING STUDIOS

4542 49th S.W., Seattle, WA 98116
(206) 932-8348

Owner: Harlan Michael

Studio Manager: Harlan Michael

•• APR RECORDING STUDIO

2115 Knowles Rd., Medford, OR 97501
(503) 773-3988

Owner: Skip Bessonette

Studio Manager: Dave Wooten

•• ARCAL PRODUCTIONS

2732 Bay Road, Redwood City, CA 94063
(415) Office: 369-7348, Studio: 368-0973

Owner: Arcal, Inc

Studio Manager: Sal Viola

•• ARMY STREET STUDIOS/B.S.U. PRODUCTIONS

also REMOTE RECORDING

P.O. Box 31425, San Francisco, CA 94131
(415) 285-0932

Owner: J A K Enterprises

Studio Manager: Lester Gass

•• AUDIO TRANSFER RECORDERS

also REMOTE RECORDING

3327 Mt. Diablo Blvd., Lafayette, CA 94546
(415) 283-4094

Owner: John, Peter and Duncan Rowe, John Christensen

Engineers: Ritchie Moore (chief), John Rowe, Peter Rowe, Duncan Rowe (staff)

Dimensions of Studio: 19' x 22'

Dimensions of Control Rooms: 17 1/2' x 9'

Tape Recorders: Scully 284 8 track, Scully 280 2 track; Ampex/MCI 351 4 track; Tandberg cassette.

Mixing Consoles: Sound Workshop Series 30, 16 in x 24 out.

Monitor Amplifiers: Yamaha P2100, Yamaha P2200

Monitor Speakers: UREI Time Align Model 811

Echo, Reverb, and Delay Systems: Master Room XL 305

•• ROBERT BERKE RECORDING

(415) 661-8316

Owner: Robert Berke

Studio Manager: Joe Hunter

Direction: The studio is a fully equipped facility specializing in radio, TV and multimedia sound production and includes an extensive music and sound effects library. The recent addition of SMPTE synchronizing equipment and color 1/4" VCR now allows us to do post production sound tracks for television.

•• BRANDT'S RECORDING STUDIOS

1030 48th St., Sacramento, CA 95819

(916) 451-3400

Owner: Charles M. & Edna M. Brandt

Studio Manager: C.M. Brandt & Chief Engineer Irvin I. Herth

•• CAPITOL CITY STUDIOS

also REMOTE RECORDING

911 East Fourth Avenue, Olympia, WA 98506

(206) 352-9097

Owner: Allen P. Giles

Studio Manager: Allen P. Giles

•• CENTER FOR CONTEMPORARY MUSIC

Mills College, Seminary and MacArthur Blvd., Oakland, CA 94613.

(415) 632-2700 Ext. 337

Studio Manager: Bob Shell, Marcia Payne, Jay Cloitch

•• RICK CHAISSE PRODUCTIONS

also REMOTE RECORDING

11 Blake Lane, Scotts Valley, CA 95066

(408) 438-2331

Owner: Rick Chaisse

Studio Manager: Rick Chaisse

•• CHAPELWOOD PRODUCTIONS

6440 W. 111 Ave., Broomfield, CO 80020

(303) 466-3619

Owner: Clifford & Kenneth Chapelwood

Studio Manager: Clifford Chapelwood

•• CORASOUND RECORDING

also REMOTE RECORDING (2 track)

122 Suite E., Paul Drive, San Rafael, CA 94903

(415) 472-3745

Owner: Stephen Hart, J.D. Sharp, John Rewind

Studio Manager: Stephen Hart

Engineers: Stephen Hart, Micheal Raskovsky, J.D. Sharp

Dimensions of Studio: 24 x 32 x 12'

Dimensions of Control Rooms: 9 x 12'

Tape Recorders: Otari MX 5050 8 track, Otari MX 5050B 2 track, Nagra 4S 2 track, TEAC A3340S 4 track, TEAC, Sony cassettes

Mixing Consoles: Sound Workshop 1280B, 12 in x 8 out

Monitor Amplifiers: McIntosh MC2505, Crown

Monitor Speakers: JBL 4311, Auratone

Echo, Reverb, and Delay Systems: Ibanez AD230 delay, Roland Space Echo, Sound Workshop 262 stereo reverb

Other Outboard Equipment: EXR Exciter, Ashly parametric EQ (2), Furman parametric EQ, Bi-Amp EQ, dbx noise reduction, dbx compressors, Orban stereo synthesizer, Symetrix signal gates, Clc Trac, AD 230 flanger, Countryman and Sescrom direct boxes, MXR phaser

Microphones: AKG 414 EB, 451s, D1000, D200s, Schoeps, Neumann KM-84, Sennheiser 421s, E-V RE-20, RE-15, RE-10s, C515, Beyer 160, M-500, M-201, Shure SM-57s

Instruments Available: Hammond B-3, Korg Poly-S Strings, Oberheim 2-voice, upright grand piano, Poly-Fusion synthesizer, Roland guitar synthesizer, drum sets, electric bass, GMT and Fender amps, Gibson ES-175 guitar

Rates: \$30/hr; block time (6 hrs or more) \$26/per hour

Extras: Complete production service, professional studio musicians available

Direction: For five years, Corasound has been specializing in LPs, singles, radio and television commercials, and film soundtracks. We also offer complete production service, from arranging to pressing. Corasound product has received national airplay, and recent product is being distributed internationally. Watch for a major expansion soon.

•• CORY SOUND CO.

also REMOTE RECORDING

310 Townsend, San Francisco, CA 94107

(415) 543-0440

Owner: Phil Markinson

Studio Manager: Phil Markinson

Dimensions of Studio: 30' x 30'; 15' x 5'

Dimensions of Control Rooms: 15' x 15' (2)

Tape Recorders: Scully 2 track, Otari 5050 4 track, TEAC 2 track; TEAC 4 track, Nagra 2 track

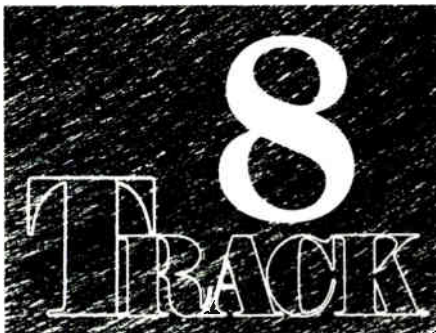
Mixing Consoles: Tascam Model 10, 8 in x 4 out

Monitor Amplifiers: Custom

Microphones: Various

Instruments Available: Piano

Rates: \$35/hr.

**•• CUSTOM RECORDING/STUDIO C**

also REMOTE RECORDING (4 track)

2220 Broadridge Way, Stockton, CA 95209

(209) 477-5130

Owner: C. Thomas T. Chen, M.D.

Studio Manager: Drew Palmer

Engineers: Drew Palmer, Dr. Thomas T. Chen

Dimensions of Studio: 30' x 30'

Dimensions of Control Rooms: 8' x 12'

Tape Recorders: 3M M-56 8 track with autolocator; Ampex AG 351 2 track; Otari MX 5050 4 track, Tandberg TCD 330 cassette; Yamaha TC 100 cassette; Otari high speed duplicator. 6 cassettes at once

Mixing Consoles: Langevin AM-4, 12 in x 4 out; Interface Series 100, 8 in x 4 out, Altac, 6 in x 2 out

Monitor Amplifiers: Crown DC-300, Crown D-60

Monitor Speakers: Bozak concert grand (studio), Electro-Voice Interface 4, MDM-4, Auratone

Echo, Reverb, and Delay Systems: Lexicon 224 digital reverb, AKG BX-20 reverb, Lexicon Model 102 stereo digital delay.

Other Outboard Equipment: EXR Exciter, Allison Gain Brain, Allison Kepex, Inovonics 2CD limiter, Eventide Flanger, Eventide Harmonizer, Countryman phaser, dbx noise reduction, Orban/Parasound stereo matrix, Orban 526A D'Esser, White Series 4000 1/2 octave EQ, ITI parametric EQ, UREI graphic EQ

Microphones: Neumann U-47 FET, U-67, KM-84; Electro-Voice RE-20, RE-15, RE-16; Shure SM-53, SM-58, SM-60, SM-81; Sennheiser MD-421, MKH-405; AKG C-451E system, D-200; P2M, custom built guitar & drum mics; FRAP and FRAP for wind instruments, Countryman direct boxes.

Instruments Available: Steinway grand piano, Hammond B-3 w/Leslie, Oberheim eight-voice w/sequencer, Synclavier II, Alembic graphite neck bass w/Alembic bass cabinet, Deluxe Fender Precision bass w/custom noiseless electronics, Gibson Les Paul guitar w/noiseless electronics, custom individually motherlode drumset, Ludwig Black Beauty and Wooden Snare, Rico-Tom; tympani, Rogers Deep Wooden Toms, Hohner clavinet w/modification, assorted percussion instruments, Fender Deluxe Reverb amp, Fender Vibraverb amp w/JBL speakers, Oberheim amplifier, Legend Amp

Rates: 8 track: \$35/hr; block rates available, 1 hr free set up. 2 track \$25/hr. 4 track remote recording \$30/hr

•• DOME STUDIOS

S.R. Box 40510, Fairbanks, AK 99701

(907) 458-1993, 458-2804

Owner: Jerry Ralston

Studio Manager: Ruf Ralston

Engineers: Jerry Ralston, Ruf Ralston

Dimensions of Studio: 375 sq. ft. irregular polygon.

Dimensions of Control Rooms: 125 sq. ft.

Tape Recorders: TEAC/Tascam 80-8 8 track; TEAC A3340S 4 track; Technics RS 1500 US (1/2) 2 track; Pioneer RT 1050 2 track; (2) Kenwood cassettes, Pioneer cartridge 8 track.

Mixing Consoles: Shure MC-24, 24 channel; Tascam Model 3, 8 channel; (2) Shure sub-mixers, 4 channel.

Monitor Speakers: JBL 4313.

Other Outboard Equipment: 8 channels dbx

Microphones: Beyer, Shure, Peavey, others on request.

Instruments Available: Piano, bass (acoustic and electric), drums, guitars

Direction: Mellow woody atmosphere, out of town, with a nice view of the Alaska range. Comfortable lounge. 1" Sitka spruce paneling throughout. Musicians available. We invite all serious musicians/composers to check us out. Our orientation is toward promoting and developing Alaskan talent and outsiders here to get a new perspective. Studio is available on a rental basis or cost plus percentage, depending on the material.

•• GRUVANDO STUDIOS

1221 Old Bayside Hwy., San Jose, CA 95112

(408) 278-0840

Owner: Dave Corbin, Lee Deal, Ed McCarthy, Sam Villarreal

Studio Manager: Ed McCarthy

Engineers: Sam Villarreal, Dave Corbin

Dimensions of Studio: Main room: 12' x 20'; Soundproof room: 12' x 10' x 8'

Dimensions of Control Rooms: 14' x 8'

Tape Recorders: TEAC/Tascam 80-8 8 track; TEAC 3340S 4 track; Akai GX 750D cassette deck.

Mixing Consoles: TEAC/Tascam Model 5A; TEAC/Tascam

Model 5 EX.

Monitor Amplifiers: Kenwood KA 907; Kenwood KA 3700.

Monitor Speakers: Control room: ADS 410, Auratone 5C; Studio: custom made speakers, AKG K240 headphones, Koss Pro headphones.

Echo, Reverb, and Delay Systems: Lexicon 93 Prime Time digital delay/flanger, Orban/Parasound dual spring reverb (2 channel) with parametric EQ.

Microphones: Neumann KM-84, Beyer dynamic 201N; Shure SM-57's; Electro-Voice RE-11, PL-76.

Instruments Available: Fender Stratocaster, Rickenbacker bass, acoustic 6 & 12 string guitars, percussion (ass'tl), piano

Rates: \$20/hr recording. Mix/engineer, dubbing, equipment, tape, by agreement.

•• HARBOR RECORDS

1250 Seventh Avenue, Santa Cruz, CA 95083

(408) 476-8444

Owner: Wayne Nelson, Noel Gott

Studio Manager: Noel Gott

Engineers: Noel Gott, Rick Cabral, 2nd Engineer.

Dimensions of Studio: 14' x 20' plus vocal booth.

Dimensions of Control Rooms: 12' x 15'

Tape Recorders: TEAC 80-8 w/variable speed, dbx, 8 track; Revox A-77 2 track; TEAC 3340 4 track; Sony 770 2 track; Sony 152 cassette.

Mixing Consoles: Sound Workshop 1280B EQ, 12 in x 8 out; TEAC and Sony's.

Monitor Amplifiers: McIntosh 275, Tapco

Monitor Speakers: Dumble/Altac custom, Electro-Voice, KLH and Auratone.

Echo, Reverb, and Delay Systems: Custom stereo reverb, DeltaLab DL2, live echo chamber.

Other Outboard Equipment: Scamp compressors, EQ, noise gates and expander gates; MXR flanger

Microphones: AKG 414; Electro-Voice RE-20, RE-11, DS-35; Shure SM-57's; Sony 22P; direct boxes.

Instruments Available: Steinway grand piano, Dumble amp.

Rates: \$25/hr. Block rates for \$10/hr.

•• (HARC) HORIZON AUDIO RECORDING CO.

10297 Bethel Burley Rd. S.E., Port Orchard, WA 98368

(206) 878-4972

Owner: Kerry L. Pilling

Studio Manager: Kerry L. Pilling

•• HART COMMERCIAL RECORDING

also REMOTE RECORDING

5722 Swan Creek Dr. E., Tacoma, WA 98404

(206) 472-3740

Owner: Dean K Hart

Studio Manager: Dean K Hart

Direction: Hart Commercial Recording has been specializing in cassette duplication for the past several years. We are continuing our commitment to provide the highest quality cassette duplication to our clients. Our clients range from educational, religious, industrial to record companies. Our commitment to quality and service has made us one of the most respected tape duplicators in the Northwest. To all this we add our special ingredient: Pride. Pride in workmanship equals pride in product.

•• INFAL RECORDS CO.

also REMOTE RECORDING

2217 Champa St., Denver, CO 80205

(303) 892-7141

Owner: Victor M. Hernandez

Studio Manager: Victor M. Hernandez

•• IRONWOOD STUDIO

20818 23rd Ave., West, Alderwood Manor, WA 98038

(206) 775-7905

Owner: Paul Scoles

Studio Manager: Paul Scoles

Engineers: Paul Scoles, Gene Darling

Dimensions of Studio: 15' x 22' plus 8' x 10' drum booth.

Dimensions of Control Rooms: 11' x 15'

Tape Recorders: Otari MX-5050 8 track; Otari MX-5050 2 track; Akai GX-630 1/4 track, Sanyo STD-1800 cassette deck.

Mixing Consoles: Spectra Sonics custom, 16 in x 16 out; (2) TEAC/Tascam Model 1's stereo cue mix, 8 in x 2 out.

Monitor Amplifiers: Marantz R 330 B

Monitor Speakers: JBL L-99's, ADS 910's

Echo, Reverb, and Delay Systems: DeltaLab DL-2 digital delay; Master-Room XL-305 stereo reverb.

Other Outboard Equipment: dbx 155 8-channel noise reduction, Symetrix CL-100 compressors (2), Symetrix noise gates (2); Audioarts parametric EQ, Neptune 910 EQ (2); custom built stereo synthesizer and phase shifter; Symetrix headphone amps (2), instrument pre-amps (2), real time analyzer, strobe tuner, and assorted effects.

Microphones: Neumann U-87, U-47, KM-84's; Sennheiser 441's; E-V RE-20; Beyer M-500; Shure SM-58's, SM-57's; Nakamichi CM-300's; Audio-Technica AT-813; Shure 545 and 546.

Instruments Available: Wurlitzer spinet piano, Farfisa organ, Guild Starfire guitar, Ovation bass, conga drums, Musc Man amp, full drum set, others on request.

Rates: \$25/hr recording and mixing, tape extra. Block rates available.

•• ISOLATION

24 Gerioli Ct., Pleasant Hill, CA 94523
(415) 937-8552 (24 hr answering service)

Owner: David Denny

Studio Manager: David Denny

Engineers: David Denny

Dimensions of Studios: 12 x 15. New booth 6 x 12 in construction

Dimensions of Control Rooms: 9 x 10

Tape Recorders: Tascam 80 8 dbx 8 track. Tascam A440SX 4 dbx 2 track. TEAC A24 SX 4 track. Sony cassette metal TC K81 TC K2A 2 track. 16 track to come

Mixing Consoles: Sound Workshop 1280 B Super EQ. 12 in x 8 out. 2 TEAC 8 in x 2 out. Technical Audio 520B. 6 in x 2 out

Monitor Amplifiers: Kenwood KA 8100. Sansui 771. Quilter 35. HK 430A

Monitor Speakers: JBL 4411's, Auratones, Infinity 4000's

Echo, Reverb, and Delay Systems: Steiner stereo echo plates. Dehlab-II stereo digital delay and flanger. Roland 301 delay & chorus

Other Outboard Equipment: Ashly Compression S050. Roland track out pre-amp. S100. SAF parametrics. Sero-level loops. Countryman direct. Sossom direct. Kora noise tuner. 150 point patch bay. Sony stereo head phone system. noise gate

Microphones: AKG C414. S.E. 5's. Shure SM 57. 58's. Sennheiser 421. 441's. bidirectional mikes. other mikes available if set up prior to recording date

Instruments Available: Fender Tele-Delux. Ovation 12 string. Ibanez Artist prototype with special EQ. load out amp. Mitchell Traynor. Kustom. Fender. Fender. Fender. Roland synth. ADA & Landi. A right piano. available

Rates: \$20/hr. 8 track. New rates will be going into effect for 16 track. 2 tape. \$25/hr. beginning after completion of the new addition

Extras: Bedwood, acoustic tile and directional track lighting. made a comfortable atmosphere for performing. Large, warm room with color TV. Also bedwood desk with BFO and pool. Refrigerator

Direction: Making people sound professional is our purpose. We're trying to cover all needs from 2 track to full 16 track. In-staff musicians are available for writing, arranging, producing and performing. We want artists to walk out of the studio with a finished album quality tape.

•• KEZR STUDIOS

777 North First Street, Seventh Floor, San Jose, CA 95112
(408) 287-5775

Owner: Alta Broadcasting Inc.

Studio Manager: Adriano Adams. David Perez

Engineers: David Perez

Dimensions of Studios: 14' x 10' (trapezoid). Studio A 40' x 10' sq. ft. isolated announcer booth (trapezoid)

Dimensions of Control Rooms: 8' x 10' (Control 1). 7' x 8' (Control 2)

Tape Recorders: MCI H101A 8 track. MCI H101A 4 track. (2) MCI H101A 2 track. 3 Technics 1500 2 track

Mixing Consoles: Quantum QM 108. 16 in x 8 out. Quantum QM 12P. 12 in x 4 out

Monitor Amplifiers: Technics 9090's. 4

Monitor Speakers: All MDM TA. Line Array

Echo, Reverb, and Delay Systems: Orban 1118 reverb

Other Outboard Equipment: UHFH LA4 limiter/compressor. Orban 22 B parametric. E-D ADC 500 up to 4 EQ

Microphones: Neumann Sennheiser AKG

Rates: \$25/hr. other audio. 5 reel. 1/4" \$200. 7 reel. 1/4" \$250. 10 reel. 1/4" \$350. 1/4" 2 track. 1/4" 4 track. 1/4" 4 track. 1/4" 5 reel. \$10. 1/4" 8 track. 1/4" 7 reel. \$25. cassette. dubs. \$2/ea

Extras: Full restaurant/bar lounge from 10 am. 1 am. free coffee/private office and phone for independent producers/announcers. xerox. full computer labeling for cassette and reel to reel. also a courier service for all local stations. Grohe and high grade or Federal express delivery no extra charge. Male/female in-announcers on staff

Direction: KEZR Studios was designed to offer the highest quality for broadcast programming and commercial. We also are used for soundtrack work for television commercials, films, video tapes, slide presentations and instructional cassette programs. We also are capable of recording live music groups, production tracks for jingles and background tracks. More often than not we create our own sound effects for perfect quality and balance

•• LIKEWISE PRODUCTIONS

P.O. Box 5447, Berkeley, CA 94705
(415) 654-3112

Owner: Jeffrey Holt, Kenneth Goodie

Studio Manager: Jeffrey Holt

Engineers: Kenneth M. Goodie, Jeffrey Holt, Randy Stadman

Dimensions of Studios: A 16' x 24'. 6' x 10' isolation booth, bass trap. B 12' x 20'. lounge

Dimensions of Control Rooms: 10' x 14' with work shop

Tape Recorders: Tascam 80 8 track. Tascam 45 2 track. TEAC A2440 SX 4 track. Sony TC 700 cassette. Akai GX2 760 D cassette

Mixing Consoles: Sound Workshop 1280B, 12 in x 8 out

Monitor Amplifiers: Yamaha P2200. P2100. Greenbacken tri-amp system

Monitor Speakers: Studio JBL 4411's, Technics SB E2. Auratones. E.V. Sentry S's P.A. Gauss JBL Electro Voice

Echo, Reverb, and Delay Systems: Sound Workshop stereo reverb M262, Lexicon Prime Time M93

Other Outboard Equipment: UHFH LA4 compressor limiter. Countryman and Sossom direct boxes. Bi Amp graphic EQ



Electronic probe tuner. Encore headphone amp. 8 out stereo. Sennheiser Pioneer headphones. Boss Dr. Beat. Assor. effects

Microphones: Sanyo E-M 55. Sennheiser 421. Nakamichi CN 400. E.V. IL 9. Beyer M 88. M 69. M 500. Shure SM 56. SM 57. SM 58

Instruments Available: Yamaha electric baby grand. Fender Yamaha or an CV-10. Gauss Leo. Paul Custom. Fender Mustang. Chinar strings. Music Man amps. Bill Groesch drums. Yamaha. rare. (mostly) piano and guitars

Rates: \$15/hr. track rate

Extras: Video. laptop. viewfind. mirror. lights. storage. kitchen

Direction: We like other artists. If you're so a band can come in and rehearse prior to recording to get used to the sound of the room. Credits: Holly Near. Tommy Tutone. June Millington. Teresa Trull. Jo Allen & the Shapers. Metropolis. Gary Marx. Rock. Little. Cover Story. Mandy Watkins. Bill Foster. Jesse Brannan. Robert Dunbar. Billy Squelute. Untouchables. Inline. KMEI. 100 FM. Braker. Sylvester & Tweed

•• LION TRACKS/CREATIVE ENTERPRISES

also REMOTE RECORDING
P.O. Box 846, Cotati, CA 94928

(707) 823-8834

Owner: Mario Lewin

Studio Manager: Mario Lewin

Engineers: Mario Lewin

Dimensions of Studios: 12' x 10'

Dimensions of Control Rooms: 12' x 15'

Tape Recorders: TEAC Tascam 80 8 w/ 4 track. Otan MX 5000 2 track 2 track. Onkyo TA-60 DM cassette 2 track. Teac A-51 4 track. Teac Sanyo TC 450 4 track 2 track

Mixing Consoles: TEA Tascam Model 5, 8 in x 8 out, 8 in x 4 out. E.V. 12 out. Teac MC 12 in x 2

Monitor Amplifiers: Fender 400. Naxco Alpha II. Sherwood

Monitor Speakers: JBL 4411's. Sones. Tru. A. w/ Billips

Echo, Reverb, and Delay Systems: Passive reverb. tape delay

Other Outboard Equipment: MXR graphic EQ. 3 track tracks. 18 X 8

Microphones: Sennheiser. Technics. AKG

Rates: \$20/hr. 8 track. 1/4" \$200. 7 reel. 1/4" \$250. 10 reel. 1/4" \$350. 1/4" 2 track. 1/4" 4 track. 1/4" 4 track. 1/4" 5 reel. \$10. 1/4" 8 track. 1/4" 7 reel. \$25. cassette. dubs. \$2/ea

Extras: Full restaurant/bar lounge from 10 am. 1 am. free coffee/private office and phone for independent producers/announcers. xerox. full computer labeling for cassette and reel to reel. also a courier service for all local stations. Grohe and high grade or Federal express delivery no extra charge. Male/female in-announcers on staff

•• LITTLE BIRD PRODUCTIONS

also REMOTE RECORDING

4416 SE Hwy 101, Lincoln City, OR 97367

(503) 996-2575

Owner: Harbinger North West

Studio Manager: L.F. Calkins

Engineers: L.F. Calkins, Jackson Smith

Dimensions of Studios: Main 15' x 10' x 9'. Drum room 13' x 10' x 7' x 4'

Dimensions of Control Rooms: 10' x 8' x 4'

Tape Recorders: Otan SD 50 8 track. Technics 1500VS 2 track. Akai GX2 310 cassette

Mixing Consoles: 2 independent. E.V. Tapco C 12 II (Series II). 24 x 8 x 4 x 2. Bi Amp 282. 12 in x 2 out. Bi Amp keyboard mixer. 4 in x 1 out

Monitor Amplifiers: Bi Amp TE 245. Bi Amp TC 120. Dynaco 120. Dynaco 80. McIntosh MC 30

Monitor Speakers: MDM 4's. Culter tubes. Community Light & Sound. E.V. SENTRY 5's P.A. monitor. AKG

Echo, Reverb, and Delay Systems: Advanced Audio D2 digital relay. Electro Harmonix echo flanger. Electro Harmonix Memory Man. Bi Amp reverb

Other Outboard Equipment: 12 channels of dbx. MXR dual 15 graphic EQ. Bi Amp 4 channel compressor

Microphones: Sennheiser 44. Sanyo ECM 21. ECM 22. Shure SM 57's. 54's. AKG D120. E.V. 1776

Instruments Available: Rhodes 88 (fully processed). ARP Odyssey. Fender Jazz bass. Slingerland/Duplex custom drum set (hot). Lesli 147. Emular driver. JBL 15 bass cabinet. Community soon

Roland Jupiter 8 polyphonic synthesizer

Rate: \$15/hr. track rate. available

Extras: We are in the area of NW known as "Ecotopia" with the Pacific Ocean 3 blocks away. bay view. sun deck. green space and we have a state-of-the-art facility. Educated in Hollywood studios and have intuitive feel for making records

Direction: We are into the New Wave of recording artist owned studios, record companies. Making our own records, producing our own artists and helping out fellow artists in the world of state-of-the-art recording. Times are changing, we can now take charge of our own destinies. Fly on Little Bird!

•• MADMAN STUDIOS

3286 Adeline St., Berkeley, CA 94703
(415) 854-1584

Owner: Paul Sandoval, Bill Thompson

Studio Manager: Bill Thompson

•• PETER MILLER RECORDING STUDIO

Union Street (at Fillmore), P.O. Box 11013,
San Francisco, CA 94109.

(415) 587-7040

Owner: Peter Miller

Studio Manager: Peter Miller

Engineers: Peter Miller

Dimensions of Studios: 28' x 23'

Dimensions of Control Rooms: 10' x 10'

Tape Recorders: 3M (1" tape) M56 8 track; Sony 854-4 4 track; Revox A77 2 track

Mixing Consoles: Response (English) BM 104, 10 in x 10 out

Monitor Amplifiers: Quad 33/303, McIntosh

Monitor Speakers: Altec 604 8G, Auratone Cubes, JBL 4311

Echo, Reverb, and Delay Systems: Binson Echorec, Orban/Parasound, Lexicon digital delay

Other Outboard Equipment: SAE 40 band graphic EQ. UREI limiters, Apollo limiter/compressor, Goobly Box, direct boxes, Kepex noise gates, four isolation booths

Microphones: Neumann U-87, KM-84, AKG C-28, D-1000E, D-19C, Shure SM-54, SM-58, Sony electret condensers

Instruments Available: Kimball acoustic piano, Fender amps, Kustom amps, Fender Jazz bass, Gretsch guitars, Levin acoustic guitar, Roland SR09 organ/string synthesizer

Rates: \$25/hr. block time available

•• MIX-MASTER RECORDING

also REMOTE RECORDING

8881 Oakdale Road, Winton, CA 95388

(209) 358-5744

Owner: Jim Schnber

Studio Manager: Jim Schnber

•• MOTHER LODE SOUND STUDIOS

8030 Sacramento St., Fair Oaks, CA 95828
(918) 968-7880

Owner: Ed Hart

Studio Manager: Ed Hart

•• MUSICAL IMAGE PRODUCTIONS

2140 Loyola Way, Turlock, CA 95380
(209) 832-8415

Owner: Gary Lee Shriver

Studio Manager: Gary Lee Shriver

•• MUSIC ART RECORDING STUDIO - M.A.R.S.

also REMOTE RECORDING

5944 Freedom Blvd., Aptos, CA 95003

(408) 868-8435 or 425-5211

Owner: Ken Capitanich

Studio Manager: Ken Capitanich

Engineers: Ken Capitanich, Will Holt

Dimensions of Studios: 14' x 18'

Dimensions of Control Rooms: 14' x 18'

Tape Recorders: Tascam w/dbx 80-8 8 track, Tascam w/dbx 25-2 2 track; TEAC 3340-S 4 track; Sony 1/2 track TC756-2 2 track, Sony cassette TC 158-SD 2 track

Mixing Consoles: Tangent 3216, 12 in x 12 out, (2) Tascam Model 5, 16 in x 8 out

Monitor Amplifiers: Crown DC-300A; (2) D-75; Marantz 250 (2); Pioneer

Monitor Speakers: JBL 4315, JBL 4301, Auratones, ESS AMT3

Echo, Reverb, and Delay Systems: Sound Workshop 242 reverb; ADR S24 time shape module and flanger

Other Outboard Equipment: 12-channels dbx; MXR limiters; MXR phaser; Burwen dynamic noise filter; Soundcraftsmen 10-band EQ; ADR expander gates; ADR compressor/limiters; ADR parametric EQ

Microphones: Neumann U-87's, Electro-Voice RE-20, RE-16, DS-35, 666, Shure SM-57's, SM-54, 545SD, Sony ECM 33s, ECM 22, AKG 451 414; Sennheiser 421, 441-U; Beyer M500N, transformer DI boxes and transformerless DI boxes

Instruments Available: Piano, amps, Rhythm Box

Rates: \$25/hr. block rates available

Direction: Studio is now under construction, to be equipped with an Ampex 1100 16 track recorder and operating 16 track by January 1, 1981

•• NEW AGE MEDIA

also REMOTE RECORDING

1111 Second St., San Rafael, CA 94901

(415) 457-5247

Owner: Pete Slauson, Alan Ventura

Studio Manager: Peggy Monaghan

Engineers: Pete Slauson, Chris Hawk

Dimensions of Studios: 17' x 20' x 8'

Dimensions of Control Rooms: 12' x 18' x 8'

Tape Recorders: TEAC 80-8 8 track; TEAC 3340S 4 track

Mixing Consoles: Tangent 1202

Monitor Amplifiers: Yamaha 100 watt

Talk is Cheap.

While others talk about performance and reliability, BGW is at work proving it, day after day after day. That's why so many pros Depend on BGW.

You already know BGW is pre-eminent in discos... recording studios... and on the road. Tough, demanding applications. But, BGW is chosen for even tougher assignments.

Consider the 1980 Winter Olympics. Future Sound, Inc. of Weston, CT was faced with providing PA, background music and network feeds for the Alpine events on Whiteface Mountain. The four amplifier sites were inaccessible by road. The only access was by snowmobile or on foot. Temperatures are, at their mildest, bitter. Naturally, Future Sound selected 20 BGW 750's because of their proven reliability.

And, when the Pope celebrated Mass on Washington's mile-long Mall, BGW 750's were there again (along with BGW 250's and 600's)... selected by Audio Technical Services, Ltd. of Vienna, VA for their reliability and because they can be operated right up to the clip point for hours with no problems.

In fact, the BGW 750 outperforms Crown's latest amplifier, the PSA-2. The 750 delivers more power at 4 and 8 ohms, has more output devices, and uses audibly superior full complementary circuitry.* One thing the Crown does have... a higher price, it's 37% higher.* And you know the BGW 750 is dependable. If you don't know from personal experience... ask the Pope.

*Based on Manufacturer's Suggested Retail Price.



*Professional
Power Amplifier
Model 750B*

*Professional
Power Amplifier
Model 750C*

Letting the competition another step behind.



CROWN



Depend On Us.

BGW Systems, Inc., 13130 S. Yukon Ave. Hawthorne, CA 90250 (213) 973-8090 In Canada Omnimedia Corp., 9653 Cote de Liesse, Dorval, Quebec H9P 1A3

Monitor Speakers: Altec 604E

Echo, Reverb, and Delay Systems: Reverb capabilities; natural echo chamber

Microphones: Neumann, Sony, Shure, Altec

Instruments Available: Upright grand piano, acoustic 6 and 12 string guitars, electric bass, assorted percussion instruments.

Rates: \$25/hr block time (20 hours or more).

•• NORTHWEST SOUNDTRACK RECORDING STUDIO

P.O. Box 7822, Eugene, Oregon 97401

(503) 683-1105

Owner: Cindy McManus

Studio Manager: Cindy McManus



Oasis Recording Studio
San Francisco, CA

•• OASIS RECORDING STUDIO

395 Sussex St., San Francisco, CA 94131

(415) 587-3644

Owner: Greg Goodwin

Engineers: Greg Goodwin, Dennis Carr

Dimensions of Studio: 15' x 30'

Dimensions of Control Rooms: 10' x 16'

Tape Recorders: Tascam 80-8 8 track; TEAC 3340 4 track, Revox A77 1/2 track, TEAC C3 cassette deck, also Sony, and Aiwa cassettes.

Mixing Consoles: (2) Tascam Model 5's, 16 in. x 8 out.

Monitor Amplifiers: BGW, McIntosh 2100, Symetrix.

Monitor Speakers: JBL 4311's, Klipsch, Altec, Auratones.

Echo, Reverb, and Delay Systems: Master-Room XL-305 reverb, Orban 111B reverb, Loft 440 delay/flanger, Roland Chorus, MXR digital delay

Other Outboard Equipment: dbx noise reduction (8 track), UREI compressor/limiters, Orban parametric EQ, Bi-Amp graphic EQ, (2) Tascam Model 1's for stereo headphone mixes.

Microphones: Neumann U-87, KM-84, KM-88; Sennheiser 421, 402; AKG 414; Beyers M500, M260's; Electro-Voice RE-20, 1776; Shure SM-81, 57's

Instruments Available: Studio upright piano (excellent tone), Gallien-Krueger 112 SC (boogie type amp), Octave Synthesizer.

Extras: Production assistance available, also studio musicians; conveniently located in San Francisco but away from the downtown madness. Call for advice on how to make the most of your studio time.

Rates: \$20-25/hr for 8 track, \$5/hr for 2 and 4 track; free set-up time. Prices may vary; block rates and project rates available.

Direction: Our specialty is producing master quality demos (Nu-Models, Invasions, Tom Russell, Antares, G.G. Jumpers) but we have handled material ranging from low budget LPs and singles (the Urals, Tuxedomoon, Clarenc, Andy Sierra) to soundtracks for film advertising seen on national television. We've produced demos that have earned artists recording contracts. (Starlord on Warner Brothers.) Oasis provides a comfortable, low key professional atmosphere. Still the hottest 8 track in the city but due to your overwhelming response, we're soon to go 16!

•• OUTBACK STUDIOS

489 1/2 Cavour St., Oakland, CA 94618

(415) 855-2110

Owner: Wilson Dyer, Steve Berryman

Studio Manager: Wilson Dyer

Engineers: Wilson Dyer, Steve Berryman

Dimensions of Studio: 20' x 20' x 13'

Dimensions of Control Rooms: 10' x 20' x 10'

Tape Recorders: Tascam 80-8 8 track; Tascam 4G-4 4 track; Otari 5050 2 track; Pioneer RT-701 2 track; Sony TC-129, TC 160 stereo cassette; Technics RS 646 stereo cassette; Saaky stereo cassette

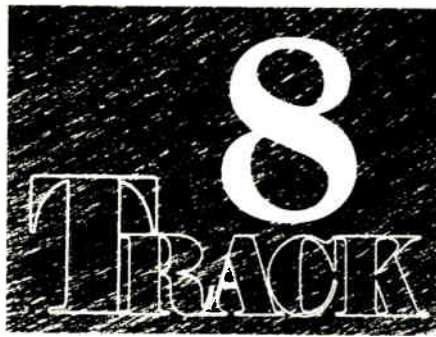
Mixing Consoles: Bi-Amp 1642, 16 in. x 16 4 subs (2) TEAC Model 2, 8 in. x 2 out.

Monitor Amplifiers: BGW 250C, Dyna MK III, MK IV

Monitor Speakers: JBL 4311's, 4301, Auratone 5C's

Echo, Reverb, and Delay Systems: Master-Room XL-305 stereo reverb; Lexicon Prime Time DDL, Furman RV-1 reverb

Other Outboard Equipment: DX-8, dbx 155 noise reduction, Dolby B 2-track noise reduction, Furman, parametric, Sunn mono



EQ, BSR stereo EQ, (2) dbx 163 comp/limiter, MXR toys, coming soon Aphex Aural Exciter!

Microphones: Sennheiser 441, 421, Shure SM-58, 57, Sony ECM 56, 22, AKG D-1000, D-190, 2000; Sescam d-boxes

Instruments Available: Wuritzer acoustic piano, Gibson 335, Marauder, Fender Strat, Jazz Bass, P-Bass, Rickenbacker electric twelve, various amps. Rentals: Gretsch studio tuned drums Wuritzer elec piano, Rhodes w/Dyno-My EQ, Prophet 5 synth, Mini Moog synth, D-6 clavinet.

Rates: 8 track \$20/hr plus materials, 4 and 2 track \$15/hr plus materials. Block rates available. Call for duplication rates

•• PEARL'S PLACE

4183 Doane St., Fremont, CA 94538

(415) 651-7187

Owner: Joey Horten, Vickie Horten

Studio Manager: Dave Humnck, Joey Horten, Vickie Horten

•• POLITE PRODUCTIONS

East Bay

(415) 525-8289

Owner: Farly Road

Studio Manager: Randy Hood

Engineers: Myself, others are welcome

Dimensions of Studio: 15' x 17'

Dimensions of Control Rooms: 9' x 10'

Tape Recorders: Scully 280 8 track, Otari 5050 2 track, TEAC CX10 cassettes

Mixing Consoles: Sound Workshop 1280 with Saper EQ 12 in x 8 out

Monitor Amplifiers: Marantz, Dynaco

Monitor Speakers: JBL 4311, Altec 604E Auratones

Echo, Reverb, and Delay Systems: Ibanez 240 delay, Orban Par sound and Gately reverbs

Other Outboard Equipment: UREI dbx, Symetrix compressor/limiters, Furman parametric and others

Microphones: Neumann AKG Sennheiser RCA Shure E.V. Beyers Countryman DI

Instruments Available: Vintage Fender amps, junky piano sometimes others

Rates: Still \$15/hr if booked in block time

•• PRUNE PRODUCTION COMPANY

10 Locust Avenue, Mill Valley, CA 94041

(415) 983-0230

Owner: Prune Production Company Inc.

Studio Manager: Wendy Morris

•• PUGET SOUND

8924 Ravenna Ave. N.E., Seattle, WA 98115

(206) 523-9933

Owner: Pat Hewitt

Studio Manager: Pat Hewitt

•• QUARTER MOON RECORDING

also REMOTE RECORDING

130-D Hamilton Drive, P.O. Box 1421, Novato, CA 94948

(415) 883-4757

Owner: Michael Ransom

Studio Manager: Michael Ransom

Engineers: Michael Ransom

Dimensions of Studio: 11' x 17' - trum both 7' x 6' vocal isolation 9' x 11'

Dimensions of Control Rooms: 6' x 12' trailer with closed circuit TV

Tape Recorders: Otari 7800 8 track Otari 5050 B 2 track Technics RS 6-to DS cassette

Mixing Consoles: Sound Workshop 1280 B8EQ 12 in x 8 out TEAC Model 1, 6 in x 4 out

Monitor Amplifiers: BGW 250D BGW 100B

Monitor Speakers: Ed Long Near Field Monitors (MDM 4) Auratone

Echo, Reverb, and Delay Systems: Orban 111B reverb

Other Outboard Equipment: UREI LA4 compressor/limiters MXR dual 15 graphic EQ Countryman direct boxes RCA video cassette recorder, 150' mic splitter snake

Microphones: Sennheiser 421, 441 Electro-Voice RE 15, RE 20, Shure EM 57 SM 58 SM 81, AKG 451, Beyers M 500

Instruments Available: Upright piano, Rickenbacker electric 12 string, LP custom Stratocaster Martin D-28/FHAP Telecaster bass guitars Gold Star banjo, dobro, other instruments and effects on request

Rates: Studio \$20/hr Remote \$20/hr plus setup/transportation charge. Call for block rates, special packages deals and video

Direction: QMR offers you a choice acoustically designed studio or complete remote facility. It is true that a studio just starting out has to do more to attract and retain clients. The number of repeat customers we've had in 1980 proves our unique packaging approach is just what the unsigned working band and songwriter needs. QMR Professional Recording for Anyone Anywhere, on Any budget

•• RAL-TBK RECORDING

also REMOTE RECORDING

2851 Oleander, Merced, CA 95340

(209) 722-3220

Owner: Robert Laughton

Studio Manager: Robert Laughton

•• RAM RECORDING-CATRACES

also REMOTE RECORDING

727 Callente Ave., Livermore, CA 94550

(415) 443-2205

Owner: Don Nelson, Dick Marsh

Studio Manager: David MacMillan

•• BILL RASE PRODUCTIONS, INC.

also REMOTE RECORDING

955 Venture Ct., Sacramento, CA 95825

(916) 929-9181

Owner: Bill Rase

Studio Manager: Bill Rase

•• RHYTHMIC RIVER PRODUCTIONS

2948 20th St., San Francisco, CA 94110

(415) 285-3348

Owner: Robert L. Richman

Studio Manager: Bruce Leighton

•• ROCKIN' A' RANCH STUDIO

91770 Nelson Mtn. Rd., Greenleaf, OR 97445

(503) 964-3225

Owner/Studio Manager: Michael Avilina

•• ROCKY MTN PRODUCTIONS

also REMOTE RECORDING

1000 E. 1600 N., Mapleton, Utah

Post Office Box 1233, Provo, UT 84601

(801) 489-7850

Owner: Walt C. Jones and Carl Frisch

Studio Manager: Walt C. Jones and Carl Frisch

•• R. O. STUDIOS

3359 Walnut Ave., Concord, CA 94519

(415) 878-2851

Owner: Rick, Ralph, and Scott Henry

Studio Manager: Ralph Henry

Engineers: Rick Henry house engineer, Dr. Richie Moore independent, other independents welcome

Dimensions of Studio: 26' x 15'

Dimensions of Control Rooms: 13' x 15'

Tape Recorders: Tascam 80-8 with dbx 8 track, Nakamichi 1000 II with High Com noise reduction; Otari 5050 2 track mastering deck

Mixing Consoles: Sound Workshop 1280 with 12 EQ, 12 in x 8 out

Monitor Amplifiers: BGW 750, McIntosh MC-2105 headphone amp, McIntosh C-28 pre-amp

Monitor Speakers: ADS 2002's, Auratones, UREI Time-Aligned 811's

Echo, Reverb, and Delay Systems: Master-Room XL-305 reverb by MICMIX, DeltaLab DL-2 Acoustocomputer delay line

Other Outboard Equipment: (2) UREI 1176 LN limiters, MXR stereo chorus, special effects, MXR pitch transposer, Harmonizer

Microphones: Neumann U-87; AKG 414's; Sennheiser MD 441's, 421; Electro-Voice RE-20; Shure 56's; Sony ECM 56F

Instruments Available: Yamaha C-3 conservatory grand piano, Sequential Circuits Prophet 5, ARP Omni II for strings and bass, guitars, bass, drums, (2) Fender Tremolux amps.

Rates: \$35/hr, block time negotiable. Studio musicians \$25/hr, always on hand.

Extras: (3) guitar cordless systems for comfort and freedom. (Enables guitar players to hear right off monitors in control room.) Cottage with king size waterbed, living room, kitchen, bathroom, shower, volleyball and badminton court, fresh coffee, 45 packages available

Direction: We pride ourselves in running a friendly and relaxing studio with that special touch. Give us a call and see what we can do for you! "Your songs today are tomorrow's music." Also we would like to thank all the bands and musicians for the good music and fun we had this year (1980) recording all of you! Coming soon: 16 track!! Thanks. —Rick, Ralph and Scott

•• RUBBER PARK PRODUCTIONS

also REMOTE RECORDING
P.O. Box 120, Tahoe, CA 95733
(West Shore, Lake Tahoe)
(916) 525-8554

Owner: Steve Teshara
Studio Manager: Steve Teshara

•• RANDALL SCHILLER PRODUCTIONS

also REMOTE RECORDING
1207 Fifth Ave., San Francisco, CA 94122
(415) 861-7553

Owner: Randall Schiller
Studio Manager: Randall Schiller
Engineers: Randall Schiller
Dimensions of Studios: 12½' x 15'; Drum Room: 9' x 9'
Dimensions of Control Rooms: 12½' x 15'
Tape Recorders: TEAC/Tascam 80-8 8 track, Sony TC-854-4S 4 track; Sony TC-850-2T 2 track; Pioneer RT-707 2 track; Sony TC-152 SD 2 track
Mixing Consoles: TEAC/Tascam Model 5, 8 in x 4 out, TEAC/Tascam Model 3, 8 in x 4 out, TEAC/Tascam Model 1, 8 in x 2 out
Monitor Amplifiers: Harman-Kardon Citation 12, SAE 2200, SAE 2400L, BGW Model 100-01
Monitor Speakers: Altec A7-500 (modified & bi-amplified), Bose 800 & Pioneer CS-88
Echo, Reverb, and Delay Systems: DeltaLab DL-2 Acousti-computer stereo digital delay, Sound Workshop 242 stereo reverberation unit
Other Outboard Equipment: MXR dual 15-band graphic equalizer, dbx 154 decliner noise reduction, dbx 161 compressor/limiter, Crown VFX-2A dual channel electronic crossover/filter, SAE 5000 impulse noise reduction unit, Advent Model 100A Dolby noise reduction unit, and assorted patch bays, switching systems and necessary support equipment
Microphones: Electro-Voice RE-15's, 635A's; Shure SM-57's, SM-58's; Sony ECM-16, ECM-33P's, ECM-19B's; and Sennheiser MC-431
Instruments Available: Story & Clark console piano
Rates: Studio recording 8-track \$25/hr; 4-track \$20/hr; 2-track \$20/hr Location recording prices available upon request

•• SENSEA

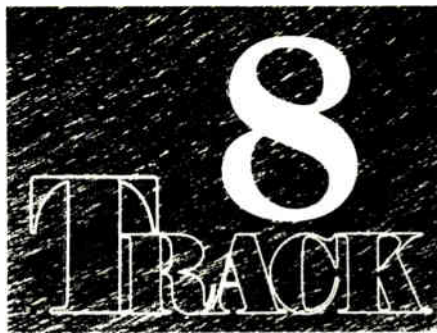
1016 Morse Ave., #16, Sunnyvale, CA 94086
(408) 734-2438

Owner: Sensa Corp
Studio Manager: Steve Hall
Engineers: Steve Hall, Stan Cotey, Doug Hopping
Dimensions of Studios: 15 x 18 main room, 7 x 10' drum room, 7 x 5' vocal room
Dimensions of Control Rooms: 9' x 10'
Tape Recorders: TEAC 80-8 8 track, Ampex 350 2 track, Aiwa M100 2 track cassette
Mixing Consoles: TEAC Model 5 & 5EX, 16 in x 4 out, TEAC Model 1, 8 in x 2 out, Ampex MX 10, 4 in x 2 out
Monitor Amplifiers: BGW 250D
Monitor Speakers: MDM 4 near field monitors, Auratones
Echo, Reverb, and Delay Systems: Loft series 440 delay line/flanger, Furman RV 1 reverb (modified)
Other Outboard Equipment: UREI LA-4 compressor/limiter, TEAC DX 8 dbx noise reduction, custom built noise gates
Microphones: Electro-Voice RE-15, RE-20, CS-15, 635A, 664 665, Shure SM-57's, SM-81's, AKG D 1000's, Sennheiser direct boxes
Instruments Available: 1914 Parkard 6' grand piano (recently rebuilt) ARP Odyssey synthesizer, Yamaha YC-30 combo organ, Fender Rhodes piano
Rates: \$25/hr, block rates available

•• 1750 ARCH STUDIOS

also REMOTE RECORDING
1750 Arch St., Berkeley, CA 94709
(415) 841-0216 or 841-0232

Owner: 1750 Arch Inc.
Engineers: Bob Shumaker
Dimensions of Studios: Dead studio 23' x 13' x 8'; live recording room 36' x 17' x 11'; many other interesting small rooms
Dimensions of Control Rooms: 17' x 12' x 8'
Tape Recorders: 3M Model M23 8 track; Ampex Model AG-440-B 4 and 2 track; Studer Model B-67 2 track; Revox Model A-77 2 track; Sony Model 366-4 4 and 2 track; Nakamichi Model 600 cassette
Mixing Consoles: MCI Model 416, 16 in x 16 and quad out; Tapco Model 6201, 6 in x 2 out
Monitor Amplifiers: Mark Levinson ML3, Phase Linear 400, Marantz 250, Dyna 70 JBL SE 400
Monitor Speakers: JBL 4310, 4315, 4320
Other Outboard Equipment: Automatic Dolby A301's for 8 track, 4 track and 2 track, UREI 1176 LN limiters; dbx 160 limiter; Furman PEQ-3 parametric EQ; Countryman 150X direct box; portable equipment for high quality stereo location recording
Microphones: Neumann SM-69, KM-84, KM-86, KM-74, U-87; Sony C500, MB-C520; E-V RE-16, 666, 1776; Sennheiser 421; Shure SM-57; Countryman condenser; Sennheiser 405; E-V 635
Instruments Available: Steinway B grand, Baldwin grand, Knabe baby grand
Extras: Tennis court, kitchen, lounge, view of Golden Gate, windows in all rooms, large maintained garden, back issues of Mandolin World News



Rates: \$45/hr for 8 track, \$40/hr for 4 track, \$30/hr for 2 track, \$25/hr editing, \$20/hr copying Stereo remote recording at the same rate, door to door 8 track and 4 track remote rates by request block rates by request
Direction: We make clean recordings of any type of music Classical, avant garde, jazz and bluegrass are specialties. We are affiliated with 1750 Arch Records, producers of early music, classical, avant garde and contemporary jazz

•• SHOWCASE SOUND

3090 S. Bascom Ave., San Jose, CA 95124
(408) 371-1897; 377-5864 (message)

Owner: Jim Bruno Jack Van Breen
Studio Manager: Randy Widner
Engineers: Randy Widner, Chret
Dimensions of Studios: 19 x 19 x 10
Dimensions of Control Rooms: 12 x 9' x 8'
Tape Recorders: TEAC/Tascam 80-8 8 track, TEAC/Tascam 4300EX 20' 1 track, TEAC/Tascam A 500 cassette
Mixing Consoles: TEAC/Tascam Model 15 16 in x 8 out
Monitor Amplifiers: GMT 1-000S, Dynaco 100
Monitor Speakers: JBL 4311, Auratones 5W
Echo, Reverb, and Delay Systems: Tapco 4400 reverb, Koru stereo echo, Lexicon Prime-Time, MXR flanger/doubler
Other Outboard Equipment: dbx 161 compressors, Bi Amp graphic EQ, Moon CL100 parametric EQ, Symetrix compressors and noise gates, MXR pitch transposer, dbx noise reduction
Microphones: AKG C-414FB, Sennheiser 421's, E-V RE-20 RE-15, PS 35's, Shure SM 57's, 58's, Beyer X1 N's, Sony ECM 24E, Descom SM1A direct boxes
Instruments Available: Upright piano, studio drum kit, various guitar and bass amps, Koru string ensemble
Rates: Please call for rates

•• SHYNE SOUND

also REMOTE RECORDING
40 Woodland, San Rafael, CA 94901
(415) 458-2833

Owner: Leroy Shyne
Studio Manager: Leroy Shyne

•• THE SOUND BOARD

also REMOTE RECORDING
402 5th Avenue, Redwood City, CA 94083
(415) 384-3484

Owner: Steven Lawson
Studio Manager: Steven Lawson
Engineers: Brian Hauck, Steve Lawson
Dimensions of Studios: (2) 9' x 12' rooms
Dimensions of Control Rooms: 8' x 14'
Tape Recorders: Ampex AG440B-8 8 track; Ampex 300 master 2 track, Marantz 5030 cassette 2 track
Mixing Consoles: Targen; 802A, 8 in x 8 out; Malatchi Performer 6 in x 6 out
Monitor Amplifiers: Gallien-Krueger 1000S-SB power amp, Crown D-150 power amp
Monitor Speakers: JBL 4311; Mitchell woofers; Gauss speakers, horns, Altec
Echo, Reverb, and Delay Systems: Tangent reverb in board, noise reduction, and digital delay systems upon request
Other Outboard Equipment: Mutron Bi-phase, MXR 6-band graphic EQ, MXR distortion, Pignose, Peavey 200, Silver Tone vac tube 1346 w/twin 12's, Franz LM-FB-4 elect. metronome
Microphones: Neumann, Teletunken U-47, Sennheiser, AKG, Shure, etc
Instruments Available: Sequential Circuits Prophet 5 synthesizer, Fender Rhodes Mark I Model 73, Ludwig drums, Rogers snare, Guild F12 12-string, 1969 Martin D18 acoustic guitars
Rates: \$25/hr, bulk rates negotiable

•• SOUNDCAPSULE STUDIOS

also REMOTE RECORDING
P.O. Box #383, Tahoe City, CA 95730
(916) 583-1836

Owner: Michael D. Loomis
Studio Manager: Michael D. Loomis

•• SOUNDMARK, LTD.

also REMOTE RECORDING
4850-C Nome St., Denver, CO 80239
(303) 371-3076

Owner: Corporation, stockholders.
Studio Manager: Charles Shoemaker, Studio manager and chief engineer.

•• STRICTLY ROCKERS PRODUCTIONS

P.O. Box 90, Dutch Flat, CA 95714
(916) 389-2328

Owner: Russell Brian Brooker
Studio Manager: Russell and Vicky Brooker

•• STUDIO N

also REMOTE RECORDING
491 Macara Ave., Suite 1004-237, Sunnyvale, CA 94088
(408) 739-2684; L.A.: (213) 460-8010

Owner: Brian G Job
Studio Manager: Brian G Job
Engineers: Dave Nodiff, Bob Higgins, independents
Dimensions of Studios: 24 x 18' x 15'
Dimensions of Control Rooms: 24' x 18' x 15'
Tape Recorders: (Modified) TEAC/Tascam 80-8 w/full dbx, Revox A77 1/2 track, Sony Hitachi, Pioneer cassettes Video JVC 4400 portapak w/Hitachi 1020 camera
Mixing Consoles: (Modified) TEAC/Tascam M-5 w/M-1's for stereo cues, reverb effects sends, returns
Monitor Amplifiers: Marantz
Monitor Speakers: JBL Magnaplanar, Bose, Electro-Voice, others available
Echo, Reverb, and Delay Systems: MXR DDL, Orban 111B stereo reverb
Other Outboard Equipment: Roland SBF 325 stereo flanger/chorus, A/D/A flanger w/V C pedal, dbx compressor, custom compressor, graphic EQ, other outboards available
Microphones: RCA 77's, E-V RE 20's, 664, Shure SM 53, SM 81, SM-57, others available
Instruments Available: Prophet-5 rev III w/cassette memory, Koru MS 20, E-H synthesizers, Rhodes 73 and Yamaha electric pianos, Fender Tele (mod) and Tele Deluxe plus various acoustic guitars, Fender "Tweed," Champ, Polytone "Mini-brute," Dwarf amps, PAIA programmable drumkit, Markley mouth-tube, various percussion, other toys and instruments available
Rates: \$20/hr plus materials (introductory rates), \$45/hr (post-Mar 1) Please call for video rates
Extras: Services include custom pressings, 8/16 and 8/24 transfers, editing, leadening, tuning, copies Pro audio rentals/sales specialty electronics, rhythm section available Pool, TV, coffee
Direction: Originally specializing in audio remotes, Studio N is developing into a full-service audio/video facility with an eye to the future. Recent LP credits include Rounder (Eckerworks), Earful, Aqua Records and a Levi-Strauss & Co soundtrack We can provide broadcast quality video production and computer animation. We look forward to serving you in 1981

•• STUDIO ONE

235 East 3rd Avenue, San Mateo, CA 94401
(415) 347-4811

Owner: Gary Duoss
Studio Manager: Gary Duoss
Engineers: Bruce Cooley, Gary Duoss
Dimensions of Studios: 12' x 20'
Dimensions of Control Rooms: 12' x 12'
Tape Recorders: Ampex 440-B 8 track, Ampex 440-B 2 track, (2) Stemo custom 2 tracks; Otari MX 5050 4 track, TEAC A 3440 4 track, (4) Sony TC-15 cassette decks
Mixing Consoles: Tascam 15, 16 in x 8 out
Monitor Amplifiers: Crown DC-300's
Monitor Speakers: Altec Model 9's, 7's, Auratones
Echo, Reverb, and Delay Systems: Orban reverb
Other Outboard Equipment: Dolby Studio "A", (2) UREI 117GLN limiter/comp, Orban 516EC silbance control, Orban parametric EQ 622B, Allison Kepeck's, Gain Brain, vanspeed, Barwen and Kenwood noise reduction, Countryman Phase Shifter, 16mm B&H projector, (6) AF-2 projectors
Microphones: Neumann U-67's, U-47's, Sennheiser 421's, 451's, AKG, Shure, Electro-Voice
Instruments Available: Baldwin piano, Ludwig drums, Zildjian cymbals, percussion assortment
Rates: \$40/hr Special block time rates available

•• SUNSHINE RECORDING

327 Del Sur, Vallejo, CA 94590
(707) 552-5210

Owner: Lyman White
Studio Manager: Lyman White
Engineers: Lyman White, graduate of the Recording Institute of America, member of the Audio Engineering Society.
Dimensions of Studios: 20' x 20'
Dimensions of Control Rooms: 10' x 20'
Tape Recorders: Tascam 80-8 with dbx 8 track, Tascam 35-2 with dbx 2 (1/2) track; TEAC 2300S 2 track; Technics RS-M85 cassette, Technics RS-M65 cassette; Pioneer H-R99 8 track cartridge
Mixing Consoles: Sound Workshop 1280-B, 12 in x 8 out
Monitor Amplifiers: Yamaha CA-1010, McIntosh MC-50 (headset)

SUBSCRIBE

EFFECTIVE JANUARY 1, 1981
 12 ISSUES / 1 YEAR \$18.00
 OUTSIDE U.S.A. \$22.50

Send Check or Money Order to:
 The Mix, P.O. Box 6395, Albany
 Branch, Berkeley, CA 94706

NAME _____

COMPANY NAME _____

ADDRESS _____

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Monitor Speakers: JBL 4311 studio, JBL Decade 16 control room.

Echo, Reverb, and Delay Systems: Ursa Major Space Station multi-tap digital delay, Pioneer SR-202W reverb, Univox EC-80 reverb.

Other Outboard Equipment dbx 162 stereo compressor/limiter, UREI stereo parametric EQ, Sesscom and Troupers-Series direct boxes.

Microphones: AKG C-414EB; Sennheiser MU-421-U-5; Beyer M-260, M-160; Sony ECM 23F; Teledyne EC-340's; Shure 556EQ's, 588SA.

Instruments Available: At \$10.00 per session: Fender Malibu acoustic 6-string, Fender Villager acoustic 12-string, Gibson Les Paul, Wuritzer spinet piano, Peavey 400 amp, Roland SR-202 string ensemble, Cat Octave synthesizer.

Rates: Recording \$25/hr. Mixing \$12/hr. Editing \$12/hr.

•• TRANSIENT SOUND REMOTE RECORDINGS
also REMOTE RECORDING

441 Pennsylvania Ave., Santa Cruz, CA 95062
 (408) 423-7957

Owner: David B. Green.
Studio Manager: David B. Green.

•• TRULLION STUDIO

P.O. Box 23051, Sacramento, CA 95823
 (916) 391-9891

Owner: Kurt & Nancy Bischoff.
Studio Manager: Kurt Bischoff.

•• THE UNREGULATED RECORDING STUDIO

P.O. Box 91485, Fairbanks, AK 99708
 (907) 458-3419

Owner: The Unregulated Record Co., Inc.
Studio Manager: Richard Pasillas.

•• WESTERN CINE SOUND SERVICES

312 South Pearl, Denver, CO 80209
 (303) 744-1017

Owner: Western Cine.
Studio Manager: Paul Emrich, Asst: Dean Zupancic.

•• WESTMONT RECORDING COMPANY

6034 Shawna Ave. S.W., Olympia, WA 98502
 (206) 943-8328

Owner: Richard E. Quick.
Studio Manager: Richard E. Quick.



*White Rabbit Studio
 Sausalito, Ca*

•• WHITE RABBIT STUDIO

301 Harbor Drive, Sausalito, CA 94965
 (415) 332-4852, 332-4855

Owner: Richard H. Grove.
Studio Manager: Jan Baldwin, Craig Talmy.

Engineers: Craig Talmy, Fernando Kral.
Dimensions of Studios: 30' x 20', 2 alcoves including 2 bass traps and loaded air volume acoustic design.

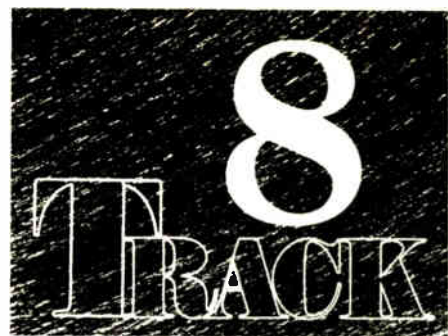
Dimensions of Control Rooms: 20' x 18'. Sona Pulse. Tuned Bill/Scott Putnam, UREI trademark. (Extremely Accurate.)

Tape Recorders: Otari 7308 1" 8 track; Otari (2) MX 5050 1/2 track; Sony TC 850-2 1/2 track; TEAC A3340S 1/4 track; Cassette decks: Nakamichi 1000, Phase Linear 7000 II, Pioneer 1250, Sony TCM-5, JVC 95, TEAC.

Mixing Consoles: Quantum QM-128, 12 in x 8 out; Bi-Amp 1221, 12 x 8 x 6 x 2.

Monitor Amplifiers: BGW, Phase Linear, Crown.
Monitor Speakers: Altec 604-8G, Auratone Acutex, Northwest Time Align Model A computer assisted.

Echo, Reverb, and Delay Systems: DeltaLab DL-2 digital delay, Orban 111B reverb.



delay, Orban 111B reverb.

Other Outboard Equipment: UREI compressor/limiters, ADF Complex, 4-band parametric EQ, DeltaLab Acouscomputer Audioarts notch filters, full Scamp Rack, CR 101 real time analyzer with EQ, 1/2-octave graphic EQ, 1 octave EQ.

Microphones: Neumann, AKG, Sennheiser, Altec, Beyer Shure, and E-V.

Instruments Available: Helpinstill PG-21 grand piano, drum kit, (We offer a wide selection of instruments and amplifiers with notice.)

Rates: \$25/hr. Block rates available. Call or come by for further information.

Extras: All rates include: kitchen, living room and private patio. full production and management facilities to help you with 45 package or demo package.

Direction: Specializing in commercials, demos, 45 packages and album productions. White Rabbit is gaining a reputation as a state of the art recording and production facility with many leading Bay Area entertainers: Cory Bumpus (Dobie Bros.), Marty Balin, Greg Douglas.

•• XANDOR RECORDING STUDIOS

also REMOTE RECORDING
 407 Camino Sobrante, Orinda, CA 94563
 (415) 254-9077, 254-5730 (answering service)

Owner: Jim Weyeneth.
Studio Manager: Jim Weyeneth.

Coming in
 February:
 Studios of
 Kentucky
 Tennessee
 Virginia
 W. Virginia
 N. Carolina
 S. Carolina
 Georgia
 Alabama
 Mississippi
 Florida

16 TRACK

the charts in Billboard, and recently demoed tapes of Ms. Lulu Small who is signed to MCM's new label. The recording scene in Alaska is starting to come to life. We've been steadily growing for the past 6 years. And the future looks very promising.

••• **FRED ARTHUR PRODUCTIONS, LTD.**
1218 E. 18th Ave., Denver, CO 80218
(303) 832-2664
Owner: Fred Arthur
Studio Manager: Debbie Mitchell

••• **AZTEC RECORDING STUDIOS**
11834-U Loma Rica Rd., Marysville, CA 95901
(916) 743-1523
Owner: Alfred L. Johnston
Studio Manager: Alfred L. Johnston

••• **BACKSTREET RECORDING STUDIO**
also *REMOTE RECORDING*
204 S. 3rd W., Missoula, Montana 59801
(406) 721-3269
Owner: M.J. Purnation & P.A. Hamilton
Studio Manager: K.L. Braags

••• **BEGGARS BANQUET RECORDING STUDIOS**
also *REMOTE RECORDING*
7736 Elphick Rd., Sebastopol, CA 95472
(707) 823-7185

Owner: Warren Dennis
Studio Manager: Warren Dennis
Engineers: Warren Dennis
Dimensions of Studios: 600 sq ft
Dimensions of Control Rooms: 150 sq ft
Tape Recorders: (2) Tascam 85-16 (2) w/dbx 16 track, Tascam 40-4 w/dbx 4 track, Tascam 25-2 w/dbx 1/2 track, (2) Aiwa 6550 Dolby cassette decks; Sony TCK-75 3 head Dolby cassette deck
Mixing Consoles: Sound Workshop, 24 in x 26 out
Monitor Amplifiers: Nikko Alpha I power amp 220 watts/channel, Symtrix HA-10 headphone amplifier, Accuphase C-200 pre-amplifier

Monitor Speakers: JBL 4311s, JBL 4313s, Auratone Cubes, 10-pr AKG 140 earphones, 4-pr Sennheiser earphones
Echo, Reverb, and Delay Systems: Master-Room SL-305 chamber, Eventide Digital Delay (stereo), Korg Deluxe tape echo with multiple taps

Other Outboard Equipment: Ashly parametric EQ, Eventide H949 Harmonizer delay, Eventide Instant Flanger, UREI LA-4 compressor/limiter, dbx 162 stereo compressor/limiter, (2) Bi-Amp stereo 10-band graphic EQs, electronic Click metronome, MXR phaser, Roland Cube 60 amp, Countryman & Sencor direct boxes, Sony direct drive turntable
Microphones: AKG 414E, Sennheiser 441, AKG D224Es, D-202Es, D-200Es; Shure SM-57s

Instruments Available: Yamaha acoustic piano (beautiful!), full set of Slingerland drums w/Zildjian & Paiste cymbals, Gibson L9-S "Ripper" bass guitar, Fender Rhodes 73 electric piano, Korg 3100 synthesizer (at extra cost), assorted percussion instruments
Rates: 16 track \$28/hr. Bulk rates available upon request
Special rates for "spiritually" oriented projects
Extras: Beautiful country environment, indoor basketball, fully air conditioned

Direction: Beggars Banquet provides, for a fraction of the normal studio rate, tapes that sparkle, atmosphere that is relaxed but efficient, attitude dedicated to professionalism, honesty and attention to detail, and production and performance assistance that satisfies the most demanding requirements. Call and arrange a casual appointment to look things over and hear some of the quality work. This studio is putting out!

••• **BIG PINK WEST**
507 Browning St., Mill Valley, CA 94941
(415) 388-2987

Owner: Dick Darling D.D.S.
Studio Manager: Ken Wagner
Engineers: Ken Wagner, Mike Rosen, Kirk Schreil, Lucy Sherk
Dimensions of Studios: 27' x 20' with 11' x 13' isolation/drum booth
Dimensions of Control Rooms: 20' x 15' (a new addition to Big Pink West)

Tape Recorders: Tascam 85-16, 1", dbx, 16 track; Tascam 80-8, 1/2", dbx, 8 track; Otari MX 5050B, 1/2 track, Aiwa 6900 II, metal/Dolby, cassette deck; JVC KD-75 cassette deck
Mixing Consoles: (2) Speck SP 800C consoles, 36 in x 36 out
Monitor Amplifiers: Yamaha PZ100, Crown D-150A, Crown D-60. Control room balanced with White 3500 23-band equalizers

Monitor Speakers: (2 pair) JBL L-100's, Auratone Reference speakers
Echo, Reverb, and Delay Systems: AKG BX-10 stereo reverb, DeltaLab DL-2 two channel digital delay, tape echo
Other Outboard Equipment: Eventide H910 Harmonizer/digital delay line, UREI LA-4 compressor; UREI 1176 peak limiter; (2) Shure M688 stereo mix mixers, Tapco 8x2 mixer; direct boxes

Microphones: Neumann U-87, KM-84s; Electro-Voice RE-11, RE-15s, RE-20; Beyers M-101N, X-1N, M-500N; Sony ECM 33P, ECM 280s; AKG D-200Es; Shure SM-57s, other condensers and dynamics

••• **AAA/TRIANGLE RECORDING STUDIO**
also *REMOTE RECORDING*

4230 Leary Way N.W., Seattle, WA 98107
(206) 783-3889

Owner: Bill Sluber, Jack Weaver
Studio Manager: Jack Weaver

Extras: Remote broadcasting, complete business consult and production staff, art/graphics dept., recording PA, music law classes, distribution and processing dept. TLC is not an extra at Triangle
Direction: Credits: Ted Nugent, Hall and Oates, Pat Benatar, Steve Forbert, Sammy Hagar, Karla Bonoff, Jesse Colin Young, Angel City, etc. Triangle is a group of individuals who are dedicated to an exciting new format focusing on the vibrant Northwest scene. Our major role has been to develop artists' conceptions as well as their careers. Our sound is that big ambient English sound. We use our extensive array of English and American effects plus our large open room to produce this sound.

••• **ALL WORLD PRODUCTIONS INC.**
4805 North Pearl St., Tacoma, WA 98407
(206) 759-4480

Owner: Maurice C. Killenbeck
Studio Manager: Maurice Killenbeck

Monitor Speakers: 1 pr JBL 4313's, 1 pr JBL 100's, Auratones, 2 pair Ed Long MDM4's; Bi-Amp third octave room equalization
Echo, Reverb, and Delay Systems: Lexon 224 digital reverb; Parasound 111 reverb; Lexicon Prime Time digital delay; Marshall Time Modulator analog delay

Other Outboard Equipment: SAE, Soundcraftsmen and Bi-Amp equalizers, LRE; LA4 compressors, Ctran StratoTuner, JREI 1176 limiters, ADG Vocal Stresser, Symetrix noise gates, Symetrix D'Esser, ADP spectrum analyzer
Microphones: Neumann U 87s, E.V. RE 20s, RE 15s, Shure SM-57s, SM 57s, 565s, AKG D 5Cs, D-451s, D-202, Sony 33Ps, Beyers 101, Sennheiser MD 421s; RCA 44BX

Instruments Available: Steinway upright grand 1905 (a great instrument, very well liked)

Extras: Kitchen, delirious & free coffee, easy parking
Rates: \$40/hr for 16 track, \$30/hr for 4 and 8 track. Discounts available and vary with job

Direction: We are perfectionists in our art, honest, and we love our work. We sincerely care about your work as well. Our non-traditional success depends on it. We've put together a completely professional yet relaxed and comfortable studio. We've tried to create an environment where musical creativity is encouraged, not stifled. We invite you to give us a call to discuss your recording needs, or stop by to check us out. We specialize in working with groups on a continuing basis throughout their development, i.e. demos to albums. We offer full production service and assistance as well.

••• **ARCTIC STUDIO PRODUCTIONS**
2427 E. 88th St., Anchorage, AK 99507
(907) 344-7514

Owner: Linda Rhodes, James Zuehsow
Studio Manager: Linda Rhodes

Engineers: James H. Zuehsow

Dimensions of Studios: Studio A 42' x 36', Studio B 24' x 36'. Both have 14' ceiling in the live area
Dimensions of Control Rooms: Control A: 14' x 16', Control B: 10' x 12'

Tape Recorders: Ampex 1-M 1100 16 track, Ampex AG 440 B track, Ampex AG 440C 2 track; Crown CX 822 2 track, TEAC 3340S 4 track

Mixing Consoles: Quad/Eight custom, 20 in x 16 out, Tascam Model 10, 12 in x 4 out

Monitor Amplifiers: Crown DC-300A, Phase Linear 400

Monitor Speakers: JBL 4511, ADS 910, Altac A-7, Auratone
Echo, Reverb, and Delay Systems: Live chamber, DeltaLab DL-2, Prime Time, AKG BX-15, echo plate

Other Outboard Equipment: Countryman flanger, time modulator, Kexpex, UREI limiters, Orban parametric EQ's, dbx limiters, dbx noise reduction, Eventide Harmonizer H949

Microphones: Neumann U-4E, U-67, U-87, KM-84, KM-88; AKG C-12A, C-24, C-451, Sony C-37A, C-500, C-55, Shure SM-58, SM-57, SM 81; Synchron S-10, AKG C-61A; E.V. 666, RE-15, RE-20

Instruments Available: Yamaha C7 piano, Rhodes 88, ARP strings, Hammond B-3 & Leslie 910, Fender F-Bass, Slingerland drums, Peavey session amps

Rates: 16 track \$80/hr & 8 track \$50/hr 2 track \$30/hr. Block booking rates available
Extras: Living accommodations will be available in the summer in the penthouse above the studio, complete with sauna, recreation room, 6 bedrooms with kitchen and dining area, all with view of the Chugach Mountains

Direction: Presently working to convert Studio A to 24 track with MCI console and tape machine. Have had 3 tapes made new on



John Altmann Recording
San Francisco, CA

••• **JOHN ALTMANN RECORDING**
1310 20th Ave., San Francisco, CA 94122
(415) 584-4910

Owner: John Altmann

Studio Manager: Colette Salaun

Engineers: John Altmann, Steve Ghara, Phil Crescenzo, Woody Simmons, Stephen Hart

Dimensions of Studios: 23' x 15' x 11 1/2' high, including vocal booth, piano booth, and drum booth

Dimensions of Control Rooms: 15' x 15' x 11 1/2'

Tape Recorders: Ampex MM1000, 16 & 8 track, Otari MX 5050 2 track; Revco A77 2 track; custom modified TEAC 4 track; (2) Aiwa cassette C900.

Mixing Consoles: Custom built console

Monitor Amplifiers: B&W 250

Instruments Available: Hamilton-Baldwin upright piano, Rogers/Zildian drum set, Roland synthesizers and guitar synthesizer by prior arrangement, assorted percussion instruments, timbales

Rates: We offer the best recording value in the Bay Area. 16 track is \$24/hr including engineer (please call to double check our latest rates). Watch for our advertised specials.

Extras: Kitchen facilities, living room, repair shop, comfortable environment at the foot of Mt. Tamalpais in suburban setting. Only 15 minutes drive from San Francisco.

Direction: We are a young, expanding studio staffed with professionally trained engineers. Our pricing policy should enable most musicians to professionally record their music with minimum expense. We are open to production deals as well. Credits: Units, Romeo Void, Van Morrison, S.V.T., X-Ray Ted, Spellbound, Elements of Style, Mad Hatter, Minimal Man, Assassins, Cosmetics. All styles welcome.



Calypso Records
Novato, CA

***** CALYPSO RECORDS**
401 Bel Marin Keys Blvd, Suite D, Novato, CA 94947
(415) 883-4788 or 883-9830

Owner: Dominic, Tina, Michael Verchiani
Studio Manager: Jack Loflin, Dominic Verchiani
Engineers: Michael J. Verchiani, Dan Ryman, Hal Lyon
Dimensions of Studios: Main room 23' x 25', vocal booth: 8' x 5'
Dimensions of Control Rooms: 23' x 20'

Tape Recorders: 3M M-56 16 track, Ampex 440 2 track, TEAC A3340S 4 track, Akai & JVC cassette, Alpha high speed duplicator
Mixing Consoles: Tangent 3216, 24 in x 16 out
Monitor Amplifiers: Bi-Amp TC 225, Bi-Amp TC 60
Monitor Speakers: UREI 811 Time Aligned, 27 bands each, Auratones, 10 bands each

Echo, Reverb, and Delay Systems: DeltaLab DL-4, Korg SE-500, Orban Stereo Reverb, Eventide 910 Harmonizer w/delay
Other Outboard Equipment: Orange County Vocal Stretcher w/expander gate option, UREI limiters, Bi-Amp Quad Limiter, Omni Craft GT 4, Furman Stereo Parametrics, ADA flanger, Mutron phasers, effects pedals of all sorts

Microphones: Neumann U-87, KM-84's, Sennheiser 421's, 441's, AKG 451's, E-V RE-20; Beyers M-500's; Shure SM-58's, 57's, 56, 54; Sony ECM-33

Instruments Available: Prophet V, Micro Moog, Fender Rhodes, Hohner clavinet D-6, Fender steel slide guitar, Hammond B-3 w/2 Leslie, studio piano, Fender Amps, tuner
Rates: Flexible. Block booking rates available

Extras: Portable color video camera w/AC Power Pack, RCA color cam, JVC cassette video deck, Marin Racquetball & Health Club open to the public, restaurant facilities in the area
Direction: Your success is our success.

***** COPPERWOOD RECORDING STUDIOS**
also REMOTE RECORDING
2818 Garfield Ave., Carmichael (Sacramento), CA 95808
(916) 485-7999, 972-1894

Owner: Jim Hubbard, Scott Welch
Studio Manager: Scott Welch
Engineers: Jim Hubbard, Scott Welch, Marty Monson
Dimensions of Studios: Main room 17' x 21'; drum room 8' x 15'; vocal room 6' x 11'

Dimensions of Control Rooms: 13 1/2' x 18 1/2'
Tape Recorders: Ampex MM1100 16 track, Otari MX 5050 8 track, 3M 79 2 track; TEAC 25-2 2 track, Dokorder 1140 2 track, (2) Sansui SC110 cassettes

Mixing Consoles: Tangent modified 3216, 20 in x 20 out, solo in place, group muting, custom 2 bus pre set effects and muting 16 effects returns and sends

Monitor Amplifiers: Yamaha, Crown, Phase Linear
Monitor Speakers: JBL 4313, JBL 4311's, Auratones
Echo, Reverb, and Delay Systems: DeltaLab Acoustcomputer, modified Orban stereo reverb 1-11B, Ibanez analog delay/flanger AD230, Eventide Omnipressor, Echoplex
Other Outboard Equipment: (2) UREI LA4 compressor/



limiters, dbx 160 limiter, dbx 154 limiter, dbx noise reduction 4 channels, Furman parametric Neptune 27 band EQ TFAC of tents mixer noise gates

Microphones: AKG 414, Beyers M-500, E-V RE-20's, Sennheiser 441, 421, Shure SM 58, SM 56, SM 57, SM 76, RCA DX77 Crown P2M

Instruments Available: Baby grand piano, custom studio Birkenbecker bass, Moog and Prophet synthesizers
Rates: 16 track \$40/hr. \$35 block rate

***** CROW RECORDING STUDIO**
also REMOTE RECORDING
4000 Wallingford Ave. N., Seattle, WA 98103
(206) 834-3088

Owner: John Nelson
Studio Manager: John Nelson

***** DESITREK RECORDING & SOUND**
3003-A S.E. Division, Portland, OR 97202
(503) 232-8806

Owner: Douglas Durbrow, Joe Perez, David Harrison, Michael Demmers
Studio Manager: Michael Demmers

***** DUSK RECORDING STUDIOS**
2217 The Alameda, Santa Clara, CA 95050
(408) 248-9875

Owner: The Dusk Corporation
Studio Manager: Robert Langlie
Engineers: Robert Langlie, plus independents
Dimensions of Studios: 16' x 28' x 16'
Dimensions of Control Rooms: 16' x 14' x 12'
Tape Recorders: MCI JH114 16 w/Auto Locate III 16 track, Tascam 80-8 w/dbx 6 track, MCI JH-10 w/dbx 2 track, Tascam 25-2 w/dbx 2 track, JVC KD-65 cassette

Mixing Consoles: Soundcraft Series II w/weep EQ, 16 in x 16 out
Monitor Amplifiers: SAE 2400L, BGW 100
Monitor Speakers: UREI 813 Time Align, JBL 4311, Auratone Cubes

Echo, Reverb, and Delay Systems: Lexicon Prime Time DDL, AKG BX10, tape delay

Other Outboard Equipment: UREI 1176 LN, LA3A, dbx 161 compressor/limiters, Orban/Parasound parametric EQ & D'Esser, Systech flanger, UREI 51 octave room EQ

Microphones: AKG 414, 451, D1C00, E-V RE-20, Sennheiser MD-421, Shure SM-56, 57, 58, direct boxes

Instruments Available: Grand piano, studio drum set, other instruments available w/notice
Rates: \$25/hr 2 track, \$40/hr 8 track, \$50/hr 16 track. Block rates available

***** EASTERN WASHINGTON RECORDING STUDIOS**
Fine Arts Complex, Radio-Television Building,
Cheney, WA 99004
(509) 359-2228

Owner: Washington State
Studio Manager: Dave Woolson
Engineers: Frank Stearns, Leon Skidmore, Steve Dahlen, Mike Clow

Dimensions of Studios: Studio A 36' x 37', Studio B 30' x 39'

Dimensions of Control Rooms: Control room A 12' x 18', Control room B 16' x 8'

Tape Recorders: Ampex MM1200 16 track, MM1000 8 track, AG 440 4 track, ATR-100 2 track, AG 500 2 track

Mixing Consoles: Quad Eight Ventura 24 channel, Quad Eight 208; 16 channel

Monitor Amplifiers: BGW 750C, BGW 100
Monitor Speakers: JBL 4333A, 4320, 4311, 4310; Auratones

Echo, Reverb, and Delay Systems: Quad/Eight RV-10, Eventide Harmonizer, Ampex AG-440 tape delay
Other Outboard Equipment: Quad-Sync NS120 noise gate, dbx noise reduction

Microphones: Neumann U-87, KM-84, KM-85, K-83, AKG C-451, D-200E, Electro-Voice RE-20, RE-55, Shure SM 87, SM 56, RCA 77 EX 44 BX, Beyers 160, Sony ECM 33

Instruments Available: 1912 Steinway concert grand (9' x 11'), acoustic pipe organ. Other instruments available with advanced notice and additional charge

Rates: \$25/hr 16 track, \$30/hr 8 track, \$15/hr 4 track, a reduction of \$5/hr for mix time

***** PHIL EDWARDS RECORDING**
also REMOTE RECORDING
1338 Mission St., San Francisco, CA 94103
(415) 861-4439

Owner: Phil Edwards
Studio Manager: Jim Hilson
Engineers: Phil Edwards, Ron Davis, Dennis Staats, Jim Hilson
Dimensions of Control Rooms: Mixdown A 13' x 14' x 7', Mixdown B 12' x 10' x 7', Remote track 21' x 8' x 7'
Tape Recorders: (3) 3M 79 16 & 8 track, (2) MCI 110B 2 track and mono, Studer A80 2 track, Ampex 440C (servo) 2 track, assorted cassette and cart machines

Mixing Consoles: DiMedio 2416, 24 in x 16 out; API 1604, 16 in x 4 out, Langevin custom, 10 in x 4 out

Monitor Amplifiers: Mixdown A Crown DC 300A, Mixdown B McIntosh MC 240, Remote track McIntosh 2100 (2)

Monitor Speakers: Mixdown A, Altec 9845A, Auratone 5C, Mixdown B JBL 4315, KLH CL4, Remote track Altec 604-8G

Echo, Reverb, and Delay Systems: EMT 140ST, AKG BX-10
Other Outboard Equipment: UREI 1176 (5), Pultec MEQ 5 (2), UREI LA3A (2), Orban D'Esser, Orban parametric EQ, SMPTE synchronizing, 16 track Dolby

Microphones: Neumann U-87's, U-47's (FET), KM-84, AKG 414's, 451's, Sennheiser 421's, Shure 53's, 56's, 58, RCA 77's, E-V RE-15's, 1778's, Sony 22P's

Rates: Remote \$1650 and up per 12 hr day. 16 track mix \$80/hr. 8 track mix \$65/hr. 2 track edit, etc. \$40/hr

***** FEATHERSTONE RECORDING**
also REMOTE RECORDING
8998 Fruitridge Rd., Sacramento, CA 95828
(916) 361-5243

Owner: Featherstone Recording Studio, Inc
Studio Manager: Tom Conrad, Gary Woltman



Freeway Recording Studios
Oakland, CA

***** FREEWAY RECORDING STUDIOS, INC.**
also REMOTE RECORDING (4 track)
2248 E. 14th St., Oakland, CA 94606
(415) 532-3700

Owner: Bernie Rivera, Billy Rivera and Peggy McDonald
Studio Manager: David Hartzheim
Engineers: Jan Waling, Beecher Runtoul III, David Hartzheim, and Bud Osterberg

Dimensions of Studios: Studio A 16 track with isolation chamber and drum booth 46' x 37' x 12', Studio B 4 track 20' x 30' x 16', Rehearsal Studios, 22' x 32' x 16' w/storage space available

Dimensions of Control Rooms: Control Room A 24' x 15' x 10', Control Room B 15' x 17' x 12'

Tape Recorders: 3M M 56 16 track, (2) 3M Series 410 2 track, TEAC 3340 4 track, Pioneer CTF 900 cassette

Mixing Consoles: RCA 60104, 24 in x 16 out, Yamaha (Studio B) PM 700, 12 in x 4 out

Monitor Amplifiers: McIntosh 2300's, 2100's, 60's, Crown DC 300A's, DC 150's

Monitor Speakers: JBL 2315's w/Heil air motion transformers, Altec 604's, (close field) ESS Targa 210's, Quad electrostatics, Cubes, and three types of headphones

Echo, Reverb, and Delay Systems: Live reverb chamber, Lexicon Prime Time digital delay, Orban/Parasound 105-C

Other Outboard Equipment: 16 channel dbx noise reduction, ADR F769 Vocal Stretcher, dbx 160 & 162 comp/limiters, UA 1176 LN stereo limiters, UREI 527 graphic EQ, Multi-track parametric EQ, UREI 550 filter, Countryman phase shifter, UREI digital metronome, Multi-Sync MDA 1B variable speed tape drive

Microphones: Neumann U-87, U-47; E-V RE-20, 14 11, PL-76, 635a, 1751, Sennheiser 441, 409-N, Sony C-37A, ECM 51, 280, AKG D-202E1, D-707E, D-1000E, Shure SM-60, 58, 57,

56, 53 33, MC-41

Instruments Available: Baldwin grand piano, Hammond B-3 organ w/Leslie 122, (Dyna My) Rhodes, Hohner string performer & clavinet, celeste keyboard, ARP 2600 synthesizer, guitars, amps, Ludwig drums, effects boxes & pedals, misc. percussion instruments

Rates: Please call for rates

Extras: Sound systems for rent up to 3000 watts—tri-amped, CLS, JBL, Altec & Gauss speakers, horns and drivers, McIntosh & Crown power amps, Yamaha PM series board, Clear-Com in-house music store; amp and speaker repair service, rehearsal studios (PA's available), refreshment center

Direction: As we enter our 8th year in the Bay area, our experienced staff of music pros, engineers, and technicians will continue to provide a complete service from pre-production to your final product. We cover a wide range of projects including demos, disc-master tapes, records (from tapes recorded here or elsewhere), jingles, I.D. spots, duets, voice overs, and 4 track remote recording. Our goal is to provide the artist with a relaxed and supportive atmosphere and to simplify project co-ordination by having everything available under one roof

***** HOLDEN HAMILTON & ROBERTS, INC.**

also REMOTE RECORDING
2227 N. 58th, Seattle, WA 98103
(206) 832-8300

Owner: Holden, Hamilton & Roberts, Inc
Studio Manager: Herb Hamilton Jr., Miriam Hamilton



Isolation Studio, Pleasant Hill, CA
Soon to be 2" 16 track
\$25 hr opening rates
See ad in 8 track section

***** JUNIPER STUDIOS**

P.O. Box 1405, Evergreen, CO 80439
(303) 393-8328, 838-5528

Owner: Tom Little, John Macy

Studio Manager: John Macy

Engineers: John Macy, Jim Little, freelance

Dimensions of Studios: 24' x 24', 16' x 8', 6' x 6'

Dimensions of Control Rooms: 22' x 22'

Tape Recorders: 3M M56 16 track, Otari 5050 2 track, Sony TD153 2 track, Sony 4 track

Mixing Consoles: Sound Workshop Series 30B, 20 in x 16 out w/mods

Monitor Amplifiers: Yamaha, Crown, Phase Linear, BGW, Dynaco

Monitor Speakers: Custom tri-amped, JBL 4313, Auratones
Echo, Reverb, and Delay Systems: Ecoplate plate reverb, DeltaLab DL-2 Acoustacomputer, Cooper Time Cube, tape delay

Other Outboard Equipment: UREI LA-3A's, (4) Symetrix CL-100's, (2) dbx 160's, (2) Audioarts parametrics, SAE graphics
Microphones: Neumann U-87's, AKG 451's; Sennheiser 421's; Beyer M-500's, M-201's, M-69's, Sony ECM 22's; Shure SM-57's; E-V condensers

Instruments Available: 1929 Bose grand piano, Hammond organ & Leslie, Ampeg B-15, Fender Deluxe Reverb, Fender Rhodes, various percussion
Rates: Upon request

Extras: Complete production services, musicians, publishing. Secluded mountain environment with picture windows in every room. Located 1 hour from Denver. Accommodations can be arranged

Direction: Specialize in custom music for advertising, production of new artists and publishing. Primarily in-house, but we also cater to outside bookings. Sister company is Aural Graphics Productions.

***** MAGIC SOUND**

also REMOTE RECORDING
1780 Chanticleer Ave., Santa Cruz, CA 95062
(408) 475-7505

Owner: Alan Goldwater

Engineers: Alan Goldwater, Merle Sparks

Dimensions of Studios: 16' x 20' x 12' (asymmetrical wedge



ceiling) 12' x 14' isolated drum room, 5' x 6' x 7' booth

Dimensions of Control Rooms: 12' x 14' x 16'

Tape Recorders: MCI/Innovonics JH 10-16 15/30 ips 16 & 8 track; Ampex AG 444B 15/30 ips 2 track, ElectroSound 505 2 track, (2) Eerwood KX 1060 cassette

Mixing Consoles: (2) Magic Devices custom 16x8, 32-8-16 fully equalized monitor sect

Monitor Amplifiers: Dynaco 150 and Phase Linear 400

Monitor Speakers: Altec/UREI 811, White EQ 4100, Sennheiser & AKG headphones

Echo, Reverb, and Delay Systems: Ecoplate II, Multi-Track reverb, Marshal Time Modulator, Roland Space Echo
Outboard Equipment: (2) MXR flanger, (2) MXR 1/2 octave graphic EQ, UREI LA4 limiter, (2) Universal Audio 175B tube limiters, Allison Gain Brain, Mayer noise gates

Microphones: Neumann KM-54a, U-67, AKG (2) 414-EB, C-45, D-190, D-160, D-12, Beyer M-260, X1N (2), Sennheiser MD-421 (2), Shure SM-57, 58, 81 (several each); Sony C377, C22, Altec M30's (tube)

Instruments Available: Cable upright piano, ARP Odyssey, Hohner D6 clavinet, Apple computer 16 voice synthesizer system; Guild F30, Danelectro and Rickenbacker 12-string guitars, Fender Princeton and Deluxe amps, Polytone amps, CB drum; w/Zildjian cymbals

Rates: \$45/hr 16 track, \$25/hr block (10 hrs or more), \$20/hr 8 track, 1 hour free set-up and rehearsal with 3 hours or more session; free pot (of coffee)

***** MOBIUS MUSIC RECORDING**

1583 Sanchez St., San Francisco, CA 94131
(415) 265-7888

Owner: Oliver DiCicco

Studio Manager: Oliver DiCicco

Engineers: Oliver DiCicco, Ken Kessie, Andy Narell

Dimensions of Studios: 25' x 15'

Dimensions of Control Rooms: 16' x 12'

Tape Recorders: 3M 56 16 track, Ampex MR 70 4 track, MCI JH 10 2 track, Revox A77 HS 2 track; Nakamichi 600 2 track

Mixing Consoles: Audionics 501, 26 in x 24 out

Monitor Amplifiers: Crown D-150, D-60

Monitor Speakers: UREI Time Aligned, Auratones, EPI 100, Sennheiser HD414

Echo, Reverb, and Delay Systems: Lexicon 224 digital reverb, Lexicon 92 DDL

Other Outboard Equipment: Orban 622B parametric EQ, UREI 530 graphic EQ, UREI LA4 limiters, dbx 160 limiters, dbx noise reduction, Allison Kepex, Moog Model 12 synthesizer

Microphones: Neumann U-87's, KM-84's, KM-85's, Sennheiser 421's, 402, Beyer M-500, Electro-Voice RE-15, RE-11, 635; Shure SM-57, AKG D-200E, D-160, Sescam direct boxes

Instruments Available: Yamaha C-3 grand piano, Slingerland Radio King drums, Guild electric guitar, custom bass, King tenor sax, Fender amps, various percussion and esoteric instruments.

Rates: 16 track \$50/hr, 2 and 4 track \$25/hr. Block booking discount available

***** MOON RECORDING STUDIO**

158 Otto Circle, Sacramento, CA 95822
(916) 392-5840

Owner: David L. Houston

Studio Manager: Tom Romano

***** NIGHTWIND RECORDING STUDIOS**

(formerly Audissey Sound)
also REMOTE RECORDING
874 Avahi Street, Honolulu, HI 96813
(808) 531-0108

Owner: Thomas H. Lee

Studio Manager: Lynne D. Mendel, Prod. Mgr., Sam King, Studio Mgr.

***** ORBIT BATH RECORDING**

1827 19th St., San Francisco, CA
(415) 285-0370

Owner: Peter Buffett

Studio Manager: Peter Buffett

Engineers: Peter Buffett, Vince Casper

Dimensions of Control Rooms: 10' x 20'

Tape Recorders: TEAC 85-16 w/dbx 16 track; Otari 50-50B

w/dbx 2 track; Revox A-77 2 track; Sony TCD-5m cassette.

Mixing Consoles: Sound Workshop Series 30 w/VCA automation, 20 in x 16 out

Monitor Amplifiers: BGW 750, 250

Monitor Speakers: UREI 813's Time-Align, MDM 4's, Auratones, JBL 4301's

Echo, Reverb, and Delay Systems: MICMIX Master-Room XL-305, DeltaLab DL-2, Eventide Harmonizer, MXR flanger

Other Outboard Equipment: Scamp Rack including compressors, expander gates, parametric EQ, panner

Microphones: AKG 414, Shure SM-58's, stereo Sony, E-V RE-18's, RE-20, Beyer M-500

Instruments Available: Yamaha CS-80, CS-20m, CP-70 (electric grand), Fender Rhodes, Roland Compu-rhythm, Roland CSQ-100 sequencer

Rates: \$40/hr. Less for block time arrangements

Extras: Soon to have complete video sync system

Direction: Basically a production studio for video. Although the studio welcomes all musicians to take advantage of the facilities, it is especially useful for keyboard players. The studio offers complete in-house writing and production of soundtracks

***** PARVIN STUDIOS**

P.O. Box 16191, San Francisco, CA 94116
(415) 359-1853

Owner: M.B. Eads Co

Engineers: Lee Parvin and Henry Parvin

Dimensions of Studios: 22' x 16'

Dimensions of Control Rooms: 12' x 13'

Tape Recorders: Ampex MM-1000 16 track; Ampex 440-B 8 track; Ampex 440-B 4/2 track; Ampex AG500 1/2 track; Akai GX-630D stereo 1/4 track; Akai 950-B stereo cassette

Mixing Consoles: Audionics 501-26, 18 in x 16 out

Monitor Amplifiers: Marantz 15, Crown DC300

Monitor Speakers: Altec 604-8G, Auratone 5Cs, JBL 4311

Echo, Reverb, and Delay Systems: Master-Room Stereo C Series reverb, Orban/Parasound reverb

Other Outboard Equipment: UREI Model 1176 LN limiters, UREI Model LA4 compressor limiters, Orban/Parasound parametrics, UREI 530 equalizer, dbx noise reduction, Eventide Harmonizer, El-Tech take finder

Microphones: Neumann U-87, U-47, KM-86, KMS-85, Sennheiser 421, 441, AKG 1000, Shure SM-81, AKG D-200, Shure SM 58, MB 301 ribbon, Shure 549, Electro-Voice RE-20

Instruments Available: Emerson baby grand piano, Hammond B-3 organ, Fender Rhodes piano

Rates: Call for rates



Kelly Quan Recording
San Francisco, CA

***** KELLY QUAN RECORDING**

Studio: 1248 1/2 Green St., San Francisco, CA 94109
Office: 55 White St., San Francisco, CA 94109
Office Hours: 10am to 5pm, Monday to Friday.
(415) 771-8718

Owner: Kelly Quan

Studio Manager: D. Marie Devalos

Engineers: Kelly Quan, Steve Bettcher. Freelance engineers available

Dimensions of Studios: 320 sq. ft. with isolation booth 7' x 8'

Tape Recorders: Ampex MM-1000 16 track; Ampex AG-350 2 track; Ampex 354 2 track; Ampex PR-10 1/4 track

Mixing Consoles: Custom Cetec/Electro-Voice console with 28 inputs

Monitor Amplifiers: Crown amps for headphones and speakers

Monitor Speakers: JBL

Echo, Reverb, and Delay Systems: EMT stereo plate reverb, multi-track stereo equalized spring reverb, MXR DDL, Eventide DDL

Other Outboard Equipment: Allison Research Kepex, UREI 1176 limiters, MXR phase shifter, Eventide Harmonizer, UREI 550-A recording filter, MXR flanger, Furman parametric equalizers, Orban dynamic silbance controller

Microphones: Neumann, etc.
Instruments Available: 6' Yamaha grand piano, Hammond B-3 organ, Fender guitar amps

Rates: \$32/hr 10 am to 10 pm, 1 hour minimum; \$25/hr 10 am

to 10 pm, 10 hour prepaid blocks \$42/hr 10 pm to midnight, \$70/hr after midnight. Special rates by arrangement only. Rates subject to change without notice.

Extras: 1/4" video tape playback available at extra charge.
Direction: With over 10 years experience in recording, KQR is now moving in a direction toward advertising and soundtracks for industrial filmstrips while continuing with its TV and radio accounts. In the past year we have been doing more and more work for outside ad agencies with great success. Soon, we hope to be offering 16 track audio to 1/4" video SMPTE Time Code synchronizing for our TV and advertising clients.

••• **RAINBOW SOUND STUDIO**
 24289 Mission Blvd., Hayward, CA 94544
 (415) 582-9980

Owner: Michael Hersh
Studio Manager: Michael Hersh
Engineers: Louise Newtrino, Ron Sicut, David Schantz, Michael Hersh

Dimensions of Studios: Studio: 18' x 16' Isolation booth: 10' x 10'

Dimensions of Control Rooms: 11' x 10'
Tape Recorders: Ampex MM 1100 16 track, TEAC 808 w/ dbx 8 track, TEAC 7900 2 track, 2 channels, TEAC 150 cassette deck

Mixing Consoles: Quantum 168 16 in x 10 out, TEAC/Tascam 5 8 in x 5 out

Monitor Amplifiers: Phase Linear
Monitor Speakers: JBL 4411, Auratones

Echo, Reverb, and Delay Systems: Roland Space Echo 201, DeltaLab DL 2 digital delay (stereo), Kempf "Echololett" tape echo

Other Outboard Equipment: (2) dbx 160 comp/limiter, SAF 2 band parametric EQ, Moog 3 band parametric EQ, Oberheim phase shifter, Morley rotator w/ wah

Microphones: Neumann U87, Sennheiser 441, 421, E.V. RE-11, RE-16, Shure SM 56

Instruments Available: Fender precision bass, Ludwig Pro Beat wheel selection of Zildjian cymbals, synthesizers and much much more with adjustment

Rates: \$30/hr 16 track, \$25/hr 8 track, \$12.50/hr 2 track 1/4" track. Block rates on request.

••• **RECORDING TECHNIQUES**
 4724 S.W. Vacuna, Portland, OR 97219
 (503) 248-6476

Owner: Mark Kiltman, Alan Martin
Studio Manager: Mark Kiltman

••• **REX RECORDING CO.**
 1931 S.E. Morrison, Portland, OR 97214
 (503) 238-4525

Owner: Russell E. Gorsline
Studio Manager: Chris Ackerman

••• **ROSEWOOD RECORDING COMPANY**
 2288 West 300 North, Provo, Utah 84801
 (801) 375-5764

Owner: Guy Handle
Studio Manager: Guy Handle
Engineers: Guy Handle, Marvin Payne, Tony Larson

Dimensions of Studios: 22' x 24' with drum/iso booth

Dimensions of Control Rooms: 16' x 14'

Tape Recorders: TEAC/Tascam 85 16 w/dbx 16 track, TEAC/Tascam 808 8 track, TEAC/Tascam 35 2 w/dbx 2 track, Technics M65 cassette

Mixing Consoles: TEAC/Tascam Model 15, 16 in x 8 buss x 16 direct out

Monitor Amplifiers: Spectro Acoustics, Sansui

Monitor Speakers: JBL 4311, Auratones

Echo, Reverb, and Delay Systems: Steiner Parker stereo plate reverb, Lott delay line

Other Outboard Equipment: dbx limiter, Bi Amp graphic EQ, hull patching, AR turntable

Microphones: Neumann (tube) AKG Electro-Voice, Shure, Beyer

Instruments Available: 6' 5" Chickering grand, Fender Rhodes, Hammond M 3, Cat synthesizer, Fender Precision bass, Gibson Les Paul vintage Fender Deluxe

Rates: 16 track recording & mixing \$30/hr, 8 track recording & mixing \$20/hr, 2 track recording/editing or dubbing \$20/hr. Album production packages & block rates available.

••• **SONOMA MUSICIANS ASSOCIATION**
MOBILE RECORDING
 also REMOTE RECORDING

19215 Arnold Dr., Sonoma, CA 95478
 (707) 996-4030

Owner: Sonoma Musicians
Studio Manager: David Songbird

Engineers: David Songbird, Terry Rankin

Dimensions of Studios: 22' x 12'

Dimensions of Control Rooms: 12' x 8'

Tape Recorders: Ampex VRI1000 transport w/16 AG 440 electronics; Ampex 350, 214", 2 track recorder

Mixing Consoles: Custom, 12 in x 16 out

Monitor Amplifiers: Spectra Sonics four-channel power amp

Monitor Speakers: Altec 6-4-8G loudspeakers

Echo, Reverb, and Delay Systems: Sound Workshop 242



Other Outboard Equipment: (2) Allison Research Gain Brain compressor/limiters, Boss phase shifter

Microphones: Sennheiser MD 421's, E.V. RE-11's, Turner TC 201's, Shure PE 585E, E.V. RE-55, Turner TC 12L, misc. mics

Instruments Available: Acoustic Gibson guitar, electric Ovation guitar, electric Gibson bass, Ampeg bass amp

Rates: Call for rates

••• **SOUND SMITH STUDIOS**
 also REMOTE RECORDING
 428 NW 8th Ave., Portland, OR 97209
 (503) 224-7880

Owner: Greg Smith
Studio Manager: David Tower

••• **SPECTRA SOUND STUDIO**
 2280 South Main, Salt Lake City, UT 84115
 (801) 486-5473

Owner: Dave Bonham
Studio Manager: Dave Bonham

••• **SPECTRUM STUDIOS, INC.**
 9C5 S.W. Alder St., Portland, OR 97205
 (503) 248-0248

Owner: Michael Carter, Lindsey McGill
Studio Manager: Michael Carter
Engineers: Michael Carter, Lindsey McGill, Chris Douthitt, Dave Matnew, Mark Gottwig, Alan Phillips

Dimensions of Studios: A 19' x 34', B 18' x 14', C 14' x 16'

Dimensions of Control Rooms: A 22' x 15', B 17' x 15', C 12' x 16'

Tape Recorders: Ampex MM-1100 16 track, (2) Scully 280 B-4 4 track, (5) Scully 280 B-2 2 track, (8) Scully 280B mono, Nagra (2) 4 2 mono, Magnasync (5) Series 2000, 1 each (in 16mm interlock system)

Mixing Consoles: Custom (manufactured in house) Spectrum 1616, 16 in x 16 out, (2) Custom Spectrum 1608, 16 in x 8 out

Monitor Amplifiers: McIntosh, Crown

Monitor Speakers: E.V. Sentry II, Auratone, Altec 604E's

Echo, Reverb, and Delay Systems: AKG BX 20E, Eventide Harmonizer

Other Outboard Equipment: dbx limiters and 187 noise reduction Harmonizer, Eventide Flanger, UREI 1/3-octave EQs, UREI notch filter, Orban D'Esser, Alison Kepex, Gain Brains, Roger Mayer gates, Jensen direct box, Countryman FET direct boxes, Eiki interlock projector, Magnasync interlock distributor, AVI Eagle computerized programmer, AVL Doves

Microphones: Neumann U87, U 47 FET, E.V. CS-15, RE-16, RE-50, AKG C 451E, D-1000E, D190, D200, Shure SM-54, Sennheiser 815, Sony ECM 50

Instruments Available: Yamaha G-3 6' grand piano

Rates: \$50/hr for all formats

••• **STARSOUND AUDIO INC.**
 2879 Oddle Blvd., Reno, Nevada 89512
 (702) 331-1010

Owner: Scott Bergstrom
Studio Manager: Lee Paggart

Engineers: Scott Bergstrom, Lee Paggart

Dimensions of Studios: 35' x 30', 3 iso rooms 8' x 14', 7' x 10', 8' x 16'

Dimensions of Control Rooms: 15' x 25'

Tape Recorders: Tascam 85-16T, 80-8, 35-2, A-800, Nakamichi 1000

Mixing Consoles: Tascam Model 15

Monitor Amplifiers: Crown PSA 2, BGW 100's

Monitor Speakers: JBL 4333, Altec 604's, Anchor 200

Echo, Reverb, and Delay Systems: MXR digital, loaded, 4400A

Other Outboard Equipment: dbx on all channels available, dbx 157, 161, 162, 163, 164, 500 and 503, Moog and Audioarts parametrics; Moog and Mutron stereo phasers; MXR pitch transposer

Microphones: E.V. RE-10, 11, 15, 16, 18, 20, Sony ECM 23, 33, 57, 56, Sennheiser 409, 416, 421, 431, 441, Beyer, Crown PZM, CNI 10's, AKG, Shure

Instruments Available: Oberheim 8 voice w/Emu programs, Steinway upright, Hammond C.V. with percussion B-6, (2) Rhodes,

(4) Moogs, Odyssey Performer, T-1 Orchestrator, drums
Rates: \$30-\$45/hr depending on time and number of tracks
Extras: Over 2500 guitars and amps on premises. Almost any type and year available. Martin, Ovation, Boogies, Marshalls, Peavey Lounge with TV and games. Repair and customizing facilities, concert sound and live multi-track available
Direction: Primarily for the pleasure of staff and clients. Project success is more important than project cost. We encourage client participation in all phases of project. Experimenting optimized with \$1 million in instruments and gadgets. Available in the bizarre guitar StarSound complex.

••• **STUDIO ONE SOUND RECORDERS**
 4435 California Avenue SW., Seattle, WA 98116
 (206) 935-2750

Owner: Doug and Debra Casady, Gordon and Vern Kjellberg
Studio Manager: Debra Casady
Engineers: Robert Holden

Dimensions of Studios: 18' x 25'

Dimensions of Control Rooms: 15' x 22'

Tape Recorders: 3M 79 16 track, Ampex ATR 100 2 track, Ampex PR 10 2 track, Scully 280B 2 track, Pioneer RT 701 1/4 track, Pioneer CTF900 cassette

Mixing Consoles: Audionics 501 16 in x 16 out

Monitor Amplifiers: (2) McIntosh 2300, Phase Linear 400, Crown D60

Monitor Speakers: UREI 811 time-aligned monitors, E.M. Long MDM4 monitors, Auratone 5C Super Sound Cubes

Echo, Reverb, and Delay Systems: AKG BX 20 reverb, Orban reverb, Lexicon digital delay, Marshall Time Modulator (delay pitch change and flanger), DeltaLab digital delay

Other Outboard Equipment: EXR Exciter, UREI 27-band EQ's, dbx compressor limiters, Symetrix compressor/limiters

Audioarts Engineering 4100 parametric EQ's, Symetrix signal gates, Neptune real time analyzer

Microphones: Neumann U87, KM 86, KM-84, AKG C 451EB, D-224, C-452EB, C 414EB, D 900, C 501E, Sennheiser MD 421, Beyer M 201NC, M 500NC, Electro-Voice RE 20 RE-15, RE 10, 635A, Sony ECM 22P, Shure SM 56, SM 57, SM 58

Instruments Available: Slingerland drum set, Kimball piano, Wuritzer electric piano, Fender Precision bass, Gibson Ripper bass, Fender Telecaster, Fender Stratocaster guitar, Les Paul Custom guitar, Slingerland bells, Fender amps, misc. percussion equipment

Rates: \$45/hr. Block booking available

••• **TIOGA RECORDING STUDIO**
 P.O. Box 205, Allegany, OR 97407
 (503) 287-2330

Owner: Jim Flanagan
Studio Manager: Jim Flanagan

Engineers: Jim Flanagan

Dimensions of Studios: 25' x 23' with drum cage and isolation booth

Dimensions of Control Rooms: 13' x 17'

Tape Recorders: Ampex MM1100 16 track, Ampex AG 440 4 & 2 track, Magnacord 1022 2 track, TEAC 2300 1/4 track, Nakamichi 500 cassette

Mixing Consoles: MC1 JH 428, 18 in x 18 out

Monitor Amplifiers: Crown DC 300A, D 150, (2) D 60's

Monitor Speakers: Altec 604E in Big Reds with Mastering Lab crossovers, JBL's and Auratones

Echo, Reverb, and Delay Systems: AKG BX 20E, Eventide Harmonizer digital delay

Other Outboard Equipment: 18 channels dbx, Orban 2-channel parametric EQ, Omni-Craft 4-channel noise gate, UREI 1176 LN comp/limiters

Microphones: Neumann, Sennheiser, Sony, Shure, Electro-Voice

Instruments Available: Knabe baby grand piano, Hammond B-3 organ with Leslie, Peavey guitar amp, Rickenbacker bass guitar, Fender Telecaster guitar, stand up double bass

Rates: \$25/hr \$1500 00 for 6 days, unlimited hours

Extras: Band house available for rent \$20 per night per band 1 mile from studio

Direction: We are located 20 miles east of Coos Bay, Oregon, up in the coastal hills of Oregon. It's peaceful with the Milkcrone River you can fish or swim in. If you look at our price you'll see we are making recording your song(s) affordable but not giving up quality.

••• **SONOMA MUSICIANS ASSOCIATION**
 MOBILE RECORDING
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 19215 Arnold Dr., Sonoma, CA 95478
 (707) 996-4030

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(516) 582-6210 Telex 649230

Sound Genesis, 2001 Bryant St., San Francisco, CA 94110 (415) 285-8900

24 TRACK



*The Automatt, San Francisco, CA
Randy Hanson recorded in Studio C*

•••• APPLEWOOD STUDIOS
680 Indiana St., Golden, CO 80401
(303) 279-2500

Owner: Applewood Studios, Ltd. (corporation)
Studio Manager: David Van Soest
Engineers: Michael Pfeifer, Richard Nelson, David Van Soest, Bob Burnham
Tape Recorders: Studer A 80 24 track, (2) Studer A 80 2 track, (2) Revox A77 2 track
Mixing Consoles: Neve 8035 24 in x 24 out
Monitor Amplifiers: Crown DC 400A's, Harman Brandon Citations
Monitor Speakers: Custom, Alter 604 w/ JBL 2231 sub w/elder White crossover, Also JBL 43, 1's, Little Reds, Auratones
Echo, Reverb, and Delay Systems: Lexicon Model 92, Lexicon Model 102, EMT 140S, AKG BX 10
Other Outboard Equipment: ADR expander/gate, Scamp, Vox 4 Stresser, ITI parametrics, Sontec parametric, Eventide Flanger, UREI Cooper Time Cube, (2) UREI LA3A's, (2) UREI 1176's, (2) UREI 1176LN's, (4) Neve limiter/compressors, Tektronix LA2A
Microphones: Neumann U 67, U 47, U 47 let, U 87, KM 84, KM 84, Sennheiser 421, 441, 116, AKG 414EB, 452EF, D1000, Shure SM 56, SM 57, SM 58, 300 ribbons, Beyer M 50, Sony C 150, ECM 22P, ECM 43P, RCA 77DX, misc. others
Instruments Available: Bechstein 9 ft. concert grand piano, Hammond C 3 with Leslie and combo pedal, Fender Rhodes, pro CBS Fender Precision, any electronic keyboard by special arrangement
Rates: \$75-\$95/hr. including engineer, \$70K plus engineer fee for 24 hr. day

Lewis, Susan Gottlieb, Maureen Droney, re-recording & mixing engineers, Michael Larmer, chief engineer, Michael Fusaro, consulting engineer, Chris Becker, maintenance engineer, Paul Stubbs, bleedie, disc mastering engineer, Terry Van Zandt, set-up
Dimensions of Studios: A 1500 sq. ft., B 500 sq. ft., C 750 sq. ft., D 1200 sq. ft.
Dimensions of Control Rooms: A 320 sq. ft., B 320 sq. ft., C 500 sq. ft., D 1200 sq. ft.
Tape Recorders: (4) MCI (MCI Autolock provides 48 track capability) w/ each 24 track, MCI 2 track, TEAC B 4 track, Nakamichi cassette



*The Automatt, San Francisco, CA
Con-Funk-Shun with Dan Cody, engineer in Studio B*



*The Automatt, San Francisco, CA
L to R: Gail Brodkey, Sister Sledge, Ken Kessie (eng),
Narada Michael Walden (prod) in Studio A*

•••• THE AUTOMATT®
829 Folsom St., San Francisco, CA 94107
(415) 777-4111

Owner: David Fubinson
Studio Manager: Michelle Messner, Receptionist Britta Bocala
Engineers: Fred Catero, Leslie Ann Jones, Ken Kessie, Wayne

Mixing Consoles: C Harrison w/ Allison 65K automation interfaced w/ the Z-80 computer system (patented by The Automatt®), Autopunch 40 in x 32 out, A Trident TSM w/ Allison 65K automation 40 in x 32 out (42 monitors), B Harrison w/ Allison 65K automation 46 in x 24 out, D Tascam Model 1
Monitor Amplifiers: McIntosh and Pioneer
Monitor Speakers: JBL 4350 4" x 1", UREI 813, Bix Reds w/ Mastering Lab crossovers, Auratones, John Meyer ACD
Echo, Reverb, and Delay Systems: (4) EMT echo chambers, remote controlled, Prime Time digital delay, Lexicon digital reverb
Other Outboard Equipment: Prime Time, Sennheiser Comm System, Marshall Time Modulator, ADR Complex limiter, Inovonics 201 limiter, Eventide Omncompressor & Harmonizer, dbx 165, UREI digital metronome, Orban parametric EQ, EMT compressor, MXR Phaser & Flanger, Keflex 2), Auto-correlator Orban D15ser, Countryman phaser
Microphones: AKG 414, 452, C 12, Beyer M 160, Electro-Voice RE 15, RE 20, Shure SM 56, Senn C 47, 477, Sennheiser 421, 44, 805, Neumann U 67, U 47, KM 84, M 49, KM 88, Telefunken U-47
Instruments Available: CP 70, Yamaha drums, Quad bass, acoustic guitar, and bass clavinet, AFP Odyssey, Rhodes electric piano, Wurliitzer organ, Cry Baby wah wah, Voxcoed Prophet 5 voice synthesizer, Princeton amp, Music Man amp, Wehr bass amp, Super Reverb amp, Echoplex I & II, Maestro synthesizer system, filter sample & hold, fuzz, sustainer, full range booster

percussion kit, Cornpro rhythm drums, Rhythm King Maestro Mutron II, let Phase phase shifter

Rates: Studio A \$150/hr., Studio B \$135/hr., Studio C \$135/hr. for 24 track

Direction: Credits: Devadip Carlos Santana (digital album), Roxie Justice, Joan Baez, Gamma, Narada Michael Walden, Greg Walker, Randy Hansen, Sister Sledge, "Apocalypse Now" sound track, Gary Barbieri, Alvin Bishop, Blue Oyster Cult, Bread & Roses, David Bromberg, Cap'n Beelheart, Chuck Corea, Herbie Hancock, The Clash, Con Funk Shun, Duroc, Tenn Ernie Ford, Greg Kihn Band, Grateful Dead, Guess Who, Herbie Hancock, Headhunters, Eddie Henderson, Journey, Van Morrison, Maxine Nightingale, the O'Jays, Roy Orbison, Pearl Harbor & The Explo-sions, the Headmades, Santana, Pharoah Sanders, Herbie Scaags, SVT, Tazmanian Devils, The Tubes, Sarah Vaughan, the Waters, Tony Williams, Chris Williamson, Neil Young, among others



*Ayre Studio
San Jose, CA*

•••• AYRE STUDIOS
458-A Reynolds Circle, San Jose, CA 95112
(408) 279-AYRE, 279-2973

Owner: Richard Nebel
Studio Manager: Richard Nebel
Engineers: Richard Nebel, Tim Padlock (independent engineers welcome)
Dimensions of Studios: 26 x 27 x 14 ft. high
Dimensions of Control Rooms: 16 x 15 x 11 ft. high
Tape Recorders: MCI JH 114, 14 w/ Autolocator III, 4 & 16 track, Ampex AG 44 HE Servo 2 track, Revox A77 2 track, Nakamichi TEAC and Sony cassettes
Mixing Consoles: MCI JH 636 A remote 42 in x 24 out
Monitor Amplifiers: McIntosh MC 2205, Crown D60s & D40, Nakamichi 620 G A S
Monitor Speakers: UREI 814 Tune Alikes, BL 4" x 1 1/2" Little Davids, Charwell's (H B J) standers, Auratones
Echo, Reverb, and Delay Systems: EMI 140 steps plate tube type, Lexicon DDI 2 cut, Eventide Harmonizer, 2 delay outputs, MXR DDL 1, 2 memory, Fender DDI, Roland stereo 555 chorus echo, tape echo, digital reverb comba
Other Outboard Equipment: FXR Psychoacoustic, Excenter, UREI LA2A's, LA3A & LA4, RCA tube limiters, (4) Inovonics 201 compressor limiters, Eventide Flanger & Compressor, Master H, Phase, Bi-Amp 1/2 octave & octave graphic EQ's, EMS signal processing synthesizer & much more (anything with noise)
Microphones: Neumann U-87's, U-47's, KM 84's, AKG C 414 EB's, 451's, 452's, Sennheiser 421's, 441's, Electro-Voice RE-20's, Shure SM 56's, SM-57's, 57's, 58's, 81's, Beyers, Sony's Countryman & Senn direct boxes and much more
Instruments Available: Chuckerina Masterpiece 7 grand

Multiple Choice:



A. Studio A is our most advanced music studio, featuring a 32-input Neve console, MCI 24-track recorder and a great Yamaha piano.

B. Studio B is an overdub studio with a versatile control room for 16-track music or media production. It includes an Amek console as well as MCI and Ampex multi-track recorders.

C. Studio C is our least expensive 16-track music studio, equipped with a 24-input MCI console, an MCI multi-track recorder and an eight-foot German Steinway.

Whatever your choice,
at Music Annex you will always find
competitive rates, great sound
and the best technical support available.



Music Annex Recording Studios

Meeting expectations, as well as budgets.

Twenty-four track recording in Menlo Park.

970 O'Brien Drive, Menlo Park, California 94025 (415) 328-8338

piano, Emu Prophet, EMS and ARP 2600 synthesizers, Gibson, Fender Martin & Rickenbacker guitars and basses, "Spectre" guitar synthesizer, vintage Fender and Vox amps, Boogie amp, other instruments and devices on request

Rates: \$50 to \$75/hr. Please phone for quote

Extras: Production, arranging, studio musicians and pressing available. Free coffee refrigerator lounge area & great atmosphere. Game room coming! (We're 5 minutes from many hotels, 24 hr. restaurants and the San Jose airport)

Direction: Ayre Studios Northern California's first MCI Automated 24 track studio now has the pleasure to offer you a very private, highly creative "One on One" alternative. Our new SRS designed control room sounds incredible offering only the finest in both new & vintage equipment in a very comfortable environment designed for you. The difference is in the Ayre!

****** BEAR CREEK STUDIO**

8313 Maltby Rd., Woodinville, WA 98072
(206) 481-4100

Owner: Bear Creek Inc
Studio Manager: Manny Hadlock, Judy Werle

****** BONNEVILLE PRODUCTIONS**

130 Social Hall Ave., Salt Lake City, UT 84111
(801) 237-2400

Owner: Bonneville International Corp
Studio Manager: Dave Michelsen

****** COAST RECORDERS**

1340 Mission St., San Francisco, CA 94103
(415) 884-5200

Owner: United Recording Corp
Studio Manager: Steve Atkin
Engineers: Steve Atkin, Bob Lindner, Gary Dominguez, Sol Weiss

Dimensions of Studios: A 25' x 40', B 12' x 18', Dialogue 6' x 12'

Dimensions of Control Rooms: A 18' x 20', B 16' x 18', Dialogue 10' x 12, Production 14' x 14'

Tape Recorders: MCI 24 track, 3M, Ampex 8 tracks, Ampex, Scully 4 tracks, Ampex, Westlake, MCI 2 tracks & monos

Mixing Consoles: MCI automated JH-428B, 28 in x 24 out, Bushnell, 20 in x 12 out, Quantum, 20 in x 4 out

Monitor Amplifiers: UREI 6500, Crown, United Audio

Monitor Speakers: UREI 813, JBL 4320, 4311, L 65, Auratone

Echo, Reverb, and Delay Systems: EMT 4, MICMIX

Other Outboard Equipment: UREI LA-3A, 1176LN, 527, 530, 537, 545, 565T, Orban D'Esser, Kexex, UREI DDL, UREI digital metronome

Microphones: Neumann U 87, U 67, U 47, E-V RE-20, RE-15, Sennheiser 405, AKG 451, 414, RCA 44, 77, Shure SM 56, 57

Instruments Available: Steinway, A B Chase grand pianos, Celeste

Rates: \$40 to \$100/hr

Extras: Hi-speed open reel and in cassette recording. Total tape mailing service. Direct remote phone lines

Direction: The leader in audio services geared to the advertising industry. Total service except film and location

****** COMMERCIAL RECORDING HAWAII**

333 Cooke St., Honolulu, HI 96813
(808) 536-5439

Studio Manager: Donn V. Tyler



CSS Recording Studios
Las Vegas, NV

****** CSS RECORDING STUDIOS**

also REMOTE RECORDING
2010 East Charleston Blvd., Las Vegas, NV 89104
(702) 384-1212

Owner: Jon M. Parks, Robin Freeman
Studio Manager: Debbie Parks
Engineers: Robin Freeman, Jon Parks, Michael Lyman, Jim Root, Bob Lentini



Dimensions of Studios: 35' x 32'

Dimensions of Control Rooms: 18' x 24'

Tape Recorders: MCI JH 24/16 with Autolocator II 24/16 track, Tascam 8C 8 track, Tascam 40 4 track, MCI JH-110 2 track, Ampex 440 2 track

Mixing Consoles: MCI JH 528 28 in x 24 out

Monitor Amplifiers: Crown DC 300s, Crown DC-150s, SAE 4700

Monitor Speakers: JBL 4333's, JBL L100's, Auratones

Echo, Reverb, and Delay Systems: EMT 240, Lexicon 224, Eventide digital, MXR digital

Other Outboard Equipment: 24 channel Dolby, 36 channels dbx, Eventide DDL/Harmonizers, Omnipressor, Flanger, Phaser, Kexex Gain Brains UREI 1176 limiters UREI LA-3A LA4 limiters, dbx 162 limiters, Aphex Aural Exciter, Orban D'Esser, UREI 527 A graphics, Crown parametrics, Crown pre-amps, tape echo SAE 2700 EQ's

Microphones: Neumann U 87, U 47, KM 83, KM-84, KM-85, AKG 414 451 452, E-V RE-20, Shure SM 54, SM-56, SM-57, SM-58, 54E, Sennheiser MD 441, MD-421, Sony C 37, ECM 22, 3 JF, Altec 589BX

Instruments Available: Kawai 74" grand piano, Hammond B 3 Fender amplifiers, Music Man amplifiers, Yamaha drums, tympani, bell tree, (no tee)

Rates: Available upon request

Extras: Video production and high speed tape duplication

Direction: Credits: Ann Margaret, Paul Anka, Beach Boys, Lynnda Carter, Cher, Bill Cosby, Rodney Dangerfield, Lola Falana, Merle Haggard, Engelbert Humperdinck, Tom Jones, Loretta Lynn, Christie McVie, Wayne Newton, the Osmonds, Tony Orlando & Kenny Rogers, Seals & Croft, Fred Travalena, Bobby Vinton. Also various pre-records of events for: Al/Holmes Fight, Caesars Palace Flamingo and Las Vegas Hiltons, Southern Sun Hotel South Africa, Merv Griffin Show, Stardust Hotel, etc.



Cypress Star Studio
Monterey, CA

****** CYPRESS STAR RECORDING STUDIO**

also REMOTE RECORDING
800 E. Franklin St., Suite E, Monterey, CA 93940
(408) 372-STAR

Owner: Nancy Doolittle
Studio Manager: Ins Dean, Paula Roberts
Engineers: Randy Roberts, John Benjamin, Chuck Leary, Sandy Stone

Dimensions of Studios: 27' x 22'
Dimensions of Control Rooms: 14' x 22' Overdub room 10' x 10'

Tape Recorders: 3M Series 79 16 and 24 track, Ampex AG 440 4 track, (1) Ampex AG 440 2 track, Sony TC-850 1/4 and 1/2 track, Otari MX 5050 2 track, Sony TC-788-4 4 track, Tascam 80-8 track

Mixing Consoles: MCI JH 424, 24 in x 24 out with Allison automated mix (Memory's Little Helper-65K)

Monitor Amplifiers: Altec 9440A, Crown DC 300A, Crown D60, McIntosh 275

Monitor Speakers: Altec 604-8G, JBL 4311, Auratones (White Room: EQ)

Echo, Reverb, and Delay Systems: EMT echo, Eventide Digital Delay

Other Outboard Equipment: ADR Vocal Stresser, UREI limiters, UREI graphic EQ dbx noise reduction-26 channels, Dolby noise reduction-2 channels, Multi-sync motor drive, Kexex, Eventide Flanger, dbx compressor/limiters, custom console

Microphones: Neumann U-87's, AKG 451's, D-58E, Shure SM-52's, SM-56's, Sennheiser MKH-405's, MK-404's, MD-421, Electro-Voice RE-20's

Instruments Available: ARP strings, ARP Omni, 6 foot 1980 Kawai grand piano, Camco drums, Hammond C-3 organ with Leslie speaker, Yamaha bass amp

Rates: Please call for rates. Cypress Star Studio has a 7 year track record having opened its doors in 1973 under another name—Supersound. But now it has a new owner, a new name, and new beginnings!

Extras: Currently under construction is Studio B. Also available artist's lounge, kitchen, and bathroom with shower, all for your comfort and convenience

Direction: Picture this setting and see if you can resist! A golden sunset over Monterey Bay. An invigorating walk to Fisherman's Wharf with its fascinating shops and gourmet restaurants. Clear skies. Ocean breezes. Fishing boats and barking seals. And just a five minute drive to the "old world charm" of Carmel-by-the-sea. Everything you need for "artistic inspiration" plus endless possibilities for those moments of relaxation! Because we at Cypress Star believe that musicians are a "special breed of people" our goal is to make you feel as special as you are. Since ours is a studio "run by musicians for musicians," we invite you to come and set your creative juices flowing in the gracious "home like" atmosphere we have prepared for you. Just minutes from the airport and two blocks from the sea, Cypress Star offers you our finest in recording equipment and engineering services as we constantly strive for an exciting and rewarding end product! We look forward to including you among our ever growing list of enthusiastic recording artists—such as Jack Dougherty, Paul Anka, the Beach Boys, Michael Nesmith, the Mark Almond Band and Uncle Rainbow and the Tubes. Stop in won't you? "There's a song in the air!" It might be yours!!!



Different Fur
San Francisco, CA

****** DIFFERENT FUR**

also REMOTE RECORDING
3470 19th Street, San Francisco, CA 94110
(415) 884-1967

Owner: Patrick and Patty Gleeson
Studio Manager: Patty Gleeson, Assistant Manager Susan Skaggs

Engineers: Staff: Stacy Baird, David Blossom, Karen Kirsch, Howard Johnston, Don Mack, Independents Don Cody, Jim Gaines, Steve Mantoani, Systems Engineer Tom Paddock

Dimensions of Studios: 25' x 35' x 12' plus isolation booths
Dimensions of Control Rooms: 17' x 21' x 12'

Tape Recorders: MCI JH 16 16/24 track, MCI JH 100A 2/4 track, MCI JH 100A 2 track, (4) Technics M85 cassettes

Mixing Consoles: Harrison (completely modified for digital recording) 4032, 35 in x 32 out, Allison 65K automation

Monitor Amplifiers: BGW, Crown, Spectra Sonics, Phase Linear

Monitor Speakers: Westlake double 15's, 604E's, JBL 4310's, 4313's, Little David's, Auratones (all pushbutton switchable)

Echo, Reverb, and Delay Systems: Lexicon 224 programmable, EMT 240 Gold Foil, Eventide DDL programmable, Lexicon Prime Time (2), live echo chamber 17' x 10' x 10'

Outboard Equipment: Kexex's Gain Brains, MXR, 28 channels Dolby, 28 channels dbx, 1176's, LA-4's, Harmonizer, White 1/6 octave spectrum analyzer w/software processing, digital metronome, etc.

Microphones: Neumann, AKG, Beyer, Sony, Sennheiser, E-V, PZM, Shure. All current models, plus some oldies

Instruments Available: Yamaha C-7B, Mini Moog, Vocoder, amps, String Machine, snare, etc. Lots of effects and pedals. Strobe tuner

Rates: Telephone for rates, engineer availability, block booking and special demo rates

Extras: Copying facilities, showers, sauna, lounge w/kitchen, TV,

sleeping accommodations, catered meals, production office, park and

Direction: Custom service in a state-of-the-art studio designed by Tom Storyk of Sugarloaf View. Offers both analog and digital recording capabilities. Complete seclusion in a very private atmosphere for musicians, producer and manager. Media voice-over and music sessions. Recent clients include Van Morrison, Brian Augus, David Byrne, Goran Funk Shun, Huey Lewis & the News, Tommy Tutone, Tazmanian Devils and B.J. Summers.



Fane Productions
Santa Cruz, CA

**** FANE PRODUCTIONS

115-B Harvey West Blvd., Santa Cruz, CA 95060
(408) 425-0152

Owner: Fane Productions Inc.
Studio Manager: Corie Anastasio
Engineers: Fane Opperman, Pete Carlson, Dave Luke, Corie Anastasio

Dimensions of Studios: 30' x 20' isolation booth
Dimensions of Control Rooms: 29' x 12'

Tape Recorders: MCI JH 114 transformerless 24-track, MCI JH 114B transformerless 24-track, Tascam 8000 8-track, Tascam 2424 24-track, Sony 24-track, TEAC A8 cassette, Technics M63 cassette

Mixing Consoles: MCI JH 616 transformerless 40 channel with JH 500 automation

Monitor Amplifiers: Yamaha P2200, Yamaha P2100, Crown DC 300A, Symetrix HI-30

Monitor Speakers: Tannoy Berkeleys, JBL 4311s, Altec A7s, Auratones

Echo, Reverb, and Delay Systems: Lexicon 224 digital reverb, URSA Major Space Station digital reverb, Orban Parasound 111B dual reverb, Eventide Harmonizer and DDL, Delatlab DL2 Acoustic Computer, Evox AD 230 analog delay auto multi flanger

Other Outboard Equipment: 34 channels of dbx noise reduction, EX3 Aural Exciter, dbx Model 160 compressor/limiters, UREI 1176 peak limiter, Symetrix CL 700 compressor/Dessers Symetrix noise gates, UREI stereo parametric EQs, UREI 27 band 1/3 octave graphic EQ, MXR 31 band 1/3 octave graphic EQ, Bi Amp graphic EQ's

Microphones: Neumann U87, AKG 414, 452EBs, 1-224 D11s, D1100E, Beyes M500, Sennheiser 421, Electro Voice RE 20s, RE 11s, Sony ECM 22Ps, PFM's Shure SM 57s, SM 58s, SM 54

Instruments Available: Hammond B3 with Leslie acoustic piano, Wuritzer electric piano, Guild Jumbo 12 string, Fender Telecaster, Fender jazz bass, Fender Twin Reverb amp, Ludwig 6 pc drum set with timbales, Syndrum, many Latin percussion instruments, Sequential Circuits Prophet 10, Prophet 5, Polymoog, Minimoog, Roland sequencer are also available.

Rates: 24-16 track \$50-\$100/hr, 8 track \$35/hr
Extras: Control room recently redesigned with active bass trap. Studio musicians, arrangers and jungle writers are available. A restaurant/bar with pool tables and pinball is next door. The studio has a redwood geodesic dome lounge.

Direction: Fane Productions offers automated 24 track transformerless MCI recording at excellent rates. We have pride in our studio and staff and care about each project we do. All this in sunny Santa Cruz! Our staff producers and engineers have worked with Kenny Loggins, Alice Cooper, Maria Muldaur, the Humans, Leslie West, U.F.O., Dave Mason, REO Speedwagon, Steve Marriott, the Mighty Diamonds, Poco, and the Moody Blues.

**** FANTASY STUDIOS

10th & Parker, Berkeley, CA 94710
(415) 549-2500

Owner: Fantasy Records
Studio Manager: Roy Seegal
Engineers: Bill Austin, Wally Buck, Richard Corsello, Eddie Harris, Mike Herbeck, Danny Kopelson, Nyya Lark, Steve Toby and George Horn

Dimensions of Studios: Disc Mastering Facilities: Studio A, 30' x 50', B, 21' x 26', C, 24' x 35', D, 30' x 50'



Tape Recorders: Studer A800 24 track, Ampex MM1000 24 track, Scully 8 track, Studer A80 2 track, Ampex ATR 2 track

Mixing Consoles: Neve-H, H, 56, 6, 48 out, DeMedia custom 24 in x 24 out, Quad Eight 27, 82, 28 in x 16 out

Monitor Amplifiers: McIntosh 2100, Crown DC 300
Monitor Speakers: Hitley UREI Time Alan 813, JBL 4311, 4312, MCM Auratone

Echo, Reverb, and Delay Systems: EMT 25, EMT 4, 4, Eventide eventidiers

Other Outboard Equipment: Lexicon DDL, Dolby, Link LA2A, LA2A, LA4A, Linklab DL2, FXR Power Ramp, Allport Filter, Eventide 1176s and more

Microphones: F.V. Sany Sennheiser, Neumann Telefunken, AKG, PMI, RCA, Shure 12M

Instruments Available: Yamaha grand Baldwin grand Steinway grand, Hammond B3, Hammond B, Yamaha 704, Hectors, Yamaha electric grand, Synclairs, Hoopers, Great, drums and more

Rates: Call manager or Andrea Saffer for bookings and rates.

**** HEAVENLY RECORDING STUDIOS

1020 55th Ave., Sacramento, CA 95822
(916) 428-5888

Owner: James Communications
Studio Manager: Raymond Pyle
Engineers: Martin Asley, Chief Engineer, Larry Louzon, Engineering Mgr, Steve Croft, Ray Pyle, Julie Fudness

Dimensions of Studios: Studio A, 30' x 40' (isolation booth, 18' x 30' drum stage, 18' x 30')

Dimensions of Control Rooms: A, 37' x 15', B, 16' x 22' (best fast production)

Tape Recorders: MCI JH 24 24 16 8 track, Ampex AG 440, 4 track, Scully 280 B 2 track, Ampex 351 2 track

Mixing Consoles: Quad Eight Paramix 28 in x 24 out, Gallens 21249, best, 16 in

Monitor Amplifiers: McIntosh 2100, MC 275

Monitor Speakers: JBL 4333, 4311, 4301, Altec 614E, Auratone SC

Echo, Reverb, and Delay Systems: Lexicon 224 digital reverb, AKG BX 20E, Eventide H 910, Harmonizer DDL, Marshall Time Modulator

Other Outboard Equipment: 38 channels dbx, UREI 1176, 1N, LA2 limiters, Quad Eight CL 22 compressors, ADR Scamp expander/gates, Pulse Tube EQ, Pulse filter, Ampex VSO Spert, 1/3 oct, Techtron MK85, assette

Microphones: Neumann U 67, UREI KM 84, AKG C 451E, RCA 77 DX, Sennheiser MD 421, Altec M 30, Sony ECM 22, ECM 240, Shure SM 7, SM 53, SM 58, 545, 300, Electro Voice RE 16, RE 20, 454A, 660, 1751, CO 90

Instruments Available: Yamaha Conservatory grand piano, Ludwig drums, wire toms and Zildjian cymbals, Synare and various percussion instruments, Synthesizers by appointment

Rates: Please call for specifics
Extras: Heavenly is located 1001 feet east of the Sacramento River with boating and docking facilities, also near shopping center. New musicians lounge has just been completed w/stereo and TV, Cotee tea, munchie box, refrigerator, and trustee on premises.

Direction: Heavenly is Sacramento's first and only 24 track facility. Our new studio is under construction 101 feet from the beautiful American River, projected opening mid 1981. Heavenly is new, under new management—new people.

**** THE HYDE STREET STUDIOS

245 Hyde St., San Francisco, CA 94102
(415) 441-8934

Owner: Dan Alexander, Tom Sharples, Michael Ward
Studio Manager: Christa Corvo
Engineers: Richard Van Dorn, Gary Mankin, John Cumbert, Yves Gutsch, Mark Walner, Jeff Melby and various independents

Dimensions of Studios: A, 20' x 45' x 12', C, 26' x 34' x 12', D, 35' x 32' x 13', E, 18' x 10' x 10'

Dimensions of Control Rooms: A, 16' x 20', C, 14' x 15', D, 18' x 18', F, 18' x 14'

Tape Recorders: Otari MTR 90 24 track, (2) Ampex MM 1000 16 track, 16 24 track, Ampex 440 B 4 track, 3M M64 4 track, Otari 50 50 w/ISO 2 track, 3M M64 2 track, Studer B62 2 track,



Hyde Street Studios
San Francisco, CA

Ampex 44 2 track, Nakamichi cassette decks

Mixing Consoles: Trident Series B, 48 in x 8 x 24 out, Helios 2408, 28 in x 8 x 24 out, Neve 18 in x 4 x 8 out, Electrodyne 24 in x 4 x 8 out

Monitor Amplifiers: BGW 700, 5A, Son of Ampz, SAF, 2, Studio 11, D equalized w/White EQ's

Monitor Speakers: UREI Time Alan 813, JBL 4340, JBL 4313, Tannoy Studio Grade F, M, Tannoy MIM4, Auratones

Echo, Reverb, and Delay Systems: 5 stereo acoustic echo chambers, EMT 14 tube Lexicon Delatlab MXR, Cooper time delays

Other Outboard Equipment: 22 outboard EQs including AP, Baker, Sansa, UREI and others, rare limiters, Tele LA 1, LA 2, LA 3, RCA BA6A, Fairchild 67, stereo, UREI 1176 1N, LA 3A, Neve stereo, ADR stereo, Allison Gain Brain (2) Kelex (4) Buser Mayer, keyable noise gates, Eventide Omnidyner and 4 in 1 out flanger, MXR Phaser and phaser

Microphones: We have an extremely large compliment of microphones including (25) tube type Neumann condensers and all the currently available standard models by the leading manufacturers

Instruments Available: Mason Hamlin 9, concert grand (910), Hammond organs, Chamberlin, MESA Boogie amps, Ampex R18 bass amp, Celeste, Ludwig timpani, w/pedal, a sorted percussion instruments.

Rates: Studio A, 16 track for \$20/hr, 16 hr blocks, Studio C, 16 track for \$30/hr, 10 hr blocks, 24 track for \$40/hr, 10 hr blocks, Studio D, 24 track for \$75/hr, block rates available. Call for media rates.

Extras: Cotee from Mr. Frets, climate and environmental control, game room open soon

Direction: Low cost, high quality, relaxed atmosphere. Having been available in the Bay area music scene for about 500 years, we are flattered to be able to offer you such a fine facility at such low costs. Recent projects include Doug Clifford (Creedence Clearwater), SVT, Rubinos, Michael Bloomfield and (already) dozens more. Future plans include video interface, hot tub and sauna.

**** KAYE SMITH STUDIOS

2212 Fourth Ave., Seattle, WA 98121
(206) 624-8651

Owner: Danny Kaye, Lester Smith
Studio Manager: Rick Fisher

**** LUXURY AUDIO WORKSHOP

2570 E. Tropicana #19, Las Vegas, NV 89121
(702) 451-6767

Owner: L.A.W. Inc.
Studio Manager: Lee Watters
Engineers: Jeff Baum, Tom Sarno, Lee Watters, Tony Woods
Dimensions of Studios: 1000 sq. ft.
Dimensions of Control Rooms: 22' x 15'

Tape Recorders: MCI JH24 24 track, MCI JH16 16 track, MCI JH10A 2 track, Tascam 800 8 track

Mixing Consoles: Tangent 24 24 in x 24 out
Monitor Amplifiers: Altec 9440 A, BGW 750B, BGW 100

Monitor Speakers: JBL 4333 A, JBL 4343 B, JBL 4311, Auratones

Echo, Reverb, and Delay Systems: Lexicon 224, Lexicon Prime Time 160

Other Outboard Equipment: Eventide Harmonizer, Orban D-Esser, UREI 1176 1N, LA 3A, LA 4 limiters, Allison Gain Brain, Kelex MICMIX, Dynalancer, ADC, graphics EQ, and a lot more

Microphones: Sennheiser MD421, AKG 414EB, 451, Electro Voice RE-20, RE 15, Shure SM 56, 57, 58, 59, 81, 565SD, Neumann U 87, Sony RCA ribbon mics, and a lot more

Instruments Available: Drums, guitar amps, 7 Yamaha grand piano, 88 Fender Rhodes electric piano, most synthesizers available

Rates: 2 & 4 track \$30/hr, 8 track \$40/hr, 16 track \$50/hr, 24 track \$70/hr. Block time can be worked out

Extras: Ping pong, pinball, TV, kitchen, isolation rooms, over

The audio professional demands precision control, frequency division and flexibility for multi-amplification sound systems. He also requires performance he can count on. To optimize the quality of sound reproduction he must have confidence that the electronic crossover will properly handle the entire audio signal and then route it where it belongs; without coloration, without degradation and without fail.

The experienced professional relies on UREI. He also expects the quality that is engineered into the Model 525 Electronic Crossover.

Fixed installation or portable application, the 525 provides

precision crossover performance in recording studio monitoring, live concert sound, discotheques,

The UREI Electronic Crossover

theaters, churches, schools — even sophisticated audiophile systems. Features that set the 525 apart from an ordinary crossover include:

- Exclusive frequency counter which accurately measures and displays each crossover frequency with 1 Hz resolution.
- Front panel mode switch for stereo 2-way, 3-way or mono 4-way or 5-way operation.
- 18 dB/octave slopes for unity

summing and maximally flat response.

- Mute switches on each output to facilitate testing and set-up.
- Balanced inputs and transformer coupled outputs.
- LED's which indicate active controls in each mode of operation.
- Recessed mode switch and frequency controls to prevent unintended changes of critical settings.

To maximize the performance of sound reinforcement systems, the 525 is designed to augment UREI one-third octave equalizers and the unique Model 562 Feedback Suppressor.

From One Pro To Another — trust all your toughest signal processing needs to UREI.



UREI From One Pro To Another

United Recording Electronics Industries
8460 San Fernando Road, Sun Valley, California 91352 (213) 767-1000 Telex 65-1389 UREI SNVY
Worldwide: Gotham Export Corporation, New York Canada: E.S. Gould Marketing, Montreal

See your professional audio products dealer for full technical information

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When he was 16, Humberto moved to the U.S. from Chile, where several of his relatives were successful singers. He worked on an assembly line for a while, before wandering into MGM Studios. A year later, when an engineer got sick before a major session, Humberto was the only one around who could get the job done. He's been getting the job done ever since for an incredible variety of people, from Debbie Boone to Alice Cooper, as well as Frank Sinatra, Sammy Davis Jr., Steve Lawrence, Tony Bennett, Shaun Cassidy, The Osmonds, David Bowie, Denise Williams, Gladys Knight, Bill Champlin, Lee Ritenour, Hall and Oates, Leo Sayer, The Average White Band and Bernie Taupin, whose album he produced.

ON RECORD BUYERS

"When you make hits, you have to think hits—14, 18, young. The people have to be realistic. How many albums is a 27-year-old guy going to buy, as opposed to a 15-year-old? I mean, you go to a record store. Maybe a 16-year-old is going to buy four albums. A 23-year-old is going to buy one or two—he's very picky. He might buy very specific groups that he likes. He might follow critics. When you make records, you have to think kids. Those are the guys who buy the records."

ON RETAKES

"I hate perfect records. You cut the basic track, the vocals, and then the producer goes all the way back again. He starts replacing the drums. And then he replaces the bass, because the bass doesn't feel quite right. And then he starts doing the keyboards again. So that by the time he's finished, he's done it all over again. If it's not right, I understand. Let's do it all over again. But when you start patching things that already have the specific feel in there—that 'something' that has already been printed—you

can hear all the human things that are all there for the first time—I don't want to be a part of that. I have been part of one of those and it just drove me crazy."

ON NOISE REDUCTION

"I don't use any noise reduction. I never use it, either when I'm doing tracks or when I'm doing final mixes. They really affect the music. They affect sound in general. To me, the punch is all gone. The drums sound different. The vocals sound different. The keyboards sound different. I can hear those things and it really bothers me, so I don't want to be a part of it."

ON TAPE

"Since I started with MGM, we always used Scotch. Only once, I've experienced a different brand of tape. And I was very disappointed. And I had a serious problem. It got so bad, like in the middle of the mixes, the tape started giving up—heavy drop-out in places. And then the tape started peeling. Not on the outside. It was giving up on the inside. I mean, I was doing a mix, and halfway through the song, the whole top end disappeared, like someone threw a blanket on top of the speaker. So we mixed about halfway through the album. We mixed in sections. We cleaned the heads all over the place. We did the introduction. Clean the heads again. We don't want to take chances. I wouldn't do a project with any other tape besides the 250. I have done the past 20 albums, the past 30 albums all on Scotch. It gives me what I want, and what I want is a real clean taping, punchy bottom end, very little hiss, almost none. You have to try things in order to know if you're doing the right thing. If you don't try, you'll never know. And I have tried, and the results have been different."

SCOTCH 250 WHEN YOU LISTEN FOR A LIVING.

HUMBERTO GATICA ON TAPE.

Scotch™ is a registered trademark of 3M.

Magnetic A/V Products Division

3M Hears You

3M

World Radio History

•••• SOUNDS OF HAWAII, INC.
1084 Young Street, Honolulu, Hawaii 96814
(808) 537-1442
Owner: Herbert Ono
Studio Manager: Herbert Ono

•••• STUDIO HAWAII
(Formerly Broad Studio)
1 N. King St., Honolulu, Hawaii 96817
(808) 536-9311
Owner: Al Harrington
Studio Manager: James Linkner, Fred Woodruff

•••• SUMMIT ENTERTAINMENT STUDIOS
also REMOTE RECORDING
724 Columbia Lane, Provo, Utah 84601
(801) 377-8900/01
Owner: D. Jefflyn Priest, President
Studio Manager: D. Jefflyn Priest

•••• TIKI SOUND STUDIO INC.
also REMOTE RECORDING
792 East Julian St., San Jose, CA 95112
(408) 286-9840, 286-9845
Owner: Corporation
Studio Manager: Bob Berry and Gracie J. O'Neil

•••• TRACKS MOBILE
also REMOTE RECORDING
Box 747, Stinson Beach, CA 94970
(415) 868-0763
Owner: Tim Tomko



Tres Virgos Studio
San Rafael, CA

•••• TRES VIRGOS STUDIO
1925 Francisco Blvd., Suite G, San Rafael, CA 94901
(415) 4567-866
Owner: Allen Rice, Robin Yeager, Mike Stevens, Jerry Jacobs
Studio Manager: Robin Yeager, Allen Rice
Engineers: Robin Yeager, Richie Moore, Allen Rice
Dimensions of Studios: The studio is asymmetrical with a floor area of approximately 850 square feet. There is a separate drum room and two additional isolation booths. The ceiling ranges from 12 to 14 feet.
Dimensions of Control Rooms: The LEDE (TM) control room is approximately 450 square feet with a minimum ceiling of 12 feet.
Direction: Early 1981 will see the opening of our new facility in San Rafael, California. This 3500 square foot complex will utilize the latest in studio design by Chris Davis—The Music Place Heater #4 I.A., Las Vegas Recording, National Audio Archives, Syracuse NY. The new Tres Virgos is built to meet all of the criteria for LEDE (TM) certification. A separate production, dubbing and voice over facility, along with numerous creative comforts will make your sessions both creative and productive. For more specific details, call (415) 4567-666. (LEDE is a trademark of Syn Aud Con.)

•••• TRIAD RECORDING STUDIOS, LTD.
1825 Oak St., Eugene, OR 97401
(503) 687-9032
Owner: Gene P. Moritz, Peter Lonnz
Studio Manager: Gene P. Moritz
Engineers: Peter Lonnz, Don Ross
Dimensions of Studios: 22' x 24' vocal booth 5' x 8'
Dimensions of Control Rooms: 14' x 16'
Tape Recorders: Ampex MM 1200 24 track, Otari 5050 4 track, Studer B67 2 track, Revox A77 1/4 track, Nakamichi 582 cassette
Mixing Consoles: Tangent 3216, 24 in x 24 out
Monitor Speakers: UREI 813's (4) JBL 4311's, Auratones
Echo, Reverb, and Delay Systems: EMT 140 plate reverb, Master Room Super C reverb, Klark Teknik DN 36, DeltaLab



1) 1/2 Ampex comp/limiter, dbx 190 comp/expander (2) Roger Mayer HM 605 noise gates, 7S 100 1/2 comp/expander, Otari DL 4050 half speed cassette duplicator, dbx noise reduction, Jensen transformer direct boxes, Boss AK-4 and 1 Semtex noise phones.
Microphones: PZM's Neumann KM 84, U87's, U147, AKG 44, 501, 200, 100, Sennheiser MD 441, 421, Soly 21, IRT 20, Heil, Sennheiser MD 441, 421, Soly 21.
Instruments Available: Yamaha grand piano, synthesizers Steinberg, Ensoniq, Roland, Fender Rhodes piano, Gibson Martin, Fender Gibson guitars. Also available on request Mellotron, Reverend guitar and various amps and instruments, various percussion instruments.
Rates: 1/4 track \$9/hr, 1/2 track \$70/hr, 2 track \$50/hr, 2 track \$5/hr. A 1/2 hour minimum on 1/4 track. \$30/hr block rate available.

•••• VILLA RECORDERS
3013 Shoemaker, Modesto, CA 95351
(209) 521-1494
Owner: Fred Echel, Scott Studer
Studio Manager: Fred Echel, Scott Studer
Engineers: Tom Whitman, Greg Sesser
Dimensions of Studios: 40' x 40' Isolation booths: 12' x 12' and 12' x 12'
Dimensions of Control Rooms: 25' x 25'
Tape Recorders: 2) Ampex ATH 102 2 track, 4) Ferrograph Studio 5, 1) track Studer A50 Mark III, 1/4 track
Mixing Consoles: Trident 24 in x 24 out
Monitor Amplifiers: Spectra Series, Yamaha Crown Phase Linear KGW
Monitor Speakers: UREI Line Alan Alterco 4 JBL 4311, Tannoy, Auratone
Echo, Reverb, and Delay Systems: AKG BX 20, Marshall Tape Modulator, echo chamber with 1/4 second delay in 15 minutes and delay
Other Outboard Equipment: 2) UREI 117A (A), 2) UREI 117A 1N Kenex, Gun Brans dbx 160 limiters, Scamp sweep EQ, Scamp noise gates, Eventide Harmonizer with keyboard, 2 channel Trident parametric EQ, 4 channels Orban parametric EQ, Whire 1/2 octave, 2Q, 26 channels of Dolby noise reduction
Microphones: Neumann U 87, EM 84, Sennheiser 41, 44, Electro Voice B-20, AKG 414, 452, D200, D202, Calrec 1050, 654, Beyer M 200, Soly C 11, Shure SM 50, Countryman direct boxes
Instruments Available: Baldwin 9 grand piano, Fender Rhodes electric piano, Ampex 1/2 pass amp, Fender Twin reverb amp, MESA/Boogie amp, Oberheim 2 voice synthesizer, ARP Odyssey, Sunburst electric guitar, Fender bass guitar
Rates: 24 track \$95/hr, 16 track \$65/hr, 2 track \$50/hr

•••• WESTSOUND RECORDING, INC.
828 East 7th Ave., Olympia, WA 98501
(206) 754-4848
Owner: Westsound Recording, Inc.
Studio Manager: Ross Matteson
Engineers: Cal, for specifics
Dimensions of Studios: 41' x 25' x 15'
Dimensions of Control Rooms: 25' x 19' x 11'
Tape Recorders: Ampex MM 200 24 track, Ampex ATH 102 2 track, Ampex 4400 2 track, 1/4 track, 1/4 track stereo cassette duplication available
Mixing Consoles: Quad Eacht custom 28 in x 24 out with Neumann phantom power
Monitor Amplifiers: Phase Linear 700B, McIntosh 40
Monitor Speakers: UREI 813, MDM 4, Alterco 604E, Auratones
Echo, Reverb, and Delay Systems: EMT 140 stereo plate reverb, acoustic chamber, DeltaLab DL 2
Other Outboard Equipment: UREI 1178 stereo comp limiter, UREI LA 4 Audio on noise gates, ADH direct box, Dual turntable SAE MK 7 700B quadraph EC, Symetrix SE 400 EQ, K 140S head phones
Microphones: Neumann M 50's, KM 56, Cine church mic, Sony C 500, AKG 45, D 200E's, PML DC 7's, PML DC 6's, Beyer M 50, Crown PZM, Sennheiser MD 421, Shure SM 81, SM 57's, Sony ECM 90's, Electro Voice RE 20's
Instruments Available: Steuway Model M (1927) Hammond B 3 with Leslie, Mirco 10000
Rates: \$60/hr 24 track, \$50/hr 16 track, \$40/hr 2 track

Westsound Recording, Inc.
(206) 754-4848.

Westsound Recording, Inc.
Olympia, WA

Extras: Near motor and parking, sound treated lounge with stereo and art exhibits, kitchen, free, no cream, and portable, easy access, 24 hour, and a car for easy loading, easy wheelchair access.
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•••• THE WINERY RECORDING STUDIO, LTD.
R.R. 2, Box 639, Kaupakalua Rd., Haiku, Maui, HA 96708
(808) 572-1560
Owner: Harry Davison
Studio Manager: Tom Malner, and Jerry Blyler
Engineers: Tom Malner
Dimensions of Studios: 40' x 12' with 14' x 15' isolation
Dimensions of Control Rooms: 20' x 12' x 14'
Tape Recorders: Ampex MM 100 1/4 track, Ampex AG 44 1/4 track, Scully 1/8 track
Mixing Consoles: Allen and Heath Ltd.
Monitor Amplifiers: Crown DC 300 A and DC 300
Monitor Speakers: JBL 4415, Auratone
Echo, Reverb, and Delay Systems: AKG BX 10
Other Outboard Equipment: BX 10 compressor limiter, UREI 1176 1N compressor limiter, phasers, graphic EQ, blander, double noise gates
Microphones: AKG D112E, Neumann U 87, Shure SM 81, 59, 58, 57, Electro Voice RE 20, 25, Sony C 500, Sennheiser 41, 44
Instruments Available: ARP PE 4 string Ensemble, ARP 2600 synthesizer, Hohner D10, Fender Fender Rhodes piano, Gem Box, onyx MESA/Boogie amp, Fender Twin reverb, pro CB amp, Fender Princeton guitar amp, Fender bass pre-amp with parametric EQ, Yamaha EL 2001 vss amp, Aemulor vss speaker
Rates: \$85/hr for 16 and 24 track, \$45/hr for 2 track or copy/mix
Extras: On 15 acres of beautiful scenery, Maui, sound equipment rentals for Hawaii live concerts, writer, demos on premises, kitchen, and a car, super hi, available, easy loading can be arranged

•••• ZOETROPE STUDIOS RECORDING
916 Kearny St., San Francisco, CA 94133
(415) 788-7500
Studio Manager: Jake Kramer

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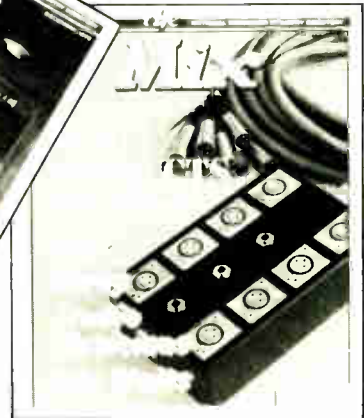
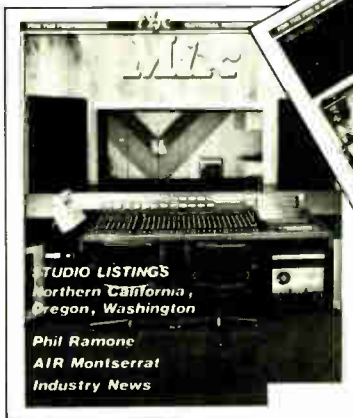
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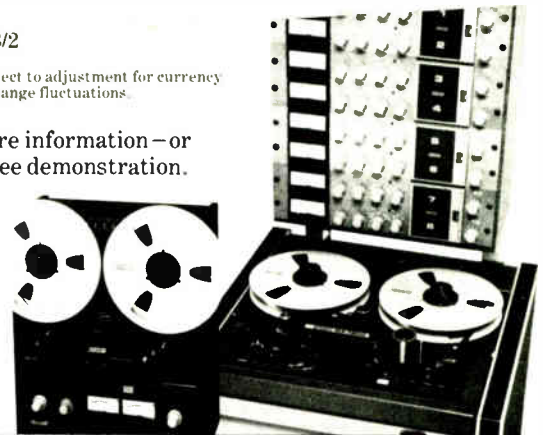
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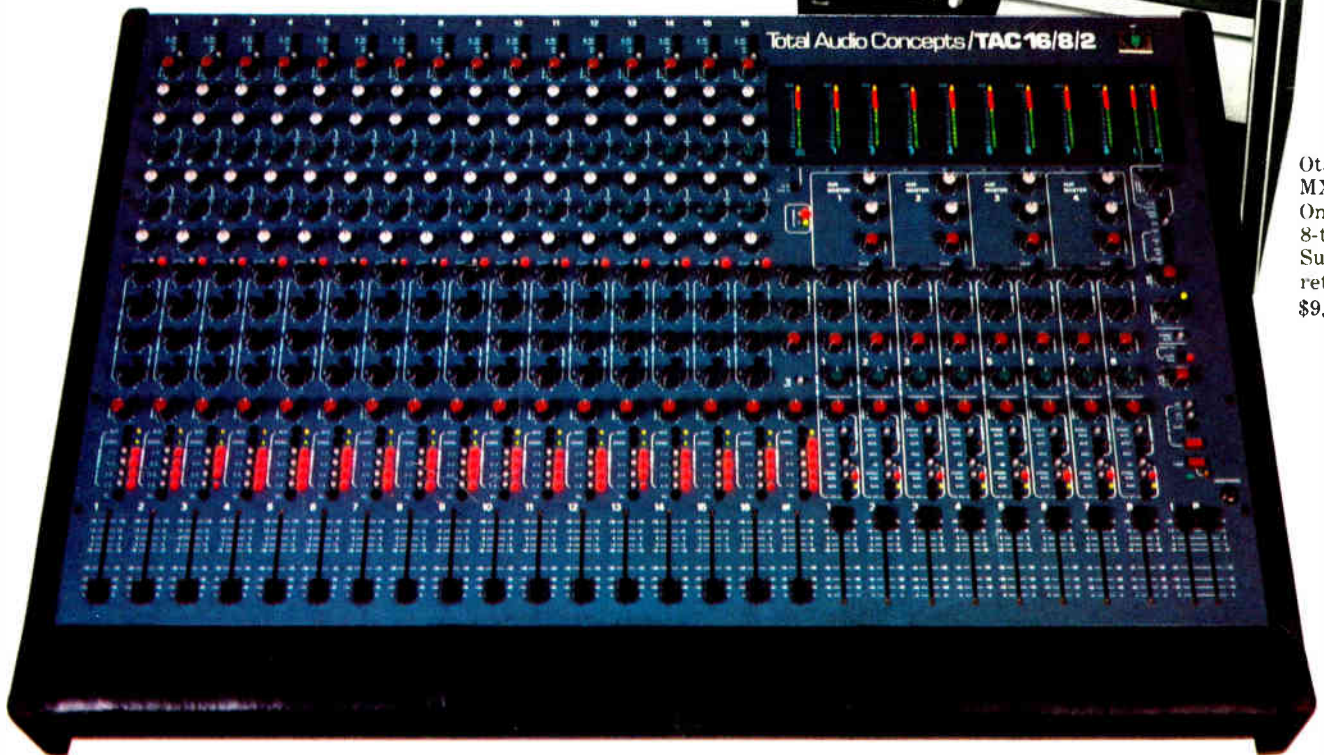
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