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HOLLYWOOD, CALIFORNIA

DECEMBER, 1964



Star Performer at Desert Inn . . . (see story on page 2)

### MANUFACTURING SUBSIDIARIES SALUTED

This issue of the United & Affiliates Newsletter is largely devoted to the Manufacturing subsidiaries, UNIVERSAL AUDIO, INC. and STUDIO ELECTRONICS CORP. These two companies, rapidly becoming leaders in their respective marketing fields, represent important diversification in the UNITED complex, otherwise comprised of primarily service organizations. Wholly-owned subsidiaries of the parent UNITED company, both UNIVERSAL AUDIO and STUDIO ELECTRONICS presently occupy a large area in the WESTERN RECORDERS building at 6000 Sunset Boulevard in Hollywood, but their rapid growth indicates a need for larger quarters in the near future.

Although operated as separate companies because of their uniquely different production, engineering and marketing styles, operating efficiencies are realized through mutual use of various departments and facilities. All accounting functions are handled by the centralized accounting department and are currently being automated and computerized.

OVER 30,000 MASTER LACQUERS SUCCESSFULLY PRODUCED

# EVOLUTION OF A CONSOLE

Custom studio control consoles are not just born — they are evolved. Some of the factors that determine the design are—the nature and diversity of the work to be performed by the console; the physical layout of the studio and control room; maintenance considerations; personal preferences of owners and engineering personnel; access route to installation site (don't build a large boat in a small basement!); echo or reverberation requirements; monitor and meter requirements; and, of course, cost considerations.

There are at least nine major steps in the development of a console design and its construction, all of which are time-consuming and exacting. STUDIO ELECTRONICS CORP., through experience and methods standardization, has refined these procedures and as a result, console and other custom-systems contracts

are at an all-time high.

The first four steps in console design must be taken before a contract can be signed. This involves a great deal of concentrated effort with only the prospect of a sale, and frequently must be accomplished in a few days — when time is of the essence:

 Determination of requirements. Correspondence or personal consultation with the prospect to analyze his needs and establish general specifications for the

console or system.

 Preliminary engineering. Consultation of the Sales Engineer with the design department to finalize designs and dimensions. Preparation of single-line block drawings and sketches.

3. Consultation with client to obtain final

approval of design.

 Estimation of costs and construction time. Preparation and submission of formal proposal, including all design specifications and bid price.

When these specifications and the accompanying bid are finally approved, a delivery schedule is established and the project ini-

tiated.

Detailed engineering design and preparation of working drawings, and a bill of materials.

Letting of subcontracts for outside fabrication such as cabinetry and metalwork.

7. Purchasing and delivery scheduling of components, including Universal Audio products. Detailed and exacting schedules are prepared to insure receipt of materials as needed during the course of fabrication. Use is made of a visual scheduling board in the purchasing department and controls are set up for expediting where required.

 Actual fabrication and wiring. Sub-assembly techniques are employed, allowing certain sections of the system to be preassembled and wired, ready to be installed when the cabinet is completed. 9 Performance testing and checkout. Exhaustive laboratory tests are made of sub-assembles, and performance specifications of each individual section of the system are verified. The complete console is then tested and measured to guarantee performance which will exceed specifications. No detail is left to chance, no deviation from design standards permitted. This final checkout sometimes requires two weeks.

Only after all of these steps have been completed can the console be delivered. In cases where installation is to be made by STUDIO ELECTRONICS the installation site has meanwhile been prepared and all external wiring and equipment installed and checked to facilitate completion of the system when the console is delivered.

Sometimes economies can be realized by using sections of various existing designs rather than designing from scratch. In this way we are able to save the client significant time and money, but the usual requirement to complete an average custom console is three to four months following receipt of order. Like the master chef, we believe "time is an important ingredient". And we don't waste it.



## SOUNDS OF LAS VEGAS AT THE DESERT INN

For years the Desert Inn at Las Vegas has presented in its theatre restaurant the finest entertainment talent available. No trouble or expense was spared in its aim to retain a position of leadership in the Las Vegas show scene.

In the summer of 1963, Ed White, technical director of the Desert Inn, decided that he wanted a completely new sound system and the best sound system for the theatre. He got it — and he got it at Studio Electronics.

Ed White had superlative specifications involving high performance, ease of operation, dependability, low maintenance costs and a reasonable price. It was obvious that Ed had given this project a great deal of thought and planning. As an expert engineer, he knew what he wanted and was not willing to compromise on quality.

The console that Studio Electronics built for the Desert Inn has been in operation for a year being used in two complex production shows a day, seven days a week and the console has performed without failure and only with routine maintenance.

# UNIVERSAL AUDIO EXPANDS MARKETING

Bud Morris, General Manager of UNIVERSAL AUDIO, emphasizes that product marketing is being expanded both domestically and abroad. The object of present sales efforts is to exploit fully the recording studio market on a world-wide basis as well as making further inroads into the Broadcast and TV audio fields.

Current marketing methods include distribution through Franchised Dealers in major markets and direct factory sales elsewhere.

Negotiations are in progress with Magnecord Australia for Franchises in Australia, New Zealand, Hong Kong and Maylasia.

A distributorship in Paris has been established by Gerhard Lehner, Chief Engineer of Studios Barclay. Lehner's firm imports UNI-VERSAL AUDIO products for distribution in France, Western Germany and Spain. Orders have already been shipped under this arrangement.

Domestically, new Franchises have been established during the past few months in Portland, Oregon; Chicago, Illinois; Arlington, Texas; Indianapolis, Indiana and Phoenix, Arizona.

Direct mail promotion, utilizing New Product publicity releases in Audio and Electronics World magazines has resulted in numerous sales since this program was begun six months ago.

A complete new catalog is being prepared, using graphic arts and technical information to create interest in Universal Audio products. Upon completion of this catalog, an extensive program of national advertising, coupled with direct visits to Franchise distributors will be put in motion. A 100% increase in sales volume the first year is anticipated as a result of these efforts.



UNIVERSAL AUDIO Professional Products are now being sold domestically by these dealers:

## DISTRIBUTORS

JOHN B. ANTHONY MFR. REP. Box 343 Wilton, Connecticut

AUDIO ACOUSTICS EQUIPMENT CO. 3105 Avenue E. East Post Office Box 444 Arlington, Texas

AUDIO INDUSTRIES CORP. 1419 North LaBrea Avenue Hollywood 28, California

BARCLAY STUDIOS Barclay Hoche Enregistrements 9, Avenue Hoche Paris, 8e, France

BEHREND'S INCORPORATED 161 E. Grand Avenue Chicago 11, Illinois

RAY BUTTS 319 7th Avenue North Nashville, Tenn.

BOB FARRIS 213 Casa Blanca Fort Worth, Texas

LANG ELECTRONICS, INC. 507 Fifth Avenue New York 17, New York

SONOCRAFT CORPORATION 115-117 West 45th Street New York 36, New York

UNITED RADIO SUPPLY, INC. 22 North West Ninth Avenue Portland 9, Oregon

WALTON RECORDING SUPPLIES 46 Walton Chicago, Illinois 60611

BRUCE'S WORLD OF SOUND, INC. 2711 East Indian School Road Phoenix 16, Arizona

MAGNECORD AUSTRALIA 158 Clarence Street Sydney, Australia

Any of these distributors will be glad to supply technical literature and prices on all UAI Products, or write Universal Audio, 6000 Sunset Boulevard, Hollywood, California, 90028.

#### CHRISTMAS MESSAGE

Christmas is a good time of the year to remember friends and business associates. A time to pause and give thought to many things of which we do not always take sufficient notice. The casual greeting, the hurried hand sake, the small talk engaged in during the year are at this season superseded by conscientious attention to our sincere appreciation of each person's friendship.

We do not think it gross commercialism to talk of your business or work-a-day endeavors at this time because these things are so much a part of our lives that to ignore them would be to ignore very important threads in the continuously weaving fabric of our lives.

But, of course, our first and foremost wishes are for you and those dear to you. May the happiness of the Christmas Season be with you throughout the coming year.

We have enjoyed and appreciated the opportunity to serve our clients during 1964 and hope to continue this association in the coming year.

The warmth of the many friendships we enjoyed in the year past brings us comfort many times over. We will endeavor to enrich these friendships in 1965.

To friends, clients and their families we wish a Merry Christmas and a Happy New Year.

M. T. PUTNAM President

### HOPES AND DREAMS OF THE FUTURE

The Children's Hospital is many things to many people. To some, it represents an image of being one of the country's great pediatric institutions and care centers , . . a place where sick children from birth to 17 years can be helped and restored. To others, it is a multi-story 232 bed, private non-profit charitable hospital admitting both private and part pay patients of all races, religions and economic circumstances. It is these things and more. To United Recording, this hospital is the hope for the future. During this season of the year, it is our privilege to help by contributing to its new building development program. We take this opportunity to thank all those who have helped in making this contribution possible.



### PROFILE OF SUCCESS

Jerry Ferree was recently appointed to the position of Chief Engineer at United Recording Corp. of Los Angeles. Jerry has been with United since its inception in 1958 and has been in the recording field since he graduated from Valparaiso Technical Institute at Valparaiso, Indiana, in 1956. He was very highly recommended by the dean of the school as being its most outstanding student. His work and progress over the years have amply justified this honor.

Jerry is a native of Reading, Pennsylvania, moved to Chicago at the age of 13 and attended public school there being graduated from Morton High School at Cicero, Illinois. He is a person of relaxed, genial personality who is well liked by most everyone who knows him and is, of course, greatly respected for his large technical knowledge in electronics and related fields. He and his charming wife, Louanne, have a wonderful family of 2 girls and 1 boy.

The interest in radio electronics infected Jerry even before he was out of grammar school and by the time of his junior year at high school, he was Chief Engineer of the Campus Radio Station. Probably Jerry's interest in radio and things electronic was given impetus by his father who is a Telephone Equipment Engineer with Western Electric Co.

In addition to being busy as Chief Engineer at United and spending time with his family, this versatile young man also pursues hobbies of ham radio operator and photography. In his "spare" time he does consulting work and through this was responsible for designing and supervising the installation of a completely equipped film studio for Hanna-Barbera.

Day in and day out Jerry performs complex tasks in efficient and ingenious manner to properly earn him the kudo bestowed on him by Bill Putnam, President, and D. F. Morris, Vice President, of being an exceptionally talented engineer.

# PROFESSIONAL AUDIO

What is the difference between "Professional Audio" and "High Fidelity" audio equipment?

First, let us define "high fidelity", the dictionary meaning of which is "faithfulness of reproduction". It simply implies that equipment bearing this description is capable of presenting at its output a reasonably accurate amplified reproduction of information applied to its input. This might be likened to a photographic enlargement of a small picture. If the enlargement is sharp and clear, and shows the same tonal balance as the original picture, it could be termed a "high fidelity" image. From this standpoint Professional Audio equipment, such as that manufactured by Universal Audio, Inc. could be termed "high fidelity"

However, during the past two decades "high fidelity" has come to be synonymous with commercial audio equipment designed and manufactured specifically for home or hobby use. It is available in a wide range of prices, quality and decor and is admirably suited for the purpose for which it was designed — the reproduction of recorded music for personal enjoyment.

"High Fidelity" components are not, however, suited to professional recording or for use in radio or TV audio systems. Because of the type of circuitry (high impedance) used in "hi-fi" gear, short interconnecting wires must be used to avoid quality loss. Switching can cause noise and hum.

Professional Audio equipment employs a type of circuitry (low impedance) which permits interconnections over great distances without loss of quality and much greater switching flexibility without noise and hum problems. Most Professional Audio components are designed for mounting in standard 19" wide equipment racks, while commercial hi-fi units are made for shelf mounting or are used freestanding.

While some commercial high fidelity products are realistically rated and perform well within their excellent specifications, others, unfortunately, make performance claims which they cannot meet. Most Professional Audio ratings are conservative and factual, since these products are sold to users who are capable of confirming performance claims.

All UNIVERSAL AUDIO products meet or exceed the high quality standards of the recording industry as established by its own regulating body, the R.I.A.A.



# WEDDING BELLS FOR JEANSONNE

Belated congratulations are extended to Paul Jeansonne, UNIVERSAL AUDIO Production Manager, on his marriage to Victoria Del Corchio.

Paul and Victoria were wed August 24 at St. Patrick's in Burbank. A reception followed at the home of Mr. and Mrs. Danny Gonzales, friends of the bride and groom.

The new Mrs Jeansonne is the daughter of Mr. and Mrs. Antonio De Corchio of Burbank.

Paul manages the production line at UNI-VERSAL AUDIO, and also doubles as purchasing agent. Following a four-year stint in the U. S. Air Force from 1950 to 1955, his work experience includes two years with the R. V. Weatherford Company in Industrial Sales and purchasing, and four years at Electronic City in Burbank as buyer and salesman. Paul studied merchandising at L. A. City College to supplement his training and experience in electronics.

The newlyweds make their home in Burbank, and share an avid interest in outdoor life, fishing, boating and camping. Paul's Mexican and French ancestry and Victoria's Italian background results in some wonderful culinary experiences in the Jeansonne kitchen. Problem: How do you make Creole Lasagna?

### INTERNATIONAL MARKETS

The manufacturing companies sell the largest percentage of their products to users in the United States. Probably every state in the continental United States has some equipment fabricated by Universal audio or Studio Electronics. We are proud of the widespread domestic market.

However, international sales are not ignored and these add geographic diversity and the spice of excitement to our activities. If the quality of recorded material coming from Latin America, Europe, the South Pacific or Australia sounds better these days it may be due to the audio equipment we have sold and installed in these areas.

The first of our foreign contracts was with Discos Mexicanos of Mexico City to whom we sold three recording consoles and other related equipment in 1958. Over the years we have placed various of our equipments in France, England, Germany, Hawaii, Canada, Venezuela, Puerto Rico and other countries.

If you travel out of the country and need to do some recording, look for the Universal Audio or Studio Electronics trademark. It's a sign that the studio is particular in choosing the best recording gear and can deliver a sound similar to the good quality afforded by United Recording Corp. and its affiliates.

### NEW CUSTOM STUDIO INSTALLATION AT RAY CHARLES ENTERPRISES

United Recording Corporation's affiliate organization, Studio Electronics Corp. (SEC) has, during the past few years, found many new professional homes for its line of custom studio installations. The latest "made-to-order" installation is for Ray Charles Enterprises (the famous blue's singer).

The new studio installation, located on the second floor of the newly constructed RPM International office building, was created to meet two important pre-requisites . . . high quality and flexibility. SEC supplied a newly engineered custom console which acted as the control center for tape machines, a new multispeed turn table, various types of microphones and associated secondary components necessary to make this installation one of the finest of its kind in this part of the country.

The new Ray Charles consoled has 12 positions, 3 output channels plus monaural and rerecording capabilities. In keeping with its interior design decor, all cabinets and tables were finished in black Formica.

# TALLY HO LOUNGE AND CASINO TO OPEN JAN. 1st

Las Vegas' newest casino and entertainment lounge, plush new additions to the Tally Ho Hotel on the fabulous Las Vegas Strip, will be open to the public on New Year's Eve.

Designer Leonard England is responsible for the tasteful and glamorous decor of the new Tally Ho facilities, and visitors to the Nevada showplace for the grand opening will be ooohing and aaahing at the crystal chandeliers, antique mirrors and rich interiors.

The unique New Entertainment Lounge will feature an international review produced by Steve Parker. Technically a lounge, the show-room is actually a complete small theatre with full stage rigging, stage elevator, lighting and sound.

To be heard, but not seen, is Studio Electronics Corporation's complete custom sound installation featuring a 12-microphone console, elaborate amplifier and speaker system, reverberation facilities and intercommunication systems. Under construction at our Hollywood factory for the past 90 days, the systems are being installed during the month of December under the direction of Bob Bushnell, Studio Electronics sales engineer. SEC is also installing all of the background music and paging facilities for the lobby, casino, dining and bar areas. Included are many Universal Audio components.

Since the Tally Ho gaming licence becomes effective on January 1, 1965, the gambling tables and slot machines will be silent until 12:01 a.m. . . . at that moment the casino will burst into action and the New Year's Eve merrimakers can try their luck in Nevada's newest and most beautiful club. Tally Ho!



## UNIVERSAL AUDIO CATALOG GROWS

Starting just six years ago with only two products (both now improved by new designs), the UNIVERSAL AUDIO catalog of Professional Audio Products now encompasses eighteen prime products and a number of accessory and special-purpose items. In addition, two new prime products are in pre-production phases and several more are on the drawing boards.

Here is a list of the present line:

	the second secon	
175-B	Limiting Amplifier	
175-BT	Limiting Amplifier	
	Limiting Amplifier	
960	Digital Metronome	
1016-C	Program Amplifier	
1008-B	Preliminary Amplifier	
508-A	Environmental Equalizer for 1008	
610-A	Modular Amplifier-mixer	
112-A	12-watt Power Amplifier	
160-A		
	60-watt Power Amplifier	
235-A	35-watt Dual Power Amplifier	
500-A	Program Equalizer	
550-A	Recording Filter	
412-10A	DC Filament Power Supply (10A)	
	DC Filament Power Supply (30A)	
400-175	DC High Voltage Supply (175ma)	
400-350	DC High Voltage Supply (350ma)	
301	Hybrid Echo Network & Control	
138	Special Networks, Fixed Pads,	
	Equalizers, Filters	
1008108	"Inputrim" Photoelectric Variable	
LOUGLUM	Pad for 1008-B	
1000 TD		
1000-15	Tray, Bracket & Plug for	

Undergoing final laboratory prototype testing now is a new version of the time-tested Model 175-B Limiting Amplifier. The new unit, Model 176, includes provision for varying the compression ratio for certain program applications. Another version, Model 177, will be a two-chassis variation of Model 176, specifically packaged for disc mastering channels, and having switch settings for repeatability instead of continuously variable controls.

1008-B and 1016-C

Amplifier Shelf and Panel

Panel for 500 A or 550 A Dual Units

Panel for 500-A or 550-A Single Units

1608-S

525

525-A

Also in prototype testing and ready for final packaging is our Model 120 Electrostatic Reverberation Simulator. This revolutionary device will provide reverberation (commonly referred to as "echo") closely approximating the results obtained with a high-quality acoustical "echo chamber", but requiring only a few inches of space in a standard equipment rack. Orders are already on hand for a number of Model 120's and from all indications there is a large ready-made market for this unique new product. Units should be ready for marketing in January.



## NEW PROGRAM EQUALIZER INTRODUCED

#### GENERAL DESCRIPTION

The Model 500-A Program Equalizer has been specifically designed to the new concept of corrective equalization for film and disc recording, broadcast and reproduction. Choice of available frequencies represents a concensus of professional opinions to provide optimum correction in a wide range of applications.

The 500-A features "dip" attenuation curves which are true reciprocals of the "boost" equalization curves. This represents a distinct advantage over the "roll-off" type program equalizers presently in general use. With the 500-A it is now possible to attenuate a discrete segment of the frequency spectrum without suffering loss of frequencies above this range.

The Model 500-A is of the L, C, R bridged T configuration, and is of passive design. No tubes, transistors or power are required for operation, therefore there is no addition of noise or distortion. Insertion loss is only 10 db as compared with 14, 16 or more in other pas-

sive equalizers.

The low frequency rotary selection switch allows a choice of equalization or attenuation at 40 CPS or 100 CPS, and provides an OFF position for the entire unit. The high frequency rotary selector switch allows choice of equalization or attenuation at 3KC, 5KC, 7KC, 10KC or 15KC — practical increments for the modern approach to sound alteration and correction.

The low and high frequency gain controls provide 10 db of boost or 10 db of attenuation at the selected frequencies in 2 db detented steps. Switch action is smooth and noiseless and detents are positive. Standard double jacks are provided for input and output connections, as well as a barrier strip on the rear for permanent connections.

A PRODUCT OF UNIVERSAL AUDIO, INC. 6000 SUNSET BLVD. LOS ANGELES, CALIF. PUBLISHER . M. T. PUTNAM EDITOR GENE SOLTYS Corporate Communications CIRCULATION EDITOR . . . TONY PARRI

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CUT OUT AND SAVE



## RECORDING FILTER FEATURES WIDE CHOICE OF CUTOFFS

#### GENERAL DESCRIPTION

The Model 550-A Recording Filter is a variable high pass and low pass filter with excellent band restriction over the important ranges required by modern film and disc recording.

broadcasting, and sound reproduction.

The Model 550-A has independent controls for high and low frequency "cutoffs", each with six positions. Separate off/on controls are provided for both low and high frequencies.

High-pass selection: 40, 55, 70, 85, 100 and 200 cps.

Low-pass selection: 5, 7, 8.5, 10, 12.5 and 15 KC.

Standard double-jacks are provided for input and output connections, as well as a barrier strip at the rear for permanent connections.

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