

Telex Communications, Inc.

PRO AUDIO GROUP

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TELEX



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Lots of important information to help you navigate the landscape of professional audio products and services worldwide.

“JIM, JIM AND YOU”: ON THE ROAD WITH EV®

“Jim, Jim and You” is the moniker for a new program dedicated to exposing EV sound contractors to recent EV loudspeaker offerings. The “Jim’s” refer to Jim Long, director of strategic projects, and Jim Tassey, director of the technical services group. The “you” refers to your local manufacturer’s representative. Intended to not only inform, the program’s name connotes the kind of intimate and grassroots approach these industry renowned factory experts have adopted. Thus, if you are an EV pro sound contractor, one of the Jim’s and the local rep are coming to your place of business soon — with a van or two full of speakers, processing and power amps ready to demo and talk about whatever you haven’t heard yet. The program includes product positioning as well as the rationale behind specific engineering and design choices made to achieve desired product performance.

When asked why there is a need for this kind of customer interaction, Jim Long explained, “Tassey and I believe that EV does a fine job of exposing our products at trade shows like the NSCA Expo. We deliver carefully honed presentations and effective demonstrations outlining EV’s key benefits to 50–60 people, several times a day. But compared to our contractor base, many important customers are missed.” While EV’s marketing efforts traditionally include mailings and on-site rep demos, the Jim, Jim and You program is a way to make this a much more concentrated process — exposing multiple product lines and marrying the expertise of the factory man with that of the local rep.



Jim Long (left) on the road in Heber City, Utah with contractor Deward Timothy of Poll Sound, Salt Lake City

Most demos will be conducted at the contractor’s place of business — the optimal place to involve the most people and often the place where the contractor evaluates a new product before a final decision is made. As for the current schedule of the Jim, Jim and You program, Long explained how he’s had the opportunity to accumulate some serious frequent-flyer miles in the past year. “I don’t expect to slow down now. I’m trying to be on the road nearly all the time.” Upcoming visits include stops in Florida, Ohio, western Pennsylvania, Atlanta, Nashville, Kansas City and St. Louis.

A typical road presentation includes examples of EV’s X-Array™ Xi-Series™, FRX series, FRi series and the EVI Vari Intense® systems. If you would like the Jim, Jim and You show at your contracting place of business, please contact your local EV® sales representative. Your sales rep will notify the regional manager and make arrangements to have you placed on Jim & Jim’s travel itinerary. Jim & Jim look forward to the new year and the inherent challenges a program of this magnitude presents.



Jim Tassey (left) with independent consultant, Bob McCarthy (middle), and sound contractor, Jon Pinney, tweaking the Xi-Series™ system at The Chapel in Akron, Ohio

EMPLOYEE FOCUS: LIVE AND INSTALLED SOUND SALES SUPPORT



Carla Engler

Carla Engler, sales assistant for Live and Installed Sound Sales, has been with the Telex Pro Audio Group for almost a year. A graduate of Northern Michigan University, Engler received her BS in Office

Administration, and since her graduation Engler has assisted upper management (VPs and CEOs) in various capacities, including meeting planning and working in direct contact with customers. At Telex, Engler performs a wide variety of duties and responsibilities, including assisting callers and directing them to the appropriate help, whether it's sales, customer service, reps, dealers, tech support or marketing. Engler also handles web inquiries, co-op distribution, spiff reimbursement, literature distribution, seminar preparation and NFL billing.

Engler feels that one of the characteristic strengths of Telex is the high caliber of its employees. "Telex employees really BELIEVE in the products they sell," remarked Engler, "and some of them eat, sleep and breathe these things. Because so many are musicians, they know what works and what doesn't. It's much easier to sell if you believe in what you're selling..."

Engler enjoys the work environment at Telex — which she describes as "creative" — a place where it's okay to laugh and where occupational variety is the norm.

With regards to sales representatives and dealers, Engler believes it is her job to support them to the utmost degree: "Dealers and reps are the people on the front lines — the people who generally have the first contact with our end users; thus, we need to do the best possible job we can to get them the information and products that they need. Without them, we wouldn't exist."



Cheri Knudtson

Cheri Knudtson, administrative assistant for Live Sound Sales, has been employed with Telex Communications, Inc. for four months. Prior to her position at Telex, Cheri Knudtson spent eight years at US Bank. While at US Bank Cheri worked in a variety of positions, beginning her tenure as teller, eventually moving through customer service, administrative assistance, sales support and a position as banker. As an employee of Telex Communications, Inc. Knudtson offers support and service to the Live Sound Sales team. Among other duties, Knudtson is responsible for the extensive set up and

preparation of Telex Academy training seminars. In addition to planning and coordinating opportunities for dealers and contractors to become better acquainted with the Telex Pro Audio Group and its numerous product offerings, Knudtson also tracks, documents and prepares co-op, spiff refunds, literature requests, 435's, and dealer agreements.

When asked what she likes best about her position, Knudtson remarked that it is the quality of the people she works with that makes her job so fulfilling. "I could not have picked a better group to work with, and the quality of the products we manufacture, market and sell is top-notch — real, world-class product — which we stand behind wholeheartedly."

Referring to her experience with sales reps and dealers, Knudtson remarked, "The communication I've had with reps and dealers has always been a good experience. If reps communicate with dealers as well as they communicate with us at Telex, then you can bet that we are all on the same page...or should I say, wavelength?"

Thanks to Carla, Cheri, and all Live and Installed Sound Sales Support staff at Telex Pro Audio for their excellent work and commitment to excellence!

EV WEB SITE FEATURES IMPROVED TRADES ONLY AREA!

To more completely service the needs of our dealers, the Trades Only area of the EV web site now features current information on promotional and advertising materials available for retail display. Included in the Trades Only area are the following pieces:

- **New EV® 24 x 36-inch Product Banners** with top and bottom poles and eye hooks that include N/DYM® Wired, N/DYM® Wireless, Eliminator®, Force™, PSX Stereo Powered Mixers, and Authorized EV® Dealer logos
- **New N/DYM® Wireless System Point of Purchase** designed for counter-top or slat wall stand-alone display
- **New N/DYM® Wired Microphone Point of Purchase** designed for use as a slat wall mounted-, counter-top or pedestal floor display

- **New 3 x 5-inch Product Signage** designed as boingers, easel-back or standard card format for everything from the Eliminator® Series to PSX Powered Mixers
- **New 3 x 3-inch Authorized EV® Dealer Decals** available as two-sided window or wall-adhesive

Please contact your local EV rep for a password and user name to immediate access the Trades Only area of www.electrovoice.com

In the near future, look for a streamlined registration process via our web site that will grant you access to dealer-specific pages and programs through assignment of unique passwords and user names.

Other Trades Only News

Looking for product photos, logos or other images for your catalog or weekly brochure? No problem. To simplify the process of acquiring product photos, logos and other images, EV is currently completing a high-resolution graphics archive for dealers in our Trades Only area.





EV® DISTRIBUTOR HI-FI SERVICES WINS BIG WITH 100% OF LEBANESE SOCCER ARENA INSTALLATIONS



Established in 1967, Hi-Fi Services is one of the oldest and most respected

teams of audio professionals in Lebanon. At the head of the Hi-Fi Services team is Oussama Mansour, who over the past few years has become the number one provider of audio equipment for sports projects in Lebanon. Due to the team's incredible service, EV has become the far and away leader of professional audio in Lebanon. The enthusiasm, excitement, and pride Lebanese football (soccer) and basketball fans exhibit is only intensified by the impeccable sound of

EV horns and speakers. The following is a list of venues and equipment that currently employ EV professional sound reinforcement products:

1 – Beirut Sports City Stadium (45,000 seats): Hosted the 1998 Pan Arab Olympic games, the 2000 Asian Football Cup opening ceremony, as well as the final championship game between Saudi Arabia and Japan (Japan won 1: 0); 92 dB over 95% of the seating area; MH horns, HP horns, TL15-2 subwoofers, Sx500, P Series power amplifiers, Dx34

2 – Beirut Municipal Stadium (20,000 seats): Hosted the national football championship games; 92 dB over 95% of the seating area; HP horns, Sx500, TL15-2, Q Series power amplifiers, Dx34

3 – Tripoli Municipal Stadium (23,000 seats): Hosted the 2000 Asian Football Cup games; 105 dB over 95% of the seating area; MH4020AC horns, Sx500, T15-2, Q series amplifiers, P series power amplifiers, Dx38

4 – Saida Municipal Stadium (20,000 seats): Hosted the 2000 Asian Football Cup games; 105 dB over 95% of the seating area; MH4020AC horns, Sx500, T15-2, Q series amplifiers, P series power amplifiers, Dx38

5 – Beirut Sports City Arena (12,000 seats): Hosted major national and Middle Eastern basketball games; Sx500 and Sx300 speakers, Q Series power amplifiers

We at EV would like to congratulate Oussama Mansour, as well as the other professionals on the Hi-Fi Services team for a job well done!

ARTIST ENDORSEMENT UPDATE: EV® SIGNS BIG NAME ACTS AND FUELS WORLD TOURS

Over the last five months, EV Marketing Manager/Artist Relations, Chris Robinson, has been busy securing new artists and performers to endorse EV professional music products. In cooperation with Minneapolis' Tour Supply (a company dedicated to serving touring professionals), the Telex Pro Audio Group has been able to target and sign newer and edgier bands with an active fan base. Recent success with performers like Slipknot, Papa Roach, Static-X and P.O.D is proof that Electro-Voice® products are designed and manufactured to meet and exceed the most critical demands of today's top performers. As we move forward, we will continue to target a mix of contemporary acts to build EV presence and enhance our market perception. The following artists and engineers comprise an expanding list of EV endorsees:

Artists

AC/DC Tour
Baha Men
(Of "Who Let the Dogs Out?" fame)
Bon Jovi Tour
Deftones Tour
Eight Stops Seven
Fishbone
Fu Manchu Tour
hed PE
John Berry
John Mellencamp Tour
Karl Denson's Tiny Universe

Leroy Van Dyke
Machine Head Tour
Metallica Tour
Mitch Malloy
Neal McCoy
New Found Glory
P.O.D.
Papa Roach
Slayer Tour
Slipknot
Static-X
The Honeydogs
Third Day
Ultraspank

Engineers

Brad Divens – Machine Head, Fu Manchu, hed PE
Jim Baker – John Berry
Rocky Holman – Bon Jovi, John Mellencamp
Steve Taylor – Neal McCoy

Papa Roach, domestic and international sensation, is now one of the key artist endorsees of EV® N/DYM® wired and wireless microphones. And lately they've been everywhere: December '00 cover of *SPIN* magazine, cover of *Guitar World*, upcoming cover of *MIX*, as well as in heavy rotation on radio stations, web radio, MTV, and the world wide web. Along with other Electro-Voice® endorsees, Slipknot, P.O.D., Fu Manchu, and Static-X, Papa Roach was also listed as one of the year's most influential bands in *Rolling Stone*

in addition to selling nearly 3 million albums and reaching triple platinum.

While on tour, Papa Roach has been using the entire line of N/DYM® mics to great success. The N/D868, N/D478, N/D468, N/D767a, N/D267a, NHSCU-N7, as well as the RE20, RE200, RE1000, and NRU wireless have all played a significant role in the tour. From late-night television show appearances to MTV award ceremonies and an ongoing world tour, Electro-Voice® products have provided outstanding performance through the rigors of the road. Papa Roach is currently touring the United States and will be appearing internationally over the next few months. To find out where you can hear and see EV® products in a critical world-tour setting, please visit the music news area of the news archive at www.electrovoice.com for Papa Roach tour dates and locations.

Papa Roach's endorsement of Electro-Voice® wired and wireless microphones is also visible in a new series of advertisements and promotional pieces currently being launched. Look for them in your favorite industry magazines, and please contact our web site to order posters and other promotional materials for your stores.

PRODUCT OF THE MONTH – ZEUS MATRIX INTERCOM



One of the newer intercom products from Telex is the ZEUS Matrix Intercom System. Similar to the established ADAM in many ways, the low price, and high performance of the unit allow it to be used in many situations where matrix intercom has not been practical in the past.

Zeus is a 24 “port” matrix, meaning that there are 24 inputs and 24 outputs available for balanced analog audio. 20 bit, 44.1 kHz converters are used for input and output, typically yielding in excess of 90 dB dynamic range from 20 Hz-19.5 kHz. Routing of professional quality audio signals for sound reinforcement, paging, and traditional communications are all possible within the same matrix.

To fully explore some of the possibilities, we will need to “translate” some broadcast specific terms into concepts more common to professional sound. IFB (Interrupted Fold Back) is used in broadcast applications to temporarily interrupt (or “duck” by a preset level) a program feed with cues from a director. Replace the program feed with music, replace the director with a paging

station, and you have paging over background music; up to 24 zones! IFBs can have multiple priorities, allowing certain stations to interrupt other interrupting stations, just the ticket for emergency or higher priority announcements!

Special Lists allow a single button to call an entire group of outputs — a perfect solution to zone paging.

Software control of individual crosspoint level controls is available for setting relative volumes for listening to different sources in a broadcast application; for professional sound applications, this feature turns ZEUS into a complete 24 x 24 mixing matrix!

GPI (General Purpose Interface) inputs and outputs can EASILY be programmed to allow certain events to trigger other events. For example, a contact closure from a PBX can be connected to a GPI input to activate a specific input fed from a chime generator, to broadcast an alert of the incoming call. A GPI output can be connected to a 2-way radio transmitter to automatically activate the transmitter anytime that someone “calls” the transmitter via their panel.

ZEUS has provisions for RS-232 control via “command line protocol”, a high level language with very simple commands for controlling and querying the status of the system. Add an AMX or Crestron control system, and you have one touch access to any function, from creating conferences to reconfiguring whole setups for room combining to simple paging.

ZEUS is the only intercom on the market with UPL (User Programmable Language). UPL allows the user or contractor to create very complex control schemes using very simple pull down menus in Windows. UPL can act upon changes of any key status, GPI status, time of day, or crosspoint status to change setup of the intercom, activate GPI outputs, adjust levels, or re-route signals — all in real-time, without operator intervention!

ZEUS comes with a wide variety of user panels to meet every need. From low cost 4 button desktop units perfect for paging, to 32 button panels for dispatch to level control panels for matrix mixing, any function can be quickly and easily implemented.

ENGINEERING Q & A: ED PLETSCH ON MICROPHONE MAGNETS

What is the real difference in microphone magnets?

There are several major families of permanent magnet materials used in microphones today. They range from ferrite, which is low cost and low energy, to rare earth materials that are high cost and high energy. Many factors affect the choice of magnetic materials: resistance to demagnetization, operating temperature, brittleness, magnetic strength, and cost. The latter two are most important in the development of MI microphones.

Materials such as Alnico (aluminum, nickel, cobalt, and iron) and

Ferrite/Ceramic (iron oxide), were developed and gained popularity in the 1940s and 1950s, respectively. The high performance Neodymium Iron Boron permanent magnets were developed and became commercially available in the mid-1980s. The table below contrasts the important characteristics of the three major magnet materials.

Material	Relative Cost	Magnetic Strength
Neodymium Iron Boron	High	High
Alnico	Moderate	Moderate
Ceramic/Ferrite	Low	Low

What makes Neodymium a choice material in dynamic microphones?

It relates directly to the efficiency of the electromagnetic system in the microphones. The greater the efficiency, the greater the output for a given input. Why is this an advantage? Picture two mics side by side, one is 4 dB “hotter” than the other. If you want the same output from each mic, you will reduce the gain at the mixer for the hotter mic. Since the sensitivity is dropped via the mixer, the noise level of the hotter mic drops as well. This translates to improved signal to noise ratio over the less sensitive mic.

Alternatively, you can achieve the same sensitivity as an Alnico or Ferrite magnet with a smaller Neodymium magnet. So, when size is an issue, Neodymium also has an advantage.

USA 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-884-4051, FAX: 952-884-0043
Canada 705 Progress Avenue, Unit 46, Scarborough, Ontario, Canada, M1H2X1, Phone: 416-431-4975, 800-881-1685, FAX: 416-431-4588
Switzerland Keltenstrasse 11, CH-2563 IPSACH, Switzerland, Phone: 41/32-331-6833, FAX: 41/32-331-1221
Germany Hirschberger Ring 45, D94315, Straubing, Germany, Phone: 49 9421-706 0, Fax: 49 9421-706 287
France Parc de Courcerin, Allee Lech Walesa, Lognes, 77185 Marne La Vallee, France, Phone: 33/1-6480-0090, FAX: 33/1-6480-4538
Australia Unit 23, Block C, Slough Business Park, Slough Avenue, Silverwater, N.S.W. 2128, Australia, Phone: 61/2-9648-3455, FAX: 61/2-9648-5585
Hong Kong Unit E & F, 21/F, Luk Hop Industrial Bldg., 8 Luk Hop St., San PO Kong, Kowloon, Hong Kong, Phone: 852-2351-3628, FAX: 852-2351-3329
Japan 2-5-60 Izumi, Suginami-ku, Tokyo, Japan 168, Phone: 81-3-3325-7900, FAX: 81-3-3325-7789
Singapore 3015A Ubi Rd 1, 05-10, Kampong Ubi Industrial Estate, Singapore 408705, Phone: 65-746-8760, FAX: 65-746-1206
Mexico Av. Parque Chapultepec #66-201, Col. El. Parque Edo. Mex. 53390, Phone: (52) 5358-5434, FAX: (52) 5358-5588
UK 4, The Willows Centre, Willow Lane, Mitcham, Surrey CR4 4NX, UK, Phone: 44 181 640 9600, FAX: 44 181 646 7084
Africa, Mid-East 12000 Portland Ave South, Burnsville, MN 55337, Phone: 952-887-7424, FAX: 952-887-9212
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U.S.A. and Canada only.

For customer orders, contact the Customer Service department at 800/392-3497 Fax: 800/955-6831

For warranty repair or service information, contact the Service Repair department at 800/685-2606

For technical assistance, contact Technical Support at 800/392-3497