# Telex Communications, Inc.

PRO AUDIO GROUP

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**ISSUE 6** 



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## New Position Created in Pro Audio Group: Product Support, Mics

Indicative of the Telex Pro Audio Group's "customer comes first" philosophy, a new position was recently created to further assist end users and provide product support. Formerly of Telex's aircraft division, James Lupino was recently hired to the position of product support, microphones.

Jim's responsibilities include answering calls on anything mic-related, which includes technical trouble-shooting, frequency coordination, providing product information and application assistance for anything and everything microphone related. Jim Lupino can be reached at: (952) 736-4025 and james.lupino@telex.com Providing professional audio products and services worldwide...

## TAILOR-MADE<sup>™</sup>SPEAKER SHOP CATERS TO CUSTOMERS

#### You spoke and we listened.

"Can we get X-Array<sup>™</sup> floor monitors in a weatherproof enclosure for an outdoor theme park stage?"

"Well, the FRX-640 would work great, but the enclosure can't be more than 24 inches deep, and I need recessed Speakon<sup>®</sup> connectors in back."

"Tve got a club application that needs extremely high output, full-range speakers with wide coverage and fire engine red enclosures."

After 70 years of innovation and ongoing advancement in professional audio technology we began hearing requests for customized loudspeakers. Thus, to keep up with the needs of professional contracting and the expectations of professional sound equipment users, it was time to give you what you wanted.

Electro-Voice is now able to provide you, the consultant, the contractor, the end user and designer with exactly what you demand in professional audio equipment.

#### 100% Custom, 100% Electro-Voice

Electro-Voice Tailor-Made speakers begin with our dedicated Tailor-Made team: Sales reps, engineers, product managers, manufacturing supervisors and talented craftspeople all work together to make custom orders happen. These people have a passion for audio excellence. They'll consider every aspect of your Tailor-Made order. How big is the venue? What dB level do you need at what distance? What coverage pattern is required? The team works with you to ensure that every detail is covered, and the final design meets your approval. Tailor-Made speakers are pure Electro-Voice, inside and out. They're built with the same superb EV transducers that go into our regular production speakers: Smooth, efficient woofers, precise high-frequency horns, and world-class extended frequency compression drivers contribute to the no-compromise performance of your Tailor-Made speakers. We wouldn't trust components from anyone else. It all comes together at our speaker manufacturing facility in Morrilton, Arkansas, where your Electro-Voice speakers are made. While your Tailor-Made speakers are custom engineered and built, they're still Electro-Voice speakers, professional audio's most respected brand for nearly 75 years.

For the utmost in design flexibility, Electro-Voice offers a wide variety of component choices. And Electro-Voice has already researched the compatibility of various horns, drivers, woofers and other accessories with each other. All you need is the dream... Whether you're looking for a simple color or finish modification or a customized version of an existing model, our design team can accommodate any and all desires in loudspeaker design. Even if you have something in mind that hasn't been created, we can assist you in bringing to life what may only be a dream. Our level of service is second to none. Let us prove it...

For more information on Electro-Voice Tailor-Made Speakers, please call (888) 425-9521, or visit our website at www.electrovoice.com

## EMPLOYEE FOCUS: KROMMENHOEK AND DEVARMOND



Stacy Krommenhoek, sales administrative assistant, was recently hired to join the Telex Pro Audio Group customer service/sales team. A former agent with

Stacey Krommenhoek

Northwest Airlines customer service,

Krommenhoek brings vast experience in clerical, administrative and human resources activities to the position. At Telex, Krommenhoek's responsibilities include assisting with the transition to new phone reporting software, working the switchboard, aiding customer service and involvement in new-hire training.

Krommenhoek feels that one of the characteristic strengths of Telex is the company's charismatic and enthusiastic staff: "From the time I walked through the front door," remarked Krommenhoek, "I was struck by the amount of loyalty and commitment I noticed in Telex employees [...] and now that I've been here for awhile I believe the company truly has the technology and mindset to achieve nearly 100% total customer satisfaction."

Krommenhoek likes "the variety of tasks and responsibility given, being part of an ever changing environment, and learning

something new about the company every day."

With regards to sales representatives and dealers, Krommenhoek says: "As direct contact with the end-user, dealers and reps are our greatest resource [...] ultimately, they're company representatives who should represent not only our products but the enthusiasm and vigor of our corporate culture; as long as they believe in the quality of our product, we will continue to grow and increase sales."

Robert Deyarmond, technical support



specialist, has been employed with Telex Communications, Inc. for nine months. Prior to his position at Telex, Deyarmond spent nearly 20 years working for a leading manufacturer of

Robert Deyarmond

high-end consumer audio products. Prior to his experience in the

public sector, Deyarmond served in the United States Navy and earned his A.S. in electronic engineering technology. As an employee of Telex Communications, Inc. Deyarmond offers support and service to the end users as a key member of the technical services group. Among other duties, Deyarmond is responsible for researching,

delineating and answering questions on a variety of Telex product brands. Akin to a research librarian, Devarmond's daily activities involve fielding calls ranging from simple literature requests to inquiries for specific product data and sophisticated application assistance. Considering the thousands of products historically and currently offered by Telex product brands, the librarian analogy is one that holds true. Many of the calls can be handled without reference to the company's archives; however, as is often the case, Deyarmond is sent to the dusty stacks in search of schmatics, engineering data sheets or marketing collateral. "From literally thousands of telephone conversations with end users, I am able to say that people respect and believe in the product brands we sell -- especially Electro-Voice. And I feel proud that as a member of technical support services I am able to provide expertise on products and their application before the sale, during installation and after the completion of the project."

When asked what he likes best about his position, Devarmond remarked, "From individual product performance to application-related issues, I am able to work with customers to further increase public perception of the Telex/EV name."

## KICK OUT THE JAMS: ALL-STARS CONVERGE ON EV STAGE

During the 2001 NAMM Show in Anaheim, held January 18 - 21, Electro-Voice celebrated a successful year by putting together a stage replete with the most current EV product offerings and a host of guest performers to put it to the test. The following equipment was used exclusively on the EV stage: QRx115/75 and QRx118S speakers, MIDAS Heritage 3000 FOH, N/D767a vocal mics, Cobalt Co4 instrument mics on guitar, RE20/RE1000 mics and NRU wireless on bass, N/D868, N/D468, N/D478, and RE200 mics on drums and the RE20/RE1000 on sax.

Guest performers jumped in and out of sets every two hours with TM Stevens & The Boombastics, providing hours of entertaining -- and at times synergistic -- live performances. Featured guests included Vail Johnson, Kenny G's bass phenom, and Suicidal Tendencies' Josh Paul, also on a very dangerous and lethal bass.



Recent signers, but longtime users and now endorsees of EV microphones, Fishbone, showed up to jam their way through a series of funk classics. Norwood Fisher (bass, Fishbone) riffed back and forth with T.M. Stevens while Fishbone frontman Angelo Moore pulled down his calling card bowler and lipped the soprano sax. Filling out the rest of band was Delmar Brown (Sting/Jaco Pastorius) on keyboards, Kirk Douglas (session player) on guitar and multi-instrumentalist

Chuck Treece (G'Love and Special Sauce, Pearl Jam, Goats, McRad, Bob Dylan, Luther Vandross, Urge Overkill) on guitar and drums.

A true all-star line-up, guests to the EV stage were treated to a great party of live performances and even more phenomenal sound. Other appearances include radio sensation Static-X and genre-twisting EV endorsees P.O.D, who kept showgoers enthusiastic with autographs and photo opportunities. Our thanks to all!

EV<sup>®</sup> Rocks Straubing Trade Fair: Over 600 Dealers Dumbfounded

Over 600 musical equipment retailers from across the globe met on January 27 – 28, 2001 for the 14th Annual TELEX EVI Audio GmbH trade fair in Straubing, Germany. Held to inform and educate customers about new product offerings prior to Frankfurt's colossal Prolight and Sound Show, active demonstrations by some of the industry's finest drew throngs of onlookers. Product managers Martin Traut, Christian Gluck and Guido Kacher provided guests from Europe, America, Africa and Asia the chance to learn about new TELEX EVI products.

As is the case every year, TELEX EVI Audio GmbH presented a secret product in realtime, up-close and personal application -we're speaking this year of the perfectly matched peanut butter and jelly combo of QRx loudspeakers and modular P Series amplifier systems. To demonstrate the awesome system, TELEX EVI GmbH engaged the Munich band Soul Kitchen who burned through contemporized renditions of soul/r&b classics.

Visitors were also given the chance to visit Straubing's impeccable manufacturing site. Following the tour of the manufacturing facility, a special audio equipment sale was held, after which participants were treated to an opulent and delicious buffet. Following dinner, visitors congregated in the country style restaurant Zur Post in Mengkofen and celebrated to the original Starlight Express Band from Bochum. These are only a few of the numerous reasons to attend next year's TELEX EVI Audio GmbH trade fair.

For more information, please visit www.telex.de



The Boys (and Girls) Are Back in Town: Starlight Express in Straubing

## PRODUCT OF THE MONTH: QRx LOUDSPEAKERS

Recently introduced at Winter NAMM, the QRx Series features several product offerings positioned to bridge high-end MI with contracting markets. Portable and flexible enough to be used in many high end DJ and small regional live performances, as well as being equipped and precise enough for use in many fixed installation projects where direct radiating two-ways are appropriate, the QRx Series includes the following:

- QRx112/75, two-way 12-inch woofer
- QRx115/75, two-way 15-inch woofer
- QRx212/75, two-way dual 12-inch woofer
- QRx118S, single 18-inch sub
- QRx215S, dual 15-inch sub
- QRx218S, dual 18-inch sub

To more fully serve the demands of the end user, the QRx Series incorporates several features that make it a truly versatile, highend, prescribed audio solution. For example, the QRx112/75 and Rx115/75 are fivesided cabinets, allowing use as main P.A. speakers, floor wedges or ceiling-hugging low-profile boxes. Additionally, all QRx twoway systems feature a unique horn pattern: a 75-degree x 50-degree constant directivity horn that is asymmetrical with a 15-degree down angle to facilitate pole-mounting. When pole-mounted to the correct elevation (enough to reach over the top of the crowd), the QRx design facilitates natural energy distribution into the crowd without unnecessary box repositioning or tilting.

With this in mind, EV QRx Series top boxes come complete as portable or fixed install "ready-to-hang" cabinets with Safe-Grip handles, standard pole mount and Ltrack, top and bottom. The L-track is placed on the box to utilize the natural forces of the center of gravity in conjunction with the 15-degree down angle of the horn to create a natural hang with limited necessity for pull-ups. The horns are fully rotatable, which allows for the ultimate in flexibility when configuring an array. For example, given the natural 15-degree down angle, if you put two boxes together and rotate them 90-degrees in opposite directions, you only have to compensate for a 30-degree exchange between boxes. Ultimately, this means you can get a tighter pack with less overlap and still create a wider dispersion between the two boxes.

Also unique to EV's new line, all QRx topboxes are passive or biampable with a secure external switch on the back of the box for the selection of passive or biamp mode. Additionally, EV has built high frequency driver protection right into the crossover!

The QRx215S, dual 15-inch sub, and the

Rx218S, dual 18-inch sub also come available in a version equipped for flying.

Used in conjunction with EV's new line of rugged and dependable P Series modular power amplifiers, the QRx Series becomes a complete, entirely matched sound system. The dual-channel version, P1202, can be used in stereo or mono mode (2 x 600watt into 4 ohms); the two front-face slots are available with modules that feature filters and crossovers specifically designed for EV loudspeakers: FRi, FRX, Xi, QRx and others. The P1202 operates two separate (slot A & B) or the same signal in both channels (slot A only).

Not only do the features and design of the QRx Series provide the ultimate flexibility; as the first truly joint design effort between German and American R & D, the development of the QRx Series is an example of how the restructured Telex merger has strengthened individual product brands. "Ultimately," says Jim Tassey, director of technical services and loudspeaker product manager, "we believe that the joint design effort between our engineers and German engineers has truly culminated in the best of both worlds."

## PRODUCT OF THE MONTH:

Manufactured on the designs of dependable and acoustically superior high-end MIDAS consoles built for live sound application, the Venice has literally created a new product category and new markets for the legendary MIDAS sound. State-of-the-art audio performance married with portability make the Venice the utmost in flexibility, whether the application is stage mixing for live music, use as a high-end submixer, as a main console for event hire or in professional sound installations (e.g., house of worship, clubs, bars and arenas). The MIDAS Venice line, which will expand to four models, currently includes the following:

**Venice 160** -- 8 Mono-Mic/Line + 4 Stereo-Line/Mono-Mic Inputs

**Venice 240** -- 16 Mono-Mic/Line + 4 Stereo-Line/Mono-Mic Inputs

**Venice 320** -- 24 Mono-Mic/Line + 4 Stereo-Line/Mono-Mic Inputs

Unmistakably, the MIDAS Venice offers nocompromise components and design. For example, all electromechanical components in the Venice are designed by ALPS and NEUTRIK -- the highest quality potentiometers with metal shaft and collar and long life, super-slide faders. In addition, the VENICE features the most state-of-theart microphone and preamp on the planet -- the XL-3. Offering extremely low noise, ultra-linear operation and high headroom, the XL-3 outperforms competitor microphone preamplifiers regardless of the gain level. With its discrete front-end and symmetrical double cascade design, it offers less than 0.0007% THD, -129.5dBu @ 60 dB gain EIN, an extra linear gain range of 0 - 60 dB, +22 dBu maximum input level, no latching/glitching and RIF supression at all in-/outputs with ferrite-T-filters and the highest quality ceramic capacitors available.

The MIDAS Venice line also features a dedicated, added value feature package which includes an ultra-linear gain range of 0 – 60 dB, 80 Hz high pass filter, and mono inputs with 4-band channel EQ, sweepable mids, six aux sends (2 x FX (post) incl. stereo-returns); (2 x monitor (pre) incl. masterfader); (2 x AUX (each pre/post switchable)); all which allows for 2, 3, 4 x

## Engineering Q & A: David Bie on Speakers

Consider this: It takes approximately a 10 dB increase in SPL (Sound Pressure Level) for a listener to perceive sound as twice as loud. So why does EV bother to put the extra effort into optimizing speaker component design to obtain that last dB of sensitivity?

If you're only going to listen to a speaker at one watt, it probably won't matter if the speaker produces 96 dB or 97 dB. However, the difference becomes quite significant for higher inputs. For example, applying 250 watts to the 97 dB speaker will produce 121 dB SPL. To get the same SPL out of the 96 dB speaker requires one dB of additional power -- or 315 watts. Thus, it takes 25% more power just to make up for one dB of lower sensitivity! The extra 65 watts of heat cause the lower sensitivity speaker to run beyond its limit, overheating the voice coil and producing distorted sound. The higher sensitivity speaker produces the required SPL with headroom to spare. The coil temperature is significantly lower, and the sound continues to have that nice "effortless" quality.

Many factors influence sensitivity: choice of cone material and shape, magnet strength, voice coil diameter, wire material, and many others. It takes a concerted effort of our

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pre or post. Additionally, Venice features a solo switch (PFL/AFL switchable), peak LED (6 dB headroom), and signal present LED. Venice also features 4 subgroups and 4/4 mic/stereo line inputs, with mic preamps like mono-channel, allowing the use of up to 12/20/28 mics. Line trim is separate with 4-band EQ, and 6 x aux-like mono-channels.

The master section features effect return routing, multi-purpose metering for monitor 1+2/solo, talkback, effects returns on faders, monitor sends on faders, masters B, aux 1 + 2 have switchable pre/post, and a mute-all function. The rear panel outputs all feature relays, and with the exception of the insert/tape inputs, all inputs are active balanced. In addition, all jack outputs are impedance balanced.

Simply, if you demand a high profile, compact format live mixing console, the MIDAS Venice is just that...designed for a pure performance.

Please visit www.midas-venice.com for a detailed brochure and block diagrams of Venice.

Loudspeaker R & D staff, using the most accurate design tools, to arrive at the final design. Cones are studied using laser vibration measurements, magnets are optimized via computer simulation, and voice coils of pure aluminum wire are wound on edge to achieve the highest packing density. But while it's pretty easy to design that perfect theoretical driver, most of the credit must go to our manufacturing, because it's not easy to build high sensitivity components. Our factory has developed processes and technologies that make it possible to build the highest quality components consistently. Quite often, we actually find a 2 or even 3 dB difference in sensitivity between EV and competitor's products. A little here and a little there adds up to quite a lot in this case!

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 866/78AUDIO Please submit your ideas, comments, criticism, or story ideas to James Edlund, Editor, via e-mail: james.edlund@telex.com