

## **Telos Debuts Audio-Over-Ethernet System for Broadcast**

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5 April 2003, Las Vegas, Nevada

Livewire, a new way to network audio sources within broadcast facilities, is introduced by Telos Systems this week at the NAB Convention in Las Vegas. The world's first audio network designed specifically for broadcast studios, Livewire conveys audio and peripheral data streams over standard Ethernet hardware, substantially reducing the infrastructure costs incurred with traditional audio routing methods.

Livewire uses universally-available, low-cost Ethernet as a universal studio interconnect. A single CAT-5 or fiber reliably conveys multiple audio channels, control, program-associated-data, VoIP telephone, and computer data. Livewire uses switching Ethernet hubs to guarantee audio Quality of Service (QoS); audio is prioritized and takes precedence over all other data types. This approach results in extremely low latency, enabling real-time monitoring of live audio sources: per-link delay is less than 1ms for high-priority audio signals.

"Today, most radio facilities have at least four networks already in place," comments Steve Church, President of Telos Systems. "There's an Ethernet for the computers, proprietary PBX for the office phones, dedicated on-air telephone system wiring, and traditional, discrete audio wiring. Some have AES-3 and proprietary digital networks as well. Livewire makes use of Ethernet to relieve this complication and make broadcast engineering life a little easier."

"Just as with traditional analog, Livewire is naturally scalable," continues Church. "It can be used to connect just one pair of devices, or as a sophisticated infrastructure for an audio plant with thousands of signals."

Livewire gives broadcasters all the benefits of a traditional cross-point switcher, without the cost and complexity. Taking advantage of computer industry scale, Ethernet networked audio provides flexibility at a surprisingly low cost, simplifying wiring complexity and replacing sound cards, switchers, patch bays, distribution amplifiers and other discrete audio routing components. A Livewire 100Base-T link can carry 50 bi-directional stereo channels of 48 kHz, 24-bit linear PCM audio; a 1000Base-T link or Gigabit fiber can carry hundreds.

Telos will be introducing and demonstrating a family of products using Livewire at the Telos Systems booth, #N2618, during the NAB Convention in Las Vegas, April 5 - 10 2003. These will include a variety of audio terminals, a PC-based studio mixing engine, a control surface, and a Windows driver to interface PC delivery and other audio applications directly to the network.

To provide an in-depth look at Livewire, Steve Church, President of Telos Systems, and Michael Dosch, Director of Product Development, will each give papers outlining the technology at the NAB session entitled "Radio Audio Forum," Tuesday April 8, from 1 - 5:30PM.

To request more information online, browse [www.telos-systems.com/livewire/](http://www.telos-systems.com/livewire/).

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*Telos Systems, headquartered in Cleveland, Ohio with offices in Europe and Canada, is a leading manufacturer of ISDN, coded audio and telephone interface products for talk-shows, teleconferencing, audio production, remote broadcasts, and intercom applications. "Livewire"™ TLS Corp., patent pending.*