

## Telos Explores Ethernet

**Telos** is touting Livewire, a technology that enables broadcasters to transport audio over standard Ethernet, as a low-cost way to connect audio and data for a studio facility. The company says Livewire lets operators monitor microphone and other live audio with almost no discernible delay and calls these fast audio connections Livestreams.

In addition to Livestream traffic, Livewire allows other forms of network traffic on the same Ethernet. For example, PCs can send IP-Standard audio streams over the network to be mixed and merged with Livestream data. Non-audio message traffic such as program-associated data (PAD) and routine communications can be conveyed over the same network.

Telos claims Livewire is the first audio network targeting broadcast studios. A single Cat-5 or fiber conveys multiple audio channels, control, program-associated-data, VoIP phone and general computer data. The product is designed to use the traffic management and prioritization capabilities of modern switching Ethernet hubs. The switch delivers

Livewire packets only to those ports wishing to subscribe and prioritizes the audio packets so they take precedence over all other traffic.

Multiple studios are joined using Livewire. Audio sources are made available throughout the plant. Livewire features low latency, enabling real-time monitoring of live audio sources. Per-link delay is less than 1 ms for high-priority audio signals.

PCs are directly connected to Livewire. A Windows software driver emulates a sound card, enabling delivery systems and editors to pass audio directly to and from the Livewire network.

Audio is prioritized over all other data types. A 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.

*For an extended explanation, please refer to Steve Church's article "Going Digital: Consider Ethernet" (RW, May 21) or visit the Telos Web site. For more information including pricing, contact the company in Ohio at (216) 241-7225 or visit [www.telos-systems.com](http://www.telos-systems.com).*