

APPLICATION NOTE



Switch Live Between Four Remote Sources

The MegaMux ENG-4000 encoder/decoder multiplexer add-on does the job of four microwave radio links from a single news-gathering van or remote venue.

By compressing four channels of video and four channels of audio into a single stream, the MegaMux boosts bandwidth capacity on existing analog equipment by 400 percent - without sacrificing video or audio quality.

It's the equivalent of rolling out four news vans to a single story, allowing the studio to make live cutaways and receive and edit pre-recorded content while reporters deliver live reports on the air.

News Directors can view and switch live between four remote sources on the fly, just as they can during a newscast within the studio. These sources might include multiple ENG mast-cams, isolated tripod cameras or prerecorded a/b-rolls.

Content For A More Compelling Newscast

Stations equipped with MegaMux multiplexer add-ons can outperform the competition with higher-quality newscasts and the ability to report from several locations simultaneously.

News directors can even control the tilt-and-pan functions of mast-cams through an embedded signal sent from the studio, in effect staffing each remote location with an additional cameraman.

Save Money, Stretch Resources

Doing this before the Megamux ENG-4000 would have required purchasing four new microwave transmitter links. Now stations can quadruple the newsgathering power of each of its vans by installing TVC multiplexer add-ons to existing analog equipment, enabling ENG units to transmit multiple video NTSC signals without breaking the newsroom budget. The MegaMux ENG-4000 is a complete four-channel real-time MPEG2 encoder multiplexer.

Simplify Bilingual Newscasts

Bilingual stations covering a single story can receive video and audio feeds for English and Spanish-speaking viewers simultaneously from a single unit - with enough bandwidth left to provide live cutaways or to stream separate footage back to the studio. Two reporters can cover the same story, live, for two different audiences with only one ENG unit.

The added capacity of the MegaMux ENG-4000 frees additional ENG units to gather news in other locations, providing more comprehensive coverage for both English- and Spanish-speaking viewers. The MegaMux ENG-4000 effectively doubles the news van fleet of bilingual stations.

Broader Coverage, Greater Distances

TVC's multiplexing technology allows a station to mount multiple analog receivers on its tower without causing interference for other stations, so it does not cause regulatory issues with the FCC. News vans can also transmit much further from the tower without risk of signal degradation.

Each receiver can be independently aimed toward important regions in the station's broadcast area. Consequently, the tower is able to receive live feeds from multiple remote locations without re-orienting the receiver between stories.

The signal is then demodulated at the tower and streamed to the station, allowing news directors to seamlessly cut from one live story to another. There's no risk of not being able to find a signal in the middle of a newscast.

Analog, Digital Or Both

TVC has created a low-frequency digital signal that is transmitted in the same spectrum occupied by a digital analog signal. This provides stations with a much cleaner, noise-free signal and produces DVD video quality broadcasting.

For analog equipment, The MegaMux ENG-4000 enhances the quality of the transmission path, creating a higher quality video stream with existing analog hardware. Its low power consumption is ideal for ENG vans. The rack-mount system is both easy to operate and seamlessly integrates with existing equipment.

