

Case Study

Omega Broadcast Group

Broadcast • Mobile • Sports • Live Events

Utah Scientific's New UHD-12G Router Drives First Fully 4K-Capable Truck in Austin Broadcast Market



SOLUTION OVERVIEW

Omega Broadcast Group
Professional A/V sales, rental,
and design/integration company

Business Drivers

- Support current HD operations
- Lay the groundwork for customers' future 4K production
- Ensure reliability
- Attract high-profile broadcast clients

Utah Scientific Solution

- UHD-12G single-link-capable digital routing switcher

Results

- Ability to handle all HD and 4K signals over a single-link 12G-SDI interconnect
- Simplified installations with reduced rack space and fewer cables
- Lowered opex
- Powerful interim solution while IP technologies mature

Utah Scientific's all-new UHD-12G digital routing switcher plays a starring role in Omega Broadcast Group's recently launched 4K-capable mobile broadcasting vehicle. Leveraging the UHD-12G's capabilities for baseband 12G-SDI baseband signals, the new truck is the first in its market to provide a complete infrastructure for 4K/ultra-high-definition television (UHDTV). Launched in March 2016, the truck enables live broadcasts of high-profile local events including the Austin City Limits and South by Southwest music festivals and the Circuit of the Americas, home of the Formula One Grand Prix Austin.

Easing the 4K Transition

Omega Broadcast Group is a professional audio/video sales, rental, and design/integration company based in Austin, Texas. Like its TV broadcast clients, Omega is in a time of transition between the well-established, dominant format of HD and the up-and-coming format of 4K.

"Right now, we don't yet have customers who want to broadcast all in 4K using studio-type cameras, but we know that day is coming," notes David Fry, vice president of Omega Broadcast Group. "At the same time, there's growing customer demand for 4K capabilities, especially in sports. We need to continue providing the ironclad reliability our clients need for high-pressure live broadcast events, such as Formula One, that often have a national and even international viewing audience."

These concerns were top-of-mind when Omega began work on its latest 40-foot live production vehicle. The company wanted to provide all of the HD production capabilities needed for today's sports and entertainment broadcasting, while also building in 4K capabilities to support future UHD-TV productions as demand grows. With the new truck, Omega set its sights on attracting ESPN and other high-profile sports producers.

A Single-Link Solution From Utah Scientific

To meet these requirements, Omega built the truck on a digital routing infrastructure that can handle both 4K and HD signals. A cornerstone of the new vehicle is Utah Scientific's all-new UHD-12G digital routing switcher, a 12-G "single-link-capable" router that can move all signals throughout the facilities using 12G-SDI cabling. The truck made its debut in March of 2016 for coverage of the South by Southwest Music, Film, and Interactive Festivals in Austin.

Configured as a 144 x 144 chassis, the UHD-12G in Omega's new truck will initially be used to route quad-link 4K signals with an expansion path for switching single-link 12-Gbps 4K signals in the future. The truck's FOR-A HVS-2000 production switcher, configured for both HD and 4K switching, communicates with the UHD-12G to control some of the signal routing directly from the switcher panel.

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Besides offering the reliability for which Utah Scientific is well-known, the router gives us the scalability to support our clients' requirements well into the future.

David Fry, vice president, Omega Broadcast Group

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handle both HD and 4K SDI signals in a single link," said Fry. "Not only is the UHD-12G available now and compatible with a lot of our existing equipment, but it packs cutting-edge technology in a quarter of the space that other 4K routers need. Besides offering the reliability for which Utah Scientific is well-known, the router gives us the scalability to support our clients' requirements well into the future."

As one of Utah Scientific's newest integrator partners, Omega Broadcast Group is on the forefront of the emerging 4K/UHDTV broadcasting landscape with its groundbreaking new truck. In addition to providing a new revenue stream for Omega, the truck is a showcase of the latest 4K broadcast equipment – and it's an ideal demonstration of the single-link capabilities of Utah Scientific's UHD-12G.



A Foundation for the Future

Ideal for live acquisition of UHDTV content, the UHD-12G is the industry's first enterprise-class router to enable distribution of a full range of 4K SDI video signals, including data rates from SD up to 12G, in a single-link interconnect. This simplifies installations, reduces rack space and cables needed to process 4K signals, and lowers opex. Furthermore, by using the emerging 12G single-link SDI standard, the UHD-12G offers a powerful interim solution for broadcasters as IP-based signal transport solutions continue to mature.

"When we decided to take the baseband approach to signal routing for our new truck, we knew the UHD-12G would be the right choice because it can