Mobile TV Group Flexes IP Capability with Grass Valley Solutions

Denver-based Mobile TV Group (MTVG) builds, equips and operates a fleet of 37 mobile production units, supporting more than 4,000 sports and live event productions a year — from Major League Baseball (MLB) to Pasadena’s annual Rose Parade — for CBS, CNBC, Fox, DIRECTV and others. Having successfully delivered its first 4K UHD HDR production for DIRECTV’s coverage of the National Hockey League (NHL) in December 2017, today MTVG operates one of the largest HD mobile production fleets in the US and leads the way in driving 4K UHD and HDR production in North America.

With ever-greater fragmentation in the way consumers engage and interact with content, MTVG’s customers’ requirements are shifting. As they address the challenges of evolving service models to meet the growing consumer appetite for strong storytelling across all screens, production models must adapt to meet these demands. Today’s live mobile production environments must be able to handle any resolution, scale to meet the needs of a wide variety of event sizes and production requirements, and offer the agility to adapt, whether seamlessly adding cameras or transitioning to 4K UHD.

Customer:
Mobile TV Group (MTVG), US
www.mobiletvgroup.com

Solution:
LDX 86 Universe super slow-motion cameras
LDX 82 Première fiber cameras
LDX 82 Première triax cameras
Kayenne K-Frame X multiformat IP Video Production Center
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The Opportunity: Being Agile Means Being IP

When it turned its attention to building and equipping the latest addition to its fleet, the double-expando 45 FLEX, MTVG made the decision to go with a native, end-to-end open IP production environment.

“At the time, we were planning 45 FLEX, we had been keeping an eye on IP; there had been some deployments of mobile units with an IP core, which still required a conversion back to baseband for the other components of the unit,” explained Nick Garvin, COO at MTVG. “We didn’t see that as advantageous for our business — we wanted all the major systems within 45 FLEX to be connected via IP, so they could all ‘talk’ to one another and work seamlessly together.

“For us, it is critical to give customers the flexibility they need to grow and evolve their productions. Even regional network shows need a greater degree of scalability than they used to — they can have five or more separate feeds that all need to be supported and this is growing as consumers demand content across mobile and social platforms...as well as more camera angles. We believe that an IP environment can easily and quickly adapt to meet these different needs.”

While the MTVG team was in the planning stages, work by SMPTE and efforts by interoperability organizations such as AIMS and AMWA were driving the development of open IP standards and solutions. SMPTE ST 2110-based systems were launched on the market, making it possible to build a true end-to-end, open standards-based mobile production environment. As a result, MTVG was able to push ahead with its plans to create one of the industry’s first end-to-end SMPTE ST 2110 uncompressed mobile units.

“Our clients require systems from a wide range of manufacturers, and with 45 FLEX we were able to hit a point in the timeline where the different vendors could deliver the SMPTE ST 2110 equipment we needed,” added Garvin.

“We value the relationship we have built with Grass Valley over the years; we take a very collaborative approach with the Grass Valley team who are very open to our input as we strive to give our clients what they need today and address their changing requirements.

— Nick Garvin, COO at MTVG
The Solution: Meeting the Demand for Stunning Images Every Time

A long-time customer, MTVG uses Grass Valley production switchers and over 300 cameras across its fleet. “We value the relationship we have built with Grass Valley over the years; we take a very collaborative approach with the Grass Valley team who are very open to our input as we strive to give our clients what they need today and address their changing requirements.” Said Garvin. “We have also worked closely with them in the past in areas such as super slow-motion cameras.”

In 2014, the mobile production company upgraded eight mobile production units with Grass Valley LDX XtremeSpeed (XS) 6X ultra-slow-motion cameras, integrated with the K2 Dyno Replay System to support live coverage — and 6X slow-motion replays.

When looking at the right solutions for 45 FLEX, Grass Valley cameras and production switchers were once again top of the list.

“Having great cameras and switchers is integral to delivering the level of quality our clients expect for live production,” explained Garvin. “Their switchers are the standard for the industry, so it was a no-brainer to deploy a Grass Valley switcher for 45 FLEX. We also chose to once again go with Grass Valley cameras. Not only are they robust and reliable, they completed our end-to-end native IP unit with both the capability of IP connectivity and baseband for increased redundancy and production reliability. Additionally, there is a seamless upgrade path so we can easily add functionality like HDR as needed, and there are some new developments, such as Creative Grading, that we are very excited about.”

“Working on this project with MTVG is a perfect example of the collaborative approach that Grass Valley takes to help customers transition to new technologies,” said Mark Hilton, vice president of live production at Grass Valley. “We are the only company that is able to deliver end-to-end open standards IP-based OB solutions that are flexible, scalable and agile, allowing our customers to adapt to the needs of the market today and tomorrow.”

45 FLEX is equipped to support 11 Grass Valley cameras: four LDX 86 Universe super slow-motion HD/3G fiber cameras with IP XCU base stations, LDX 82 Première 720p/1080i fiber cameras with IP XCU base stations, and three LDX 82 Première 720p/1080i triax cameras with twin XCU base stations. It also houses Grass Valley’s Kayenne K-Frame X multiformat IP production switcher.

Designed, built, and operated by MTVG’s in-house engineering and technical teams, 45 FLEX provides a highly scalable, flexible production environment that delivers a format agnostic, future-ready solution capable of handling a wide range of productions — whatever their size or requirements.

Taking an open IP approach also enables MTVG to seamlessly upgrade systems, integrate new solutions as they become available and expand the truck as needed. “45 FLEX enables us to say ‘yes’ to our clients, whatever their requirements — whether that’s a request for more cameras, more resources, flexible formats or scalability,” explained Garvin. “While it offers the extra capabilities that IP can bring, 45 FLEX maintains the same feel as our existing fleet of FLEX baseband mobile units — that’s important to producers, directors, TDs and others working in the truck.”