



CASE STUDY
Mobile Production



OB-8 VAN PROVIDES UNIQUE APPROACH TO LIVE ULTRA HD PRODUCTION

First full production system for 30 true
4K Ultra HD cameras in a single OB van



THE CUSTOMER

Global Production, part of Euro Media Group (EMG), is a leading provider of top-end outside broadcast facilities across a range of genres, in its native Italy and around Europe. For 20 years, Global Production has been delivering premium content across some of the biggest sports and entertainment events for broadcasters, like Sky and Rai, and for sports rights-holders. Its fleet of outside broadcast (OB) vans includes three expandable production units.

AT A GLANCE

Hybrid  production

30 cameras 

  4K Ultra HD

100 GbE technology 

 14 router-integrated multiviewers (4x4 PiPs)

Support for  SMPTE ST 2110

THE CHALLENGE

Deliver high-value content to clients in UHD HDR, meeting a strong demand in the market, while staying ahead of the competition. Fit 30 full-4K camera chains and related production equipment into a single OB van.

THE IMAGINE SOLUTION

SDI-to-IP gateway and all-IP-capable signal processing platform.

Selenio™ Network Processor (SNP)



Router-integrated mixed-format video and audio routing, multiviewers, synchronization and audio multiplexing.

Platinum™ IP3



Software control system for hybrid SDI and IP networks.

Magellan™ SDN Orchestrator



THE RESULT

Using radical design techniques, Italian systems integrator Chromaline S.r.l. gave Global Production a groundbreaking, software-centric OB solution supporting a full production system for 30 true 4K Ultra HD cameras in a single van. The space-saving yet powerful hybrid SDI-IP system delivers pristine video and supports SMPTE ST 2110.



“This exciting project was far more than just a huge outside broadcast van. It is an entirely new way of approaching production and systems integration.”

Nicola Dall'Asta
CEO, Chromaline

BUSINESS CHALLENGE

Optimization of both the internal operational space and of the broadcast infrastructure was paramount in this truck's design. Global Production wanted its new OB van, OB-8, to have the same look and feel as the other vehicles in the fleet, and to provide an excellent working environment for the crews. Working with its systems integration partner Chromaline, Global needed to implement operator-familiar workflows to ensure consistency and maintain efficiency. The production solution designed for OB-8 optimizes software solutions within a hybrid SDI-IP environment.



“In today’s hybrid world, broadcasters have to perform a lot of conversions. SNP allows for any conversion, on any transport, with the best accuracy on the market.”

Nicola Dall’Asta
CEO, Chromaline

TECHNOLOGY SOLUTION

To deliver a 30-camera UHD production system based on conventional architecture would be impossible within the size and weight constraints of an OB van. Most of the functionality, therefore, needed to be implemented in software running on standard COTS devices, or in compact, powerful hardware.

To achieve this, Chromaline relied on three field-proven products from Imagine Communications. First, the Platinum™ IP3 router, which supports mixed-format video and audio routing and a range of key functionality in a space-saving 15RU frame. In OB-8, the IP3 also incorporates 14 multiviewers, reducing integration and operational costs, while allowing operators to monitor 448 PiPs simultaneously.

Second is the Selenio™ Network Processor (SNP), an IP media processing platform with independent processing blocks that can be reconfigured on the fly for maximum agility. The OB-8 van uses four SNPs for processing and HD/UHD up- and down-conversion, and to serve as a bridge between uncompressed IP signals in SMPTE ST 2110 and the SDI infrastructure.

Finally, the Magellan™ SDN Orchestrator enables unified management of the technical infrastructure, allowing the production team to switch and interwork seamlessly between HD, UHD and uncompressed real-time SMPTE ST 2110 streams.



THE RESULTS

OB-8 entered service in September 2018, providing host broadcaster coverage for the Men's Volleyball World Championship. Since then it has been covering major sporting events around Europe.

One high-profile showcase for the new van came at the Ferrari Challenge World Final in Monza, where Ferrari itself manages the production. The motor manufacturer was very excited by the prospect of 4K and HDR, but was keen that every viewer should see the best possible image quality.

They set up a shoot-out among technology solution providers to compare consistency of image — and particularly color fidelity — across the full range of outputs from mobile streaming all the way to UHD and HDR. The Ferrari technical team needed to see every single available standard at the same time, with completely consistent results.

The critical test came with the familiar Ferrari red trademark. The multiple outputs from the new van, created by just 4RU of Imagine SNPs, delivered complete consistency across every output, to the delight of Ferrari.

The powerful production capability of OB-8 is implemented in a tenth of the rack space typically required, providing a critical advantage in achieving the capacity necessary. Without it, Global Production's goal of full functionality, including 30 true 4K Ultra HD camera capability, simply could not have been achieved inside a road-legal vehicle.

Got questions? [Talk to an Imagine expert.](#)

