BLACK BOX

CASE STUDY
KVM TECHNOLOGY

Photo: Media Mobil GmbH

BROADCAST

MMG Deploys Compact, Remote KVM in Outside Broadcasting Vans

BACKGROUND

When you watch a live sporting event on TV, you may take for granted all the work a broadcaster has to do to bring the game to your living room. Transparent to TV viewers, a lot of technology operates behind the scenes. The broadcast needs to be crisp, clear, and display in real-time on your high-resolution TV screen. To this end, the industry is tasked with keeping up with new standards that deliver optimum results.

The Media and Entertainment industry faced many new challenges in the last two to three years, accelerated further by the pandemic. New requirements like cross-media content delivery, new format standards, the migration from HD to 4K/HDR, and the institution of hybrid workspaces led to a shift from a proprietary to a more flexible IP-based production infrastructure. These trends are not limited to broadcast centers, but continue especially in mobile transmissions.

Media Mobil GmbH (MMG) offers a wide variety of mobile production units, including Outside Broadcasting (OB) vans for recording and broadcasting of sports events, concerts, entertainment formats, or current reporting events. When it comes to new deployments, MMG uses the professional services of Qvest, a world-leading systems architect, consultant, and ICT integrator in the innovation-driven media industry.

MMG met the new industry challenges and together with Qvest, they planned a new compact OB van, whose equipment can be flexibly adapted to existing and new production processes while it allows varying operators to focus effectively and productively on the contents.

CHALLENGE

Weight, space, and functionality are all factors broadcasters and production companies must consider when building an Outside Broadcasting (OB) van. When MMG planned a new OB Van, they were also looking for a flexible KVM solution that could simplify integration with existing architecture and provide top performance. Leveraging a long-term relationship with their system integrator Qvest and Black Box, we were primed to deliver a superior OB van deployment to MMG.

MMG

CLIENT:
MEDIA MOBIL GMBH (MMG)

REGION:
GERMANY

INDUSTRY:
BROADCASTING

SOLUTION:
EMERALD KVM OVER IP, BOXILLA

KVM OVER IP

CHALLENGE (CONTINUED)

MMG needed a futureproof, compact system design for the mobile unit that would support agile HD production, and easily migrate to 4K and virtual machine access in the future.

SOLUTION

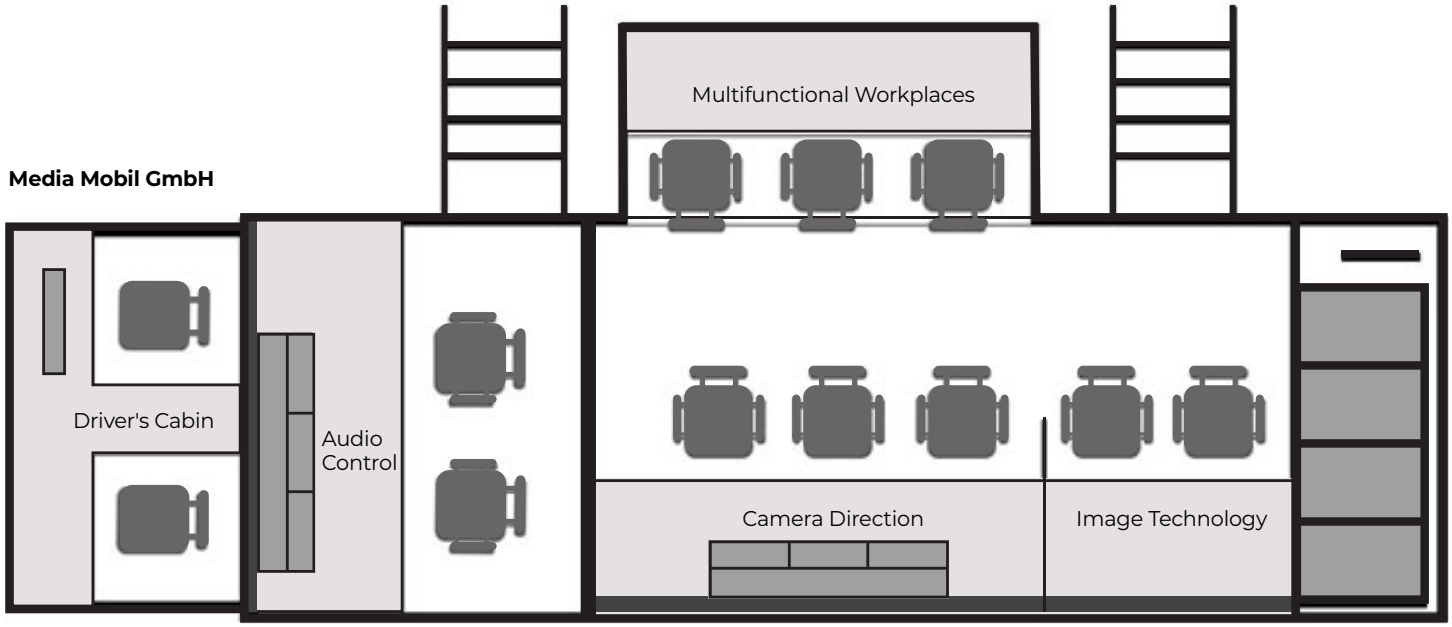
Black Box proposed the Emerald KVM solution, a universal access system consisting of Emerald Zero U Transmitters, Emerald SE Receivers, and the Emerald Remote App with Boxilla KVM Manager.

With Emerald KVM over IP, operators can share and control local computers in the van while providing access to remote PCs, servers, and virtual machines located in the central machine rooms.

Emerald® ZeroU transmitters, that are just a little bigger than a smartphone, provide connectivity to the back-racked systems inside the van consuming next to zero weight and space while operators gain a seamless desktop experience through Emerald SE receivers.

The Emerald Remote App supports simple administration by IT specialists working anywhere and anytime over a WAN connection. The installation of the app on a windows 10 laptop along with a VPN gives administrators the secure access they require without the need for additional hardware.Finally the Boxilla KVM Manager is used to easily control and administer the OB van operations from a central location.

All components, installed in the network cabinets of the OB van, function well together to create a seamless end-to-end system that is easy to manage and control from a remote location. Based on IP protocol, the components smoothly integrated into the existing network infrastructure, while introducing a clear path to upgrade to 4K in the future.



RESULTS

Meeting each and every one of MMG's requirements, the Black Box Emerald KVM system delivered exceptional results.

The Emerald solution retained the coveted space in the van and did not add much extra weight. The system extends and switches video, audio, USB, and serial signals across local and remote servers, so operators can instantly access any device they need – local or remote – from the inside of the OB van.

The intuitive interface of the Emerald systems guides technically-savvy and novice operators alike to operate their workstations with ease.

As an IP-based solution, the Emerald KVM system provides much greater flexibility for today's remote productions, as well as the scalability essential to future expansion or upgrades. The system is fully upgradeable from HD to 4K, so complete matrix functionality will be preserved with minimal changes if the broadcaster chooses to upgrade individual workstations and computers to 4K in the future.

MMG is very pleased with the resulting Emerald deployment. Marcus Mathy, Deputy Technical Manager MMG, remarked, "I really appreciate the ability to manage the equipment in the OB van using the remote app. When my colleagues run into a problem on-site, the uniquely flexible Emerald system lets me troubleshoot from another location."

Qvest's Christian Münch, Key Account Manager added, "Qvest decided to integrate an IP-based KVM system from the Blackbox Emerald series, as the customer needed a flexible and scalable system, that could be easily networked with other OB-Trucks of their existing fleet in the future. An effortless integration with a wide range of interfaces for computers, servers, and workplaces as well as virtualized systems was one of many major arguments why we selected Black Box for this challenging project."

Black Box KVM Business Development Manager EMEA, Daniel Berkemer commented, "I am proud that we were able to satisfy another customer with our Emerald KVM solution. With joint planning by Qvest as the integrator and Black Box as the manufacturer, we worked hand-in-hand with the customer to design a tailor-made system."