



CASE STUDY

4K-capable video production and live streaming facility for the Venue Group

Challenge

Implementation of a versatile, future-proof camera system that allows productions to be live streamed with or without a studio audience from multiple positions.

Solution

Five AW-UE150 4K PTZ cameras alongside a Tuning rail system and vertical motorised column, and an AW-RP150 remote camera controller.

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Russell Peirson-Hagger Managing Director

ATG Danmon



UK Systems Integrator ATG Danmon has completed a 4K television production and live streaming facility at the Lafayette London events centre. Commissioned by the Venue Group, the new system allows for live relay of stage performances as well as studio-style recording. Located close to the Regent's Canal in the King's Cross area of London, Lafayette is an industrial two floor auditorium with world class sound and light systems. It includes robotic cameras, an audio/video production control room and a floor-to-ceiling rack of auxiliary equipment.

"ATG Danmon was recommended to us by Universal Music Group which occupies most of the building," comments Chris Pollard, Lafayette's Head of Production. "A crucial challenge was how to accommodate a complete control room in the limited amount of space available above and behind the stage. Another was the need to minimise any obstruction of stage performances when viewed from the 600 capacity auditorium. ATG came up with a versatile and future-proof solution which enables the operators to capture full broadcast quality 4K video from multiple positions, including the ability to zoom in from wide angle to very tight close-up. The system allows us to stream live productions with or without a studio audience."

"Robotic pan/tilt/zoom cameras have developed strongly in recent years both in terms of imaging quality and compactness," adds ATG Danmon Managing Director Russell Peirson-Hagger. "A crucial requirement for this project was the need to obtain video quality across a wide range of light levels without interrupting the audience's view of the stage. Researching the available products, we identified Panasonic [AW-UE150](#) 4K cameras on a [Tuning rail system](#) and vertical column as the ideal choice. We have installed five [AW-UE150s](#), each with a 1-type MOS sensor and integral 20x zoom lens. The cameras connect via two-way optical fibre to an [AW-RP150](#) remote camera controller, which allows pan, tilt, zoom and focus all to be managed single-handed using a seesaw lever mounted on a joystick."

"One of the cameras is mounted on a rail system at the front of a balcony and another on a motorised column. A further camera is attached to a fixed wall mount, with the remaining two offering flexible positions via dedicated wall boxes. The whole system runs very smoothly, including gradual speedup and slowdown, so video can be captured from cameras in motion as well as when stationary. Preset movements can also be programmed. Although most of the actual streaming is likely to be HD in the medium term, 4K is now the preferred standard for practically all new production to ensure content has the greatest possible long-term value."

"At the core of the system are a Blackmagic ATEM Television Studio Pro 4K vision mixer with eight independent 12G-SDI input channels plus a Blackmagic Video Assist monitor and SD-card recorder," details ATG Danmon Head of Systems Integration Jonathan Hughes. "The mixer feeds a 55-type NEC MultiSync LED picture monitor configured as a preview and programme display above a four-wide by two-high screen group normally assigned to source feeds. Audio is handled through a 48 channel 36 bus Allen & Heath digital mixer, TC Finalizer 96K processor and Genelec active monitor loudspeakers. Additional equipment includes Ross OpenGear glue, ATG wall boxes, a Teradek H.264 encoder and NDI encoders."

