



CASE STUDY

University of Staffordshire Case Study

Panasonic's professional broadcast capabilities build a state-of-the-art eSports broadcasting course for University of Staffordshire.

Client: University of Staffordshire

Location: Staffordshire

Product(s) supplied: IT/IP-centric video platform (KAIROS)

AW-UE100

AK-HC3900

Challenge

To deliver an industry-leading eSports University degree with comprehensive facilities to equip students with broadcast skills to take into the workforce.

Re-establishing University of Staffordshire's eSports legacy

University of Staffordshire is an original trailblazer in eSports broadcast education delivery. It employed the services of Digital Garage as its primary contractor – alongside long-term partner, Panasonic – to undertake a full design and build, equipping the learning space with professional broadcast studio equipment.

This was part of a £2.7 million eSports expansion programme at the university's Stoke-on-Trent campus, which would help strengthen the university's pedigree as a leader in the field of academic eSports broadcasting.

"Our long-standing partners Digital Garage contacted us early in the project, with the plans and ideas for University of Staffordshire seemingly suiting our KAIROS live production platform perfectly. With Digital Garage, we initiated a demo of the KAIROS platform, as part of a solution that would also see Panasonic PTZ and studio cameras installed within both the arena and studio."

Sam Lynam

Broadcast & ProAV Project Manager

Panasonic

University of Staffordshire was the first UK university to launch an eSports degree, in 2018. Other universities have since produced similar eSports offerings, competing for market share. Now, University of Staffordshire is looking to expand its initial offering, using a collaborative approach to re-energise the course for students and the eSports industry.

"We needed to deliver a course to recruit the next generation of sportscasting students. The course was originally an offshoot of the events management stream, however, we quickly realised what we were designing was a professional broadcasting studio and arena that needed to meet the expectations of the students it attracts."

Richard Mortimer

Technical Services Manager

University of Staffordshire

A competitive advantage in eSports

With eSports a rapidly evolving discipline, it was extremely important that the course have an updated curriculum that will equip students with the skills, knowledge and behaviours to progress. To do so, the team knew that they had to build industry-leading facilities with commercial viability.

The funding has helped to deliver a 61-seat eSports arena in the university's Beacon Building in Stoke-on-Trent, as part of the existing eSports Broadcasting Hub. There are two gallery spaces; both the arena and studio are controlled by a dedicated gallery space with the spaces working in parallel. Each space can operate independently, controlled by its respective gallery. Alternatively, either gallery can manage both spaces for larger-scale events.

University of Staffordshire opted for Panasonic's state-of-the-art live video production platform, [KAIROS](#), with the [AT-KC200](#) mainframe series primarily utilised. Ideal for productions ranging from broadcast studios to remote production and streaming of live sporting events, KAIROS virtualises traditional switcher functions and eliminates many legacy switcher hardware constraints. It features innovative CPU/GPU architecture, and removes the one-to-one input constraints of SDI-only switchers.

The studio is also equipped with three [AW-UE100](#) 4K capable PTZ cameras and three [AK-HC3900](#) HDR studio cameras, providing students with a professional broadcast environment in a university setting.

This has enabled University of Staffordshire to deliver a course that gave students the skills to directly place them in broadcast careers, bridging the gap between academia and the workforce. Using Panasonic's state-of-the-art industry-recognised technology further enhanced the students post-university career options.



ST 2110 a game-changer

With the existing studio running on NDI IP technology, it was decided that the second would be designed with the new SMPTE ST 2110 IP-transmission standard, using Panasonic's [KAIROS](#) live production platform. This enabled much of the intermediary kit to be removed to support this transition at a minimal cost increase, providing a cutting-edge solution for eSports broadcasting.

Digital Garage also ran live tests of the KAIROS platform in its state-of-the-art demo facility. This ensured that any issues were identified and solved before on-site installation – minimising any unforeseen delays.

"With our budget, and the consultative approach offered by Digital Garage, we were able to step out of our comfort zone and invest in high-level technology. We knew that adopting ST 2110 was absolutely the right decision for the course, giving us a competitive advantage in eSports."

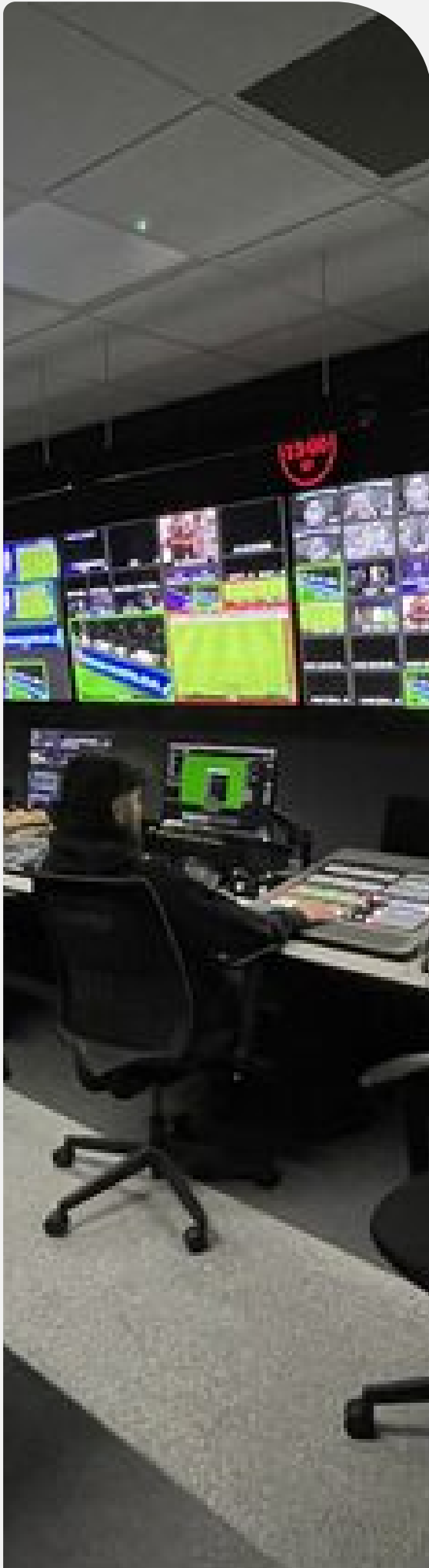
Richard Mortimer

Technical Services Manager
University of Staffordshire

"The ultra-low latency of ST 2110 is ideal for eSports. Choosing the KAIROS live production platform was a no-brainer. Combined with Panasonic's PTZ and studio cameras, University of Staffordshire's eSports arena now has the 'wow' factor. They can now provide state-of-the-art technology to students, giving them all of the tools required to run eSports events, whilst positioning the arena as a fully-fledged eSports venue to host their own events."

Mike Whelan

Managing Director
Digital Garage



Professional broadcasting in an academic setting

From the outset, the University of Staffordshire team knew they would have to contend with IT challenges. University networks are not built to support professional broadcast functions which are at odds to regular traffic flows in academic settings, especially when transitioning to an AVoIP approach. Another challenge was incorporating extra cabling into buildings that were not designed to accommodate them.

To overcome these issues, Digital Garage used its extensive industry experience and full-service expertise – alongside support from Panasonic’s technical and support team, going far beyond that of a traditional system integrator and manufacturer.

With Digital Garage managing every aspect of the project, including design, build and budgeting, it had complete autonomy over the selection of best-of-breed kit, including equipment from Panasonic. This enabled Digital Garage to maximise the form and functionality of the space, while implementing industry best practices and an innovative design.

For example, Digital Garage’s ability to redesign the installation and staging layout to maximise functionality, including everything from floor levelling, disability access, re-positioning of fire alarms, and full design and build – whilst conforming to the latest building regulations – paid dividends for a University of Staffordshire team willing to embrace new ideas and concepts.

Additionally, to ensure the internal IT and academic teams could discuss any networking issues and were upskilled to the required level, Panasonic and Digital Garage performed a number of remote ST 2110 and [KAIROS](#) training sessions with the internal IT and academic team at University of Staffordshire, before the technology was installed on-site. They were also on-hand to answer any subsequent installation and workflow queries.

"We knew this project was going to be challenging because we don't have access to a set of broadcast engineers. Instead, university staff in IT and academic departments would support the project so making this as easy as possible by, for example, ensuring presets are correct, was essential."

Richard Mortimer

Technical Services Manager
University of Staffordshire

The new state of the art eSports course and arena, delivered in partnership with Digital Garage and Panasonic, was completed and fully operational in Spring 2024.