

Professional Camera



University equips new studio to train next generation as part of major upgrade

The Panasonic AK-UC4000 camera system delivers future-proofed UHD capabilities, teaching benefits and low-power consumption.

Challenge

To cost-effectively upgrade and future-proof the studio at UCLAN.

Solution

Four Panasonic AK-UC4000 system cameras, including the AK-UCU600 Camera Control Unit (CCU), AK-HRP1000 Remote Operation Panel (ROP) and AK-HVF100 LCD colour viewfinder.

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Toby Gregory, Media Production Technician at University of Central Lancashire.



When the University of Central Lancashire decided to refit its teaching studio it turned to systems integrator Altered Images and Panasonic for its camera system. The university runs two courses that use the studio: **TV Production** and **Media Production**.

TV Production is primarily focused on the creative side; making content and learning how to put it together with students going on to directing, producing, and making content for television.

Media Production is more focused on the science, engineering and technology behind making television content within a studio environment, as well as creative programming.

"We were very fortunate on this project to be able to start with a blank canvas," explained Toby Gregory, Media Production Technician at University of Central Lancashire. "We had an SD studio working on a triax system that was very old, which meant that we could pretty much pull everything out and start again. This was great because it allowed us to build a UHD studio with fibre installations and a 12G workflow with new camera systems, lenses, switchers, lighting and back-end technology that would hold its own for the next five to ten years."

The university looked at options from all of the major camera system manufacturers with three-chip sensor options. "But when we considered them against the single-chip Panasonic AK-UC4000 camera system in our tests, we couldn't actually see any disadvantages," said Toby. "The colour science in the Panasonic UC4000 is great, the dynamic range is wide, and the sensitivity is fantastic. The other major benefit being a lower price point, which was crucial in delivering the studio build within our budget."

The university was also impressed with the great working relationship it quickly established with Panasonic, who provided advice, a demo unit for evaluation and training.

A future-proofed UHD-capable solution

The University of Central Lancashire has created a future-proof UHD-capable studio for improved teaching using Panasonic Professional Camera Systems. The £550,000 studio upgrade enabled the university to move from SD to UHD with the option of HDR, and a 12G workflow environment to reduce cable requirements, in a six week project carried out before the new academic year.

The complete studio solution includes:

- Panasonic AK-UC4000 4K system cameras with Fujinon UA18x5.4BE 4K lenses, using Vinten Pro-Peds with Vinten 250 tripod heads. The UC4000 is connected with hybrid fibre back to the AK-UCU600 CCU and the AK-HRP1000 ROP.
- Switching is completed via a Ross Carbonite Ultra, which is linked to a Ross Xpression graphics package.
- Recording via a Quadrus Ingest machine with two channels of 4K 12G playback.
- The studio engineering department use Blackmagic Smartview 4K monitors.
- Sound is mixed through an Allan and Heath SQ-6 mixer with four existing Sennheiser radio mic channels, with the option to add as many as needed. Talkback is through the use of Trilogy panels, and prompting is through two Portaprompt units.



- Incandescent lighting has been replaced with a new grid of Arri L5 and L7 lights with ETC light engines, Arri SC30 and SC60 sky panels, with the option to turn them into Source 4 spots if needed. There are also two Chauvet Rogue R3 movers to teach students about moving lights, which are run by a Zero88 FLX S24 console with touchscreen control panel.

"We have found that the studio installation has significantly lowered our overall power consumption," said Toby. "UCLAN, as a whole, is committed to reducing its impact on the environment and the technology that we implemented had to meet a strict criteria of low power consumption. As a result, we have been able to reduce the studio's power consumption by 70%, which has mainly been helped by the decision to go with LED lighting, low-draw CCUs, LCD computer and TV monitors, and a PoE power supply into the ROPs.

Teaching benefits

Staff and students have also been particularly impressed with the functionality of the Panasonic camera system for teaching. Some of the benefits include:

- Saving settings made on the ROP onto a SD card to save time and improve production value. It allows the production team to create optimum settings for a programme and use them for the next show without having to manually reconfigure.
- The LCD colour viewfinder on the camera body can be used for Focus-Assist functionality, making it easier to teach students rather than using peaking video monitoring tools.
- The bracket connecting the LCD colour viewfinder to the camera body provides a great range of mobility, allowing the camera operator to see over the camera when teaching students.

"At the start of the project, we never believed that we could have a full 4K solution at the price point of HD but with Panasonic you can and it's frankly quite incredible," said Toby. "The UC4000 camera is going to give us everything that we'd want to do in a studio environment, and gives us the right platform to teach the next generation of camera operators by working with an industry-standard camera system."

"We've turned around a 10 year old studio that was very much on its last legs, and putting us at a disadvantage when it came to both teaching and maintenance, to implementing a UHD-capable studio in just five weeks and on budget. We can now comfortably say that we have one of the best studios in the North-West of England, and we are rightly proud of that."