

Case Study

3sixtymedia Deploys Four Kahuna™ Switchers for Live Entertainment Productions



Snell's multiformat switchers standardized in three studios and Starlight Theatre at Manchester Studios.

The Customer

3sixtymedia, owned by ITV Productions and BBC Resources, provides studio, location services, post production, and creative facilities for ITV, BBC, and independent clients throughout the UK. The facility, located on the famed Manchester Studios lot northwest of London, produces about 3,000 hours each year of large scale, live entertainment programs on 14 sound stages-some before a studio audience. Current programs recorded at the facility include University Challenge, The Jeremy Kyle Show, A Question of Sport, Mastermind, and Brainbox..

The Challenge

In 2006, 3sixtymedia began to upgrade its studios for the demands of high-definition television production. Like so many facilities in transition, it needed to seamlessly handle both standard and high-definition video sources from a wide range of sources with

totally reliable equipment. The studio's ageing standard definition production switchers couldn't handle the task.

With 14 sound stages and more than 50 edit suites operating almost constantly, clients at the huge studio complex depended on the reliability of the studio's technical infrastructure. As the search for a production switcher began, engineers knew the new system had to not only work flawlessly on a 24/7 basis, but be flexible enough to handle both SD and HD through a vast number of input and outputs.

"We needed flexibility, adaptability, and scalability in a new production switcher," said John O'Shaughnessy, Head of Production Technology North, at ITV Productions.

The Snell Solution

Snell designed the Kahuna production switcher to easily transition between standard and high-definition formats from the same panel. The switcher requires no outboard converters and results in only a single frame delay.

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Paul Bennett
Director of Northern Resources,
ITV Productions



Snell's FormatFusion™ is the signal processing technology that enables Kahuna to perform seamless real-time mixing of SD and HD video, in any format, without compromise or loss of quality. It is the very definition of flexibility in a modern production switcher.

The built-in IMPAKT 3D DVE and remote auxiliary panels allows the ultimate adaptability and scalability for 3sixtymedia. The switcher can perform about any task quickly. Its signal processing power empowers operators to handle a wide range of special effects, enhancing live productions in ways not originally imagined.

And, finally, since 3sixtymedia uses many operators-both staff and freelance-the Kahuna's ease of operation and user friendliness is a huge plus for training purposes.

The Results

3sixtymedia bought one, then two, then three, and now has four Kahuna production switchers-in Studios 6, 8, 12 and the Starlight Theatre, the facility's large performance studio. The latest Kahuna, in Studio 6, is a 4 M/E model featuring a separate master auxiliary panel, six remote auxiliary panels, four channels of DVE, and an 80-input option. The three studio Kahunas ensure compatibility with the 2 M/E Kahuna system installed in the Starlight Theatre.

"We are extremely pleased with our Kahuna switchers. With its open architecture and support for both SD and HD, the Kahuna provides a superior all-around production switching package for production at our Manchester facility," said Paul Bennett, Director of Northern Resources, at ITV Productions.

"Not having to buy additional up and down converters and knowing that every input is synchronized is really convenient for our engineering practice," he added. During the many live productions on the Manchester studio lot, one switcher operator typically mixes a show on the main panel while a second operator uses a master auxiliary panel to switch floor feeds and ISO records.

Using a micro panel, the second operator can run a variety of macros, switching different layers of keying on and off as required by the director.

Snell's integrated IMPAKT DVE option offers operators a variety of effects including spheres, slabs, zooms, warps, tiling, ripples, rolls and peels, fragmentation, lighting effects, and corner pinning. In Studio 6, the Kahuna has been used on The Jeremy Kyle Show for ITV1, and in Studio 12, the Kahuna proved critical to production of the new mind-games quiz show, BrainBox, for the BBC.

For each of 20 BrainBox shows, 3sixtymedia used the Kahuna to create a composite of six stills, resized and trimmed to the aspect ratio required by the graphics team. These same images were resized and chroma keyed in seven additional arrangements that could be accessed instantly during production with a macro. This added a dynamic element to the program without the need for employing and charging for external equipment. Because virtually every button on the Kahuna control surface can be mapped using macros, standard moves are simplified and stored as part of overall settings specific to each show. 3sixtymedia can quickly and simply transfer these profiles among systems via a USB storage stick, reducing configuration time and allowing operators to work the same way on any of the facility's Kahuna systems without any added learning curve. SD camera feeds, graphics, handheld shots, and archive footage can be mixed directly into an HD production.

"This versatility has allowed us to increase the complexity and sophistication of our live entertainment productions, and the feedback from our operators has been very positive," Bennett said. "I can honestly say that it's the first time I've had my technical managers and operators say a product is even better than we thought it was going to be."