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## CTV Partners with Grass Valley for the World's First 4K UHD Broadcast of a Major Music Festival

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# CASE STUDY

### **CUSTOMER**

CTV, UK

### **CHALLENGE**

Record, transmit and edit three productions at the major music festival in 4K UHD and 5.1 audio simultaneously

### **SOLUTION**

LiveTouch Replay & Highlights System  
Rio Editing Integration  
Kahuna Multiformat Switcher



“The ability to record, transmit and edit three productions in 4K UHD and 5.1 simultaneously is a big ask but the workflow stood up to the pressures, delivering an enjoyable and immersive 4K UHD experience.”

Hamish Greig, Technical Director, CTV

### The Isle of Wight Festival

The Isle of Wight (IOW) Festival is the first major event that sets the UK Music festival season into motion. In its early years, it played host to such leading lights as Bob Dylan, Jimi Hendrix, The Doors, Leonard Cohen and Joni Mitchell. Since the festival’s revival in 2002, it has stayed true to its heritage of drawing some of the biggest acts in the music business. Headliners have included everyone from The Who, Robert Plant and the Rolling Stones to Paul Weller, Stereophonics and Pearl Jam.

For the 2017 IOW festival, held at Seaclose Park in Newport and hosted by Edith Bowman, Maya Jama and Ricky Wilson (the Kaiser Chiefs frontman), production company CC Lab planned an image upgrade — quite literally.

### Moving to a 4K UHD Production Workflow

With a line-up of headline acts such as Rod Stewart, Run DMC, Arcade Fire and David Guetta, this year’s event upped the ante as it became the first major music festival to be broadcast in both 4K UHD and HD with 5.1 audio. Across the four days of the festival, four hours of 4K UHD content every night was on offer to satellite service subscribers. For those viewers without an HD subscription, content was offered via the regular SD channel and also available for access via the broadcaster’s VOD service.

This move to 4K UHD was not without its challenges — it was decided that coverage of the event would be transmitted at 2160/50p, which had implications for everything from the production workflow to storage.

Back in January 2017, UK-based OB company CTV, which has worked on the IOW Festival many times in the past, provided a quote to CC Lab for the supply of HD facilities. When CC Lab decided to change the program format to 4K UHD, a general tender was issued for the provision of 4K UHD OB facilities, for which CTV again put forward a bid. As Hamish Greig, CTV technical director explains, “After a very challenging and competitive bid process I’m glad to say that CTV was awarded the project at the end of March.”

According to Greig, the main challenge associated with the switch to 4K UHD was twofold: first, the CTV team had to put together the workflow required to record two stages, while delivering live 4K UHD and HD coverage. Second, they had to find a way of dealing with the sheer amount of storage needed to handle all the 4K UHD feeds.

### LiveTouch Makes its Mark

After considering the options, CTV decided on a new replay and high-lights workflow, built around Grass Valley’s LiveTouch ultra-fast live replay and highlights system to support this first ever 4K UHD production of the IOW Festival. The system replaced a legacy system from another manufacturer that had been used in previous years. The flexible and intuitive nature of the LiveTouch system meant that it was quick for operators to learn, and also provided a fast and easy way to drop signals in and out.

As Greig explains, Grass Valley’s LiveTouch was selected for its ability to deliver a fast turnaround workflow and for the networking capability that it offers. “First, LiveTouch systems joined together and networked really easily and secondly, the Rio editing capability was advantageous. The native XAVC support offered by LiveTouch and way that it interfaces with the Rio editor meant it was very fast to drop in shots almost live,” he adds.



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While most replays in sports — where LiveTouch made its mark — are done at 1080/50p, the way the festival coverage was kept in 2160/50p was unusual. According to Greig, this was seen as the more sensible option as content from multiple stages was edited and delivered in quick-turnaround packages as opposed to the more common instant replays used in a live sports context. Although 2160/50p can be awkward to edit with, as Greig explains this is offset by the fact that the storage requirements are significantly reduced. This is thanks to Grass Valley’s FrameMagic media management technology which means no duplication is required when trading projects between replay and edit.

### Selecting Grass Valley’s Multiformat Kahuna Switcher

Led by CTV’s onsite Technical Producer Bill Morris, CTV dispatched OB2, one of its fleet of new 4K UHD trucks, and its MTV5 unit. The trucks arrived on the Tuesday before the event kicked off, allowing the technical rig setup to begin on Wednesday, ready for a rehearsal and transmission test on Thursday evening before going live on Friday.

OB2 was used to handle audio, vision engineering as well as the two main production areas covering Presentation and Stage 1, respectively. The truck is kitted out with Grass Valley’s Kahuna 9600 production switcher featuring its unique FormatFusion technology, external high-quality 4K UHD up- and down-converters and Axon 4K UHD embedders and de-embedders to enable simultaneous 4K UHD, 1080p and 1080i input and output paths. Sony BVM X300 32" 4K HDR monitors featured in the main production and vision areas, with 3G monitoring in all other areas. The TSV2 unit supported the Big Top (Stage 2) coverage.



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