
Case Study

TV Skyline Uses Kahuna™ Production Switcher to Deliver Multiformat Coverage of 2006 FIFA World Cup



Snell's FormatFusion™ provides pristine HD images for viewers of Premiere, the European pay television provider.

The Customer

TV Skyline, based in Mainz, Germany, has been an innovative service provider for film, television, and broadcasting since its launch in 1991. Specializing in the challenges of studio and remote television production, the company has helped develop special camera and broadcast solutions through its research and development department located near the Technical University in Ilmenau. TV Skyline also partners with the university's Media Engineering Institute to bring new advances to the broadcast market.

The Challenge

To integrate a wide variety of standard and high-definition video sources in its mobile unit to produce multiformat feeds of the 2006 FIFA World Cup, including high-definition coverage for Premiere, the pay television provider.

The Snell Solution

Kahuna, the world's first and only production switcher to enable concurrent standard (SD) and high-definition (HD) operations, allows simultaneous broadcast of multiformat feeds from a single program event.

Operating on the same control surface and in the same mainframe, Kahuna enables the user to integrate any SD video including live cameras, graphics or archives into HD productions, seamlessly, without the need for upconversion. It also allows HD material to be incorporated into HD productions without the need for downconversion.

Using the power of FormatFusion, Kahuna operators can use captions, graphics, handheld shots, and archives without having to worry about the compatibility of formats or standards. There is no need to upgrade a broadcast facility with all HD sources or the need for upconversion of SD material.

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The Results

TV Skyline purchased a new Kahuna for use in its coverage of the World Cup. Installed in its HD production truck, Ü5HD, the Kahuna switcher was used to integrate sources from as many as 12 external HD services, six additional cameras from the truck, and a variety of other SD and HD sources in the production of both an SD and a 16:9 HD 1080i broadcast signal.

“From our point of view, the Kahuna is the only high-end mixer on the market that really offers multiformat possibilities,” said Wolfgang Reeh, owner and managing director of TV Skyline. “The Kahuna is alone in allowing us to work with SD and HD signals in several formats and to integrate all these different signals and formats in one mixer, without the need for external downconversion. At the end of the day, no other production switcher can offer the same functionality as provided by the Kahuna.”

Switcher operators in Ü5HD can allocate the Kahuna’s mix/effects banks (M/Es) to output either in SD or HD and then mix any of the inputs, regardless of format, to produce a seamless HD or SD result. This operational flexibility extends Kahuna’s ability to network multiple control surfaces to different mainframes, to allocate one mainframe to separate control panels, or to operate in SD or HD as required, making maximum use of all available M/Es.

TV Skyline’s Kahuna system features 60 inputs and is equipped with four M/E banks, each with four-channel 3D DVE and a RAM recorder to enable high-quality slow motion playback. In addition to the main control interface, which is operated by the technical director, the system features a second smaller panel, equipped with two M/E banks and 24 signals per key bank for direct access by a second director.

