



RodeoHouston Riding the Grass Valley Kayenne hard at the three-week Houston Livestock Show and Rodeo



CUSTOMER

RodeoHouston, Houston, Texas

APPLICATION

The Broadcast and AV division of RodeoHouston is responsible for producing every video element that is displayed throughout Reliant Park in Houston, Texas. This includes high-quality content supporting all of the thousands of video displays of all sizes located within

Reliant Stadium, Reliant Arena, Reliant Center, and the Reliant Astrodome.

For their main event, the three-week Houston Livestock Show and Rodeo, they use Kayenne switchers from Grass Valley, a Belden Brand, to produce coverage of the rodeo and all of the activities surrounding it. Segments are displayed on eight large screens in Reliant Stadium, hundreds of monitors located throughout Reliant Park and the Fox Sports Network.

Background

The rough-and-tumble action of the Houston Livestock Show and Rodeo, including the rodeo and concert division known as RodeoHouston, is challenging from a number of logistical and technical aspects. But that's not all that the Broadcast and AV department of the show has to deal with. The team produces thousands of video segments virtually year round for one event or another, so the video production equipment they choose has to stand up to the punishment.

The team is also responsible for producing every video element that is displayed throughout the Reliant Park complex in Houston. This includes high-quality content supporting all of the thousands of video displays of all sizes located within Reliant Stadium, Reliant Arena and Reliant Center.

Understanding the importance of reliability and format flexibility, the Houston Livestock Show and Rodeo has used Grass Valley Kalypso and Kayak standard-definition (SD) switchers for years but, with its needs increasing, they placed an order for the very first pair of new Grass Valley Kayenne Video Production Center switchers in the summer of 2009. This was the culmination of a five-year SD-to-HD migration plan that began with new cameras, servers, and other gear.

Application

The new Kayenne 3.5 M/E switchers were online and fully operational by the fall of 2009, in time for the National Football League's Houston Texans season, in order to feed the large screens during Texans home games — played at Reliant Stadium. While originally used for Texans games in SD, the migration to HD occurred in 2011.

While the team has to support this wide variety of sports and entertainment shows, its main event is the Houston Livestock Show and Rodeo. It's an annual three-week gathering each February and March that offers the most competitive rodeo events and live music concerts available in the US. It's the world's largest livestock show and highest paying regular-season rodeo. It routinely garners the highest attendance numbers of any event held at Reliant Stadium year after year. During the annual rodeo, RodeoHouston produces multiple feeds per day (amounting to thousands of hours of content for this event alone).

Throughout the multi-day rodeo, the Broadcast and AV team use the Kayenne switchers to produce coverage of the Rodeo and all of the activities surrounding it. The hundreds of segments — of various lengths — are displayed on eight large screens in Reliant Stadium and hundreds of monitors located throughout Reliant Park, as well as broadcasts on Fox Sports Network.



“Once we put the Kayennes in place, we realized how much the features and functionality streamlined our operations and help us get content turned around faster. We can now easily take in any flavor of video and make it part of any of our HD events, sometimes within minutes.”

James Davidson, Managing Director, Broadcast and AV, Houston Livestock Show and Rodeo

“Our operators that now use the Kayenne switcher were very familiar with the Kalypso’s control panel and had absolutely no problem sitting down to the Kayenne and using it immediately. In fact, they found that many of their favorite features on the Kalypso have been improved on the Kayenne, which makes their job that much easier. We’ve had the new Kayenne systems for more than a year now, and they still tell me how very pleased they are with the performance.”

James Davidson, Managing Director, Broadcast and AV, Houston Livestock Show and Rodeo

To produce all of this video, they’ve built a state-of-the-art 5,500 sq. ft. production facility inside Reliant Center, which includes a large control room, several edit suites and audio mixing rooms. All of the video images they capture and produce pass through an elaborate, high-definition control room before being displayed and it’s all handled with the two Kayenne switchers. The control room is rather large, so there are many times when both switchers are being used simultaneously.

The Kayenne’s multiformat capability comes in handy because the team has to handle all types of formats and image resolutions that come from a variety of outside sources. The Kayenne does this automatically, using internal input conversion via a feature called Match-Def. The switcher’s multiformat support also helps on the output side because the team has to deliver video feeds in both HD and SD resolutions to the internal LCD screens throughout the various venues. For this they use another feature of the Kayenne, called SetDef that allows them to output both an SD and HD feed from the same switcher panel in order to support both types of screens.

It’s the volume of work that needs to be done that requires two Kayenne switchers. For Reliant Stadium alone, one of the Kayennes is used to create the sports and concert feed on center-hung screens while the other Kayenne is used to feed the large end zone displays with sponsor videos and other graphic elements.

This dynamic duo also came in handy during coverage of the NCAA’s college basketball Final Four tournament in March 2011, held at Reliant Stadium. This production served as a great example of having to deal with dozens of feeds from the numerous production trucks and edit suites on site, coming in from different locations throughout the Reliant complex. The Kayenne switchers handled all of it without missing a beat.



“The Kayenne is designed the way a switcher ought to be — it’s reliable and easy to set up. Pre-sets for the various events can be recalled in matter of minutes. As we continue to take on more projects all the time, we’re very happy we made the change.”

James Davidson, Managing Director, Broadcast and AV, Houston Livestock Show and Rodeo