Centralized Display Control Enhances Churchill Downs

By James Careless On June 03, 2015

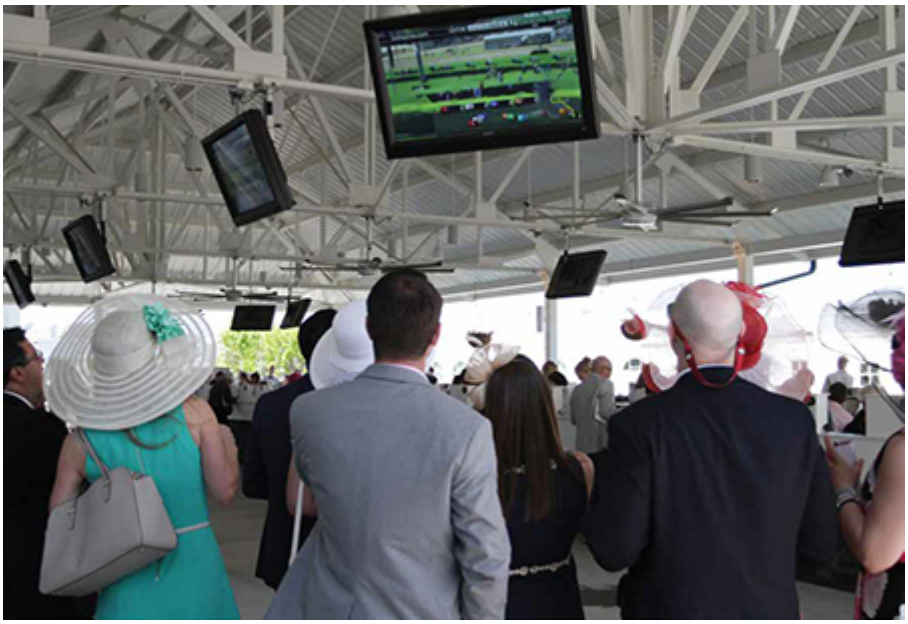
http://www.avnetwork.com/av-technology/0002/centralized-display-control-enhances-churchill-downs/95273

140 years: That's how long Louisville's Churchill Downs racetrack has been in business, and how many years it has been home to the venerable Kentucky Derby. But one annual horse race won't pay the bills: This is why Churchill Downs is an active racetrack that hosts races throughout the year. In doing so, Churchill Downs has to compete with every entertainment option clamoring for consumer' money. This is why the track has spent $150 million since 2001 to update and expand its facilities. Recently, Churchill Downs spent $14.5 million on its Grandstand Terrace and Rooftop Expansion project, with centralized monitor control being an important part of this upgrade.

OPEN AIR GETS MORE ACCESS

The Grandstand Terrace expansion added second and third floor seating, dining, wagering and restroom facilities to a formerly flat section of the track; located to the left of the main Grandstand stretching from the course's final turn to the homestretch.

"This open air space holds the 'economy seats' at Churchill Downs," said Erin Shannon, CompView's audio video designer. (CompView is a Portland, Oregon, system design and integration firm that won the AV contract for the Grandstand Terrace expansion. Shannon is the expert who designed and oversaw the AV installation.)



The Rooftop Gardens at Churchill Downs outfitted with 12 SunbrightTV 4660HD 46" TV's provide patrons with live HD racing video, betting odds information, food menus, and signage for special events. Contemporary Research RF tuners receive content at each TV from the RF-IP head-end system.

"The Grandstand Terrace expansion adds second and third-level space to the rear of the economy seats, adding 2,400 elevated and shaded seats to this part of the track complex," Shannon said. Because it connects to the existing Grandstand Terrace, the expansion provides more than 20,000 reserved seating guests with access to more washrooms, food and beverage stations, and wagering windows. The additional seats bring Churchill Down's total seating capacity to 55,638, while the facilities upgrades provides a better race day experience for all of them.

ADDING CONTROL TO THE ROOFTOP'S MONITORS

Racing information is critically important at Churchill Downs—to tell the fans which races are coming up, what odds each race's horses have to offer, and directing gamblers to wagering windows to place their bets. "The current race track is home to thousands of TV monitors as a result," said Shannon. "Some are old CRT models; others are modern."

The 69 new outdoor monitors installed in the Grandstand Terrace's Rooftop Expansion are SunBriteTV LCD monitors of varying sizes; all of which are designed to display clear visuals despite extremes in outdoor lighting and weather conditions. All of them are connected to a Contemporary Research display control system, which runs over Churchill Down's existing in-house coaxial cable RF network. The installation includes 67 Contemporary Research ICC1-232 Controllers, two Contemporary Research ICC2-ATSC+ Tuner/Controllers, a Contemporary Research ICE-HE Ethernet Head End, and one Contemporary Research SSV-DX Display Express PC.

Adding control capability to Churchill Downs' coaxial cable network, starting with the 69 SunBriteTV monitors in the Grandstand Terrace Rooftop Expansion, is the first step in bringing the track's entire video display system into the 21st century.

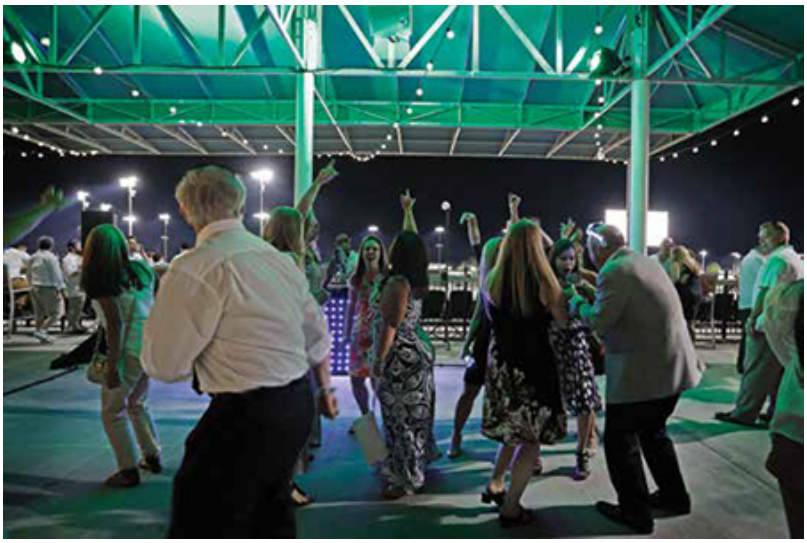
"Churchill Downs' coax network was built without installing a master control system for all of the displays," said Shannon. "This means you cannot address monitors from a central location to tune to specific channels on an individual basis. You also have to manage their volume and other features manually right at the displays themselves. In a place with thousands of displays, this is a Herculean task!"

Erin Shannon opted not to perpetuate this historical shortfall in the Grandstand Terrace Rooftop Expansion. Quite the opposite: "I wanted the design of the Rooftop Expansion addition to this historic facility to include global controls that could expand to the entire campus when desired," he said.

This said, CompView did not want to saddle Churchill Downs with the need to install a separate wired network to provide centralized monitor control. This is why Erin Shannon selected a Contemporary Research (CR) control system, because its signals can be sent to the company's addressable controllers over the existing coax network, with each monitor plugging into its own CR control box.

"The main reason for selecting Contemporary Research for the Churchill Downs project is the CR solution matched the campus requirements with a big functional upgrade—control," Shannon explained. "Adding control for multiple displays through any other third party controller would cost more and require specialty cabling to each display. CR works on the cable TV wire that is already there."

Operating over Churchill Downs' existing coax network made the CR control system relatively straightforward to install and configure. Yet the level of control supplied to the race track's AV staff is substantial, at least in the Grandstand Terrace Rooftop Expansion.



"Using the CR control system over the existing RF cabling infrastructure, all the rooftop displays are controllable through a single PC," said Shannon. "The staff can turn them all off and on, and select channels. This can be done on all rooftop displays, a single display or a group of displays; for example turning on all displays at the concessions and tuning them to the menu signage channel."

In contrast, most of the other existing displays require someone to walk around with a remote control to turn them on and select the proper channel. The good news is that these displays can be provided with centralized control capability by connecting addressable CR boxes between them and the coax network. In this way, Churchill Downs has the option of upgrading its entire video display operations to centralized control over time.

"The CR system central display control can be rolled out to every location that currently has a TV," Shannon said. "The CR system is extremely easy to scale up and does not require a new cable infrastructure to be installed through the multiple buildings that make up Churchill Downs.

Nor does it require a third party programmer or software company to set up: Our lead technician programmed the PC-based central control system."

Today, the 69 outdoor SunBriteTVs in the Rooftop Expansion area are allowing Churchill Downs' AV technicians to manage them all from a single PC, a capability that—with any luck—will be expanded to the track's entire video display plant.

"Overall the CR solution was a perfect fit for the Churchill Downs Rooftop Expansion project," Erin Shannon concluded. "It is a great way to add control capability over an existing coax network, without any extra wiring required."

James Careless is a regular contributor to AV Technology magazine.

INFO
CHURCHILL DOWNS
www.churchilldowns.com
COMPVIEW
www.compview.com
CONTEMPORARY RESEARCH
www.contemporaryresearch.com
SUNBRITETV
www.sunbritetv.com
Equipment List (Partial)
• Sixty-nine SunBriteTV LCD outdoor monitors (varying sizes), designed to display clear visuals despite extremes in outdoor lighting and weather conditions
• Contemporary Research display control system runs over Churchill Down's existing in-house coaxial cable RF network
• Sixty-seven Contemporary Research ICC1- 232 Controllers
• Two Contemporary Research ICC2-ATSC+ Tuners for Display Expresses
• Sixty-nine Contemporary Research CCCOMB Modem cables
• One Contemporary Research ICE-HE Ethernet Head End
• One Contemporary Research SSV-DX Display Express PC
- See more at: http://www.avnetwork.com/av-technology/0002/centralized-display-control-enhances-churchill-downs/95273#sthash.I1u29ZKh.dpuf