

# Sony Delivers Full A/V System Solution for 49ers and Levi's® Stadium

## Customer:

- San Francisco 49ers and Levi's® Stadium

## Industry:

- Sports and Entertainment Venue

## Challenges:

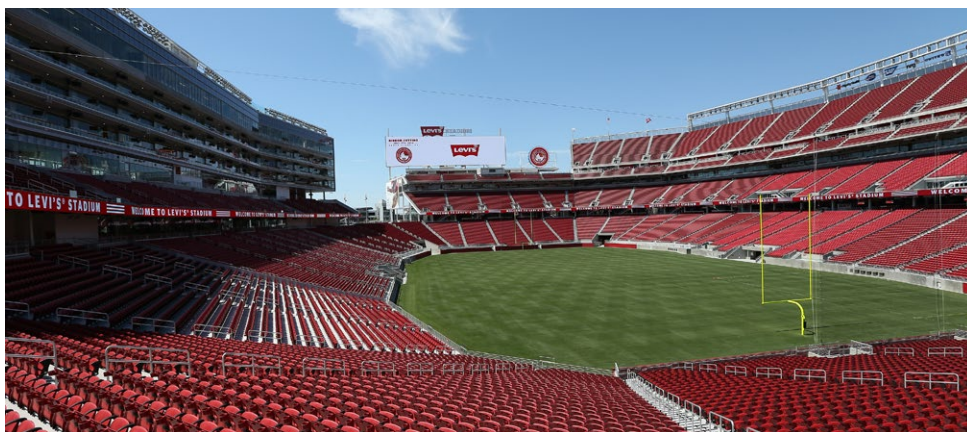
- Supply a new state-of-the-art, technologically advanced sports venue in the heart of Silicon Valley with the highest quality video equipment
- Have the ability to record, produce and distribute content during games
- Use networked surveillance equipment to help monitor the safety of players, fans, vendors, and employees

## Solution:

- Work with Sony's Solutions Development & Integration group, who managed the design and installation of Sony professional products including 4K cameras, camcorders, switchers, projectors, LCD displays, security equipment, and televisions and 4K
- Create one of the most advanced and innovative multi-purpose stadiums in the nation

## Benefits:

- Enhanced the fan experience
- Enabled the production team to shoot a game and deliver the footage quickly and easily
- Installed stadium on cutting edge of production capabilities with the use of 4K technology



The San Francisco 49ers kicked off the 2014 NFL season in its new home, Levi's® Stadium, with fans treated to a high-tech, high-definition and networked game-day experience.

Levi's® Stadium is the latest – and one of the largest – high-profile sports projects for Sony Electronics' Solutions Development & Integration group. Sony led the design and installation of the stadium's entire video production system, which includes large-scale LED displays, and a specialized replay room. The professional equipment in the Santa Clara, CA, stadium includes six F55 4K cameras for game capture, the MVS-7000 series production switcher and more than 2,200 LCD displays in sizes ranging from 40 inches in HD resolution to 85 inches in 4K.

The stadium's opening was the key step in Sony's partnership with Levi's® Stadium and the San Francisco 49ers, announced in December 2012 and covering a range of Sony's professional and consumer products used throughout the stadium.

"Sony's experience in professional products, consumer electronics, and entertainment will make the 49ers Museum and Levi's® Stadium 'must stop' destinations for fans and guests of all ages," said 49ers Chief Executive Officer Jed York.

Sony's technology also drives the fan experience in the 49ers Museum, which uses Sony's 84-inch 4K BRAVIA™ LCD displays, a professional 4K projector (SRX-T420), and Sony's 3LCD laser light source business projectors (model VPL-FHZ55).

"Our organization is really excited over the potential of this tremendous collaboration with Sony," said Robert Alberino, Jr., Vice President and Executive Producer for the San Francisco 49ers. "The key for us was to do some pretty fabulous things here in Santa Clara, things that other professional teams are not doing. We set out to accomplish a huge task: producing and directing not only the stadium show, but all our social media





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the next decade, and we have just a tremendous comfort zone with the F55s. We made the entire stadium show an F55 show. The entire show will be driven by this camera and it will allow us to have tremendous flexibility.”

Several of Sony’s security cameras are also used in the facility’s video surveillance systems. Levi’s® Stadium is using about 200 SNC-DH280 cameras throughout the stadium, 12 SNC-CH280s on the side of the stadium and for the practice facility building, and SNC-HM662 hemispheric view 360-degree cameras inside the workout facility. About 70 Sony SNC-HM662 cameras monitor parking areas, the stadium retail space and ticket scanner stations and entrances.

“The 49ers technical leadership team, being veterans of a few of the most successful Silicon Valley startups, have very high expectations for agility in the development and delivery of the solution,” said Steve Young, director of Sony’s Solutions Development & Integration group. “Their vision for an advanced ‘content everywhere’ interactive network in the stadium drove us to quickly develop features and custom interfaces to realize their vision within the short timeframe of the project.”

The custom features that Sony developed for live production and content distribution throughout Levi’s® Stadium can also be applied to other major sports venues, and Young noted Sony is currently working to develop similar systems for other venues.

“This is a terrific partnership with Sony and we didn’t realize just how much Sony shared in our vision until we started meeting with their team,” Alberino said. “They really helped us to become what we expect to become – a full-service production team. Again, not very many pro teams are doing this. Others might have somebody who just works their boards, somebody who works their websites, and somebody who works in their production department. For us, it’s one team across the board. Sony had the resources and expertise to put together a plan that matched how we work. Their innovation and creativity is going to make this stadium an unbelievable experience.”

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content, our website content and our full game-day broadcasts – all at the same high level of quality with the same gear.”

The Solutions Development & Integration group managed the integration of the Replay Control Room system, BRAVIA LCD displays, and Daktronics LED displays and show control systems. Throughout the Levi’s® Stadium project, Sony Electronics worked closely with WJHW for consulting and design services, and with Diversified Systems (DSI) as the system integrator.

A unique feature of the 49ers’ new A/V system installation is the team’s ability to shoot game footage and deliver it live or via replay servers to the two large-scale LED displays or mobile devices almost instantaneously. Another project component feature is the stadium’s readiness to adopt 4K production.

The Replay Control Room system includes six Sony’s F55 4K live camera chains, which feeds Sony’s MVS-7000 production switcher and Evertz Dream Catcher replay server. The live show is initially being produced in HD, but the 4K acquisition capabilities provide the basis for future 4K production and post-production upgrades.

“That’s why we’re using the F55s across all our platforms,” Alberino said, “capturing at the highest resolution and then deriving superb HD from that content for whatever we need. We want to be able to shoot for years and years and archive this footage and really extrapolate the best that 4K can offer. We’re already putting out amazing footage that has incredible shelf life for