**Case Study | University of Nevada, Las Vegas**

**PROFILe**

**Name:** University of Nevada Las Vegas (UNLV)  
**Location:** Las Vegas, NV  
**Founded:** 1957  
**Website:** www.unlv.edu

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<th>CHALLENGE</th>
<th>SOLUTION</th>
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<td>Engage UNLV basketball fans with a show-stopping multimedia pre-game show.</td>
<td>Leverage the extreme brightness, color depth and accuracy of Epson Pro L25000U projectors to use the basketball court's floorboards as a screen and create an over-the-top fan experience.</td>
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## Over the Top

**UNLV Basketball Adds Full-Court Projection Mapping to the Thomas & Mack Center in Las Vegas**

“We wanted to create a buzz. We wanted people to say, ‘I want to check this out.’”

That’s Dan Dolby, general manager of UNLV Sports Properties, talking about the multimedia pregame show the men’s basketball program premiered on January 31.

The buzz was enormous. “Fan engagement surveys have been extremely positive,” he says. “Our news coverage, social media and word-of-mouth really took off. It’s been a high point for our fans, our staff and our team this year.”

The excitement stems from the addition of extremely high-lumen Epson laser projection to an already iconic pregame show. The show, evolving since the 1980s, features the UNLV Pep Band, the Runnin’ Rebel mascot, fireworks, cheerleaders, spotlights, and 20-foot jets of flame, all introducing the starting lineup. The new video portion, projected onto the full court floor at the Thomas & Mack Center, includes historic footage of past players, a circling “Tark the Shark” homage to legendary coach Jerry Tarkanian, and a 3D animation of their 1990 national championship trophy splintering the floorboards.

“It’s not the first show of this type, but it’s the most over-the-top. “And without Epson’s buy-in and commitment, this thing would never have gotten off the ground,” Dolby says.

—and Dan Dolby, General Manager, UNLV Sports

**Full Court Mapping**

The UNLV Runnin’ Rebels are steeped in tradition, with the fifth-highest winning percentage in NCAA Division 1 history, and the highest number of points and the highest winning margin ever in an NCAA championship game. Their pregame show is iconic as well, and it was considered by many the best in college sports until the introduction of full-court projection by Florida, Duke and Purdue.

This year UNLV and Dolby, who is an employee of Learfield Sports, which manages multimedia programs for nearly 130 colleges, universities, conferences, and arenas, set out to create a “proof of concept” pregame show for the last five home games of the men’s basketball season.

Photo credit: Zak Krill
“We started on this project in December, when our athletic director, Desiree Reed-Francois, asked me if I had seen the Florida pregame projection,” Dolby recalls. “I said I had, and I may know people who could create something like it for us.”

Dolby called an old friend, Dan Abdalla, vice president of marketing and sales for Las Vegas-based lighting and video rental house 4Wall Entertainment. Abdalla, in turn, brought in Jeff Greenlee of Epson America, Inc. and encouraged Dolby to engage Charles Akin, executive producer of oogoog productions, which UNLV had used frequently to produce television commercials.

“The biggest challenge we had was the timeframe,” Akin explains. “Normally you’d want to create a production of this kind over the summer.” However, they were starting mid-season and only had 28 days to create the show, as well as set up the projectors, server and other gear.

Worse, the court was in daily use for classes, games and practices, so most of the on-site work had to be done in the middle of the night.

To meet their deadline, oogoog simultaneously created the content, and planned and implemented the installation and production. “We knew we wanted to include historical footage from past teams, and since that would play in a regular window, we started on that first,” Akin recalls.

Other elements, however, had to be pixel-accurate to the lines and graphics painted on the court, so oogoog could not finalize these elements until the projectors were installed. These elements included a glowing Las Vegas skyline, the UNLV logo at center court, and the 3D circling shark.

The production, Akin says, would not have been possible at all without the extreme brightness, color depth and accuracy of the Epson Pro L25000U projectors. His team decided early on that they would need at least 200,000 lumens of total color and white brightness to effectively use a basketball court’s floorboards as a screen. They divided the court into four quadrants, each to be served by two Pro L25000U projectors double stacked. With each projector delivering 25,000 lumens of equal color and white brightness, each quadrant displayed 50,000-lumen images edge-blended into one seamless picture.

The show itself, though its elements were pre-recorded, was a live production each night. “It’s all timed to the music of the Pep Band, and of course their tempo would vary just a bit from game to game,” Akin explains. As the director, he used a series of cues based mainly on the music. “The band would kick up, then UNLV’s on-court announcer, Dick Calvert, would say, ‘Lights please,’ then we would wait for the right beat right after that, which was our first cue.”

Akin admits that, although he didn’t really talk about it, his intention was to “blow everyone away…we wanted to make a statement, that this is the city of entertainment, the city of lights, and we were back with the best pregame show anywhere.”

Laser Sharp

Although Abdalla offers other large-venue projectors at 4Wall, he says he recommended the Epson Pro L25000U laser projectors to UNLV for four crucial reasons:

1. “The light output of the individual projectors is extremely consistent,” he says. There would be no way the brightness of the quadrants would match so consistently with traditional projectors as the lamps aged, and total impact over time would decrease dramatically between fresh lamps.

2. Looking beyond the dazzling brightness of the laser light source—the high resolution, precision and quality of the lens and optical systems was also apparent, allowing the production team to align their graphics to exacting tolerances, even with the projectors 50 feet above the floor.

3. These Epson projectors are smaller and lighter than any others of a similar brightness. “That made the rigging component quite simple compared to similar projects in the past,” Abdalla says.

4. The price point was attractive as well, both the initial cost and the cost of maintenance long-term. “Not having to change a lamp, not having to worry about expensive labor
was very attractive,” he adds. “We could literally leave those projectors up there for ten years or more, with the school using them for every home game in men’s and women’s basketball, volleyball, hockey, and all the other special events they hold there.” Plus, the projectors deliver reliable performance and are backed by Epson’s limited warranty of 20,000 hours of usage or three years, whichever comes first.

The benefits of the installation, Abdalla, Akin and Dolby all agree, include enhancement of the fan experience and an extra edge for player recruitment. “The projectors can also provide a new canvas for sponsor logos, and a new platform for halftime and timeout sponsored content, which will not only make the games more fun, but allow the system to turn into a revenue generator,” Abdalla explains.

**Fantastic Feedback**

Gavin Downey, Epson’s senior product manager for large venue projectors, says his team loves to be involved in cutting-edge projects like this one, because it helps them understand what is most needed as they develop new products. “We’re finding that ease of operation and confidence in the technology is key, just as important as the brightness and image quality our projectors deliver.”

“I will tell you that the reason we did this project was to prove that this was an investment that should be made going forward,” Dolby says. “We worked so hard for this five-game stretch to show the university what this technology is able to do, and they have come back and said, yes, this is something we want.”

With the university’s blessing, Dolby plans to turn the pregame proof-of-concept into a full-game experience. “Millennials want a wow factor—a digital component that keeps them engaged in the game and the nuances within the game. Their expectations are higher than our past student bodies, so it’s up to us to capture them and give them something they can look forward to when attending these events live in our arena.”

He says the experience so far has been exceptional. “It was fantastic. I would really like to thank 4Wall, oogoog and Epson for the commitment they made to making it come to life. This team in six weeks put together the best pregame in all of sports. The feedback from the fans and the athletes was ‘Wow, this is over the top, something they had never seen before.’ I can’t thank them enough.”

“The production would not have been possible at all without the extreme brightness, color depth and accuracy of the Epson Pro L25000U projectors.”

— CHARLES AKIN, EXECUTIVE PRODUCER, OOGOOG PRODUCTIONS

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**Disclaimer:** The views and opinions expressed in this article are those of the individual. Individuals were not compensated for this article.

1 Color brightness (color light output) and white brightness (white light output) will vary depending on usage conditions. Color light output measured in accordance with IDMS 15.4; white light output measured in accordance with ISO 21118.

2 20,000 hours is the estimated projector life when used in Normal Mode in an ordinary environment. Actual hours may vary depending on mode and usage environment. The Pro L-Series projectors have a limited warranty of three years or 20,000 hours, whichever comes first.