

**Waikiki Shopping Plaza's Aloha
to two million yearly visitors
features the Samsung 460UX-2**

Case Study



In building Hawaii's largest LCD video wall,
Pacific Digital Designs turns to Samsung for
state-of-the-art commercial displays

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The Customer

Pacific Digital Signs

Through customized, dynamic digital signage installations, Pacific Digital Signs helps customers increase sales and traffic, and encourage repeat visits. It provides best-in-class display hardware and software from the industry's leading companies, and custom develops software to serve every client's specific information and entertainment needs. Areas of focus include digital building directories, digital menu boards, retail display and hospitality-related solutions. The company has completed installations throughout America's West Coast and Hawaii, with clients ranging from small businesses to the U.S. Navy, and including major brand names such as Bobbie Brown, Clinique, Estee Lauder, Hilton and Hyatt Resort & Spa. It recently built the largest-known LCD video wall in Hawaii at the multi-level Waikiki Shopping Plaza.

Customer Need

State-of-the-art and cost-effective LCD flat panels to replace the aging rear-projection video displays at the Waikiki Shopping Plaza

Located at the heart of Waikiki, Hawaii's main tourist and retail destination, the Waikiki Shopping Plaza serves more than two million visitors each year. The mall offers a unique combination of small and upscale retailers, an expansive food court and a stage area that provides a variety of nightly entertainment offerings.

A video wall had once served as the mall's focal point. Prominently placed behind the main stage area and suspended 30 feet above the food court, it allowed customers in both the food court and the stage area a full view of promotions, advertising and videos. However, the rear-projection display had become outdated, and the Waikiki Shopping Plaza required a new system that offered added capabilities of real-time information and interactivity that would bring value to mall shoppers and merchants. It also wanted a dynamic solution that in the future could also integrate live video from various HD camera locations. Scalability was critical, as all of the equipment and functionality could not be budgeted for at the time of installation.

"This was a technology upgrade that involved all the elements of a new design-build-and-install project," says Vince Mitchell, President, Pacific Digital Signs. "It required technology expertise and experience — and a considerable dose of installation smarts."

Pacific Digital Signs designed a solution that would not only replace dated technology with high-resolution LCD commercial displays, but would also feature new capabilities for real-time information updates, viewer interactivity and a scalable, future-proofed system architecture.

The project included removing the old rear-projection displays weighing more than 2,000 pounds and installing the new displays using a manlift. All this would be undertaken during business hours, and during the busy holiday shopping season. Ensuring security and organizing smooth and efficient logistics, all under the constraint of a fixed budget and a tight timeframe, were just some of the project's many challenges. Additionally, to minimize the disruption to mall traffic, it was crucial to pre-test every component down to each bolt.

This was going to be the largest video wall display Pacific Digital Signs had ever built. Mitchell did not hesitate to turn to Samsung for the LCD displays that were the project's centerpiece. "We've had a solid success rate with Samsung," he says.



The Samsung Solution

Samsung 460UX-2 1080P LCD displays

The new video wall features 20 Samsung 460UX-2 1080P LCD displays, each on Peerless VW4050 custom modular wall mounts. Since the LCD displays required only a fraction of the depth of the previous displays, Pacific Digital Signs redesigned and engineered a support structure to evenly distribute their weight in the existing enclosure. The Samsung displays offered a cost-effective video wall with all the required features to support this installation. "The Samsung 460UX-2 had the necessary built-in video wall functionality, ultra-thin bezel, natural mode and cooler operating temperatures," says Mitchell.

"Samsung provided strong support, from pre-sales through installation, and facilitated a smooth and quick installation and a high level of customer satisfaction."

– Vince Mitchell, President, Pacific Digital Signs

Driving HD content simultaneously to 20 displays can present issues when compared to smaller LCD screen video wall deployments. Even though many LCD panels designed for video wall use can daisy chain the video signal to the next display, the initial concern was that, in high frame-rate video content, the delays in the video signal between the first and last display would be perceivable. After detailed discussions with vendor engineers, the decision was made to add two Atlona HDMI distribution amplifiers to drive a full HD signal directly to each display.

The video wall is wired to accept inputs from multiple A/V devices such as Blu-ray, Xbox, PlayStation and Wii consoles, laptop computers, live cameras and live TV. Because all processing functionality in the video is handled by software built into each Samsung 460UX-2 professional display, no external processor was needed. This contributed to welcome additional savings in cost and space.

A Windows PC running various software packages provides the primary video input, which allows for real-time data such as headline news, weather, sports, stocks, emergency messaging as well as programmed content offering a valuable mix of content for both locals and tourists. In the event of a storm, or local emergency, real-time messaging allows the Waikiki Shopping Plaza to alert and advise shoppers via the video wall.

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The 20 Samsung LCD displays were installed in only four days, and the entire project was completed in 30 days.

"Samsung provided strong support, from pre-sales through installation, and facilitated a smooth and quick installation and a high level of customer satisfaction," says Mitchell. "For example, Samsung recommended that, for a wall of this size, some additional distribution hardware would make video perform better. This saved us considerable trial-and-error in installing and configuring the solution."

Samsung 460UX-2 1080P LCD Display Quick Profile

- **Advanced Cooling, 24/7 Operation**

Displays feature advanced cooling technologies, allowing reliable operation 24 hours a day, seven days a week.

- **Placement in Bright Areas**

Up to 700 max cd/m² for visibility in high ambient conditions.

- **12.5mm Bezels for Seamless Video Walls**

Thin, 12.5mm bezels (.49") mean virtually seamless video walls.

- **Built-In PC for Control over LAN/WAN**

Integrated PC provides video wall control over network: up to 5 x 5 (UXn-2), or up to 250 displays (UXn-UD2).

- **MagicInfo™-i Software**

MagicInfo™-i gives you a Web-based server to upload and control content from anywhere (UXn2).

The Results

Increased traffic, increased sales, increased repeat visits

The Waikiki Shopping Plaza was able to start selling ad space immediately after the new video wall was completed. On-site events promoted through the new video wall also enjoyed increased attendance, and interactive promotions led to a dramatic increase in traffic to the upper levels of the five-story mall.

“We receive daily compliments on the high-quality video content of the new displays. Our new interactive promotions are a big hit, and since we have over two million visitors visit the mall every year, our advertisers get some great exposure.”

– Kainoa Akina, Marketing Director, Waikiki Shopping Plaza

Today, visitors to the Waikiki Shopping Plaza are greeted with the latest in video display experiences, featuring entertainment, advertising, interactive contests and promotions, emergency information, live video and Blu-ray DVD content, in addition to very popular Guitar Hero contests and Wii tournaments. Visitors can also send messages via web-based software applications, including LocaModa’s Wiffiti, which allows moderated text messages and photos from any mobile carrier to be sent directly to the big screen. This feature is especially popular with tourists, who often can be seen taking pictures of their messages as they appear on the display.

“We receive daily compliments on the high-quality video content of the new displays. It really looks sharp. Our new interactive promotions are a big hit, and since we have over two million visitors visit the mall every year, our advertisers get some great exposure,” said Kainoa Akina, Waikiki Shopping Plaza’s Marketing Director. “Pacific Digital Signs and Samsung delivered a top-quality solution within our budget, and exceeded our expectations with their results.”

For more information, please visit samsung.com or call **1-866-SAM4BIZ**.

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