



At Colorado's 14,115-Foot Pikes Peak, Planar Display Solutions Help Bring the Story of the Summit to Life

**Product**

Clarity Matrix LCD Video  
Wall System  
Planar UltraRes X Series

**Location**

Pikes Peak, Colorado

**Industry**

Hospitality  
State & Local Government

**Application**

Interactive Display

**Partners**

Mode Systems  
Gallagher & Associates

# Pikes Peak Summit Visitor Center

Fifteen miles west of Colorado Springs, Colo. is Pikes Peak, a 14,115-foot summit in the southern Front Range of the Rocky Mountains. Sitting atop what's known as 'America's Mountain,' the summit is higher than any point in the U.S. east of its longitude.

The mountain is one of the most visited in the world with nearly one million people each year coming to the summit, which is accessible via highway, railway or trail. For better serving this influx, the City of Colorado Springs, in partnership with the U.S. Forest Service, the U.S. Army Research Institute of Environmental Medicine and Colorado Springs Utilities, embarked on a project to replace a 1960s-era Summit House with an updated building. The result is the Pikes Peak Summit Visitor Center, a state-of-the-art complex with a gift shop, new dining areas and interactive exhibits.

"The previous building had nothing educational nor any information about the history of Pikes Peak," said Bradley Densmore, construction project specialist with the City of Colorado Springs. "In building this new facility, we set out to change that by creating an educational experience."

Museum planning and design firm Gallagher & Associates was brought on board to create a collection of interpretive exhibits covering the history and geography of the mountain and summit.



The collection of physical and digital displays features visualization technologies from Planar. Installed by Mode Systems based in Castle Rock, CO, the Planar elements include a nearly 28-foot-long, 2.5-foot-high Clarity® Matrix® MultiTouch LCD Video Wall System and a Planar® UltraRes™ X Series 75-inch 4K LCD display.

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— Bradley Densmore, Construction Project Specialist,  
City of Colorado Springs

## Interactive Features Spur Interest and Engagement

The Clarity Matrix MultiTouch video wall is designed with interactive features that allow users to explore historical images of the mountain and browse photo panes of people who have visited the summit. Users can also upload pictures of themselves to the video wall including where they are from and any personal information they wish to add. That data is used to create a digital pin that is added to a world map on the video wall showing where visitors are from.

The Planar UltraRes X Series display is used in conjunction with an interactive stainless steel browser wheel that enables visitors to scroll through a year’s worth of time-lapse footage of the summit. “We have a camera that takes a photo of the summit every minute and all those pictures are stored,” said Densmore. “Visitors can scroll forward and backward and gain a good understanding of the conditions at the peak and how the weather patterns change so rapidly.”



With the new exhibit hall, Densmore said visitors now spend more time at the summit compared to before. “The Planar displays get a lot of use and people love the interactive experience,” he said. “Going from designing and talking about what we could do to actually seeing it has been exciting for us. We are very proud of the result.”

## Designed for Resilience at High Altitude

When Mode Systems came aboard the project, a different display manufacturer was already slated to provide the interactive video wall. But that changed when Owner Marc Headley discovered that the manufacturer wouldn't warranty its product due to the altitude of the site.

“Some companies won't warranty over 2,000 feet above sea level; for others, it's 5,000 feet and nearly all won't warranty anything over 10,000 feet,” Headley explained. “Since this project is at 14,115 feet, we had to figure something out.”

The issue relates to less air density at higher altitude, reducing the cooling capacity of the air, which in turn can compromise electronics since it's harder to cool them. However, upon contacting Planar, he found Clarity Matrix would be warranted at the summit site.

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*—Marc Headley, Owner, Mode Systems*



“That’s because the majority of the electronics with Clarity Matrix would be located off board in a climate-controlled equipment rack,” Headley said. “The only thing in the open is just the LCD panel itself. The additional benefit is that most of the service requirements or any troubleshooting can also easily happen at the rack end.”

According to Headley, this is just another example of the benefits of Planar video wall technology. “We’ve been installing Clarity Matrix video walls since their very first iteration and we are very impressed with how the product line has advanced over the years. I have seen examples where a Clarity Matrix video wall has lasted for double its warranty—that’s an impressive capability for this type of display.”

## About the Clarity Matrix MultiTouch Video Wall System

Clarity Matrix MultiTouch LCD Video Wall System offers 32 simultaneous touch points, enabling multiple users to interact. Delivering a superior touch experience, Clarity Matrix offers pin-point accuracy to prevent false touch points. It is available in standard 2x2 or 3x3 video wall arrays with 55-inch video wall displays in 16:9 aspect ratio for popular content resolutions. Custom configurations are also available.

## About the Planar UltraRes X Series

With 4K resolution, high dynamic range (HDR) support, high 700-nit brightness and a wide color gamut, the Planar UltraRes X Series commercial LCD displays are ideal for a range of applications such as collaborative meeting spaces, control rooms, high-impact digital signage and media rooms. The displays provide 24x7 reliability and are designed for mission-critical environments including uses that require extended or continuous operation. Planar UltraRes X Series offers portrait or landscape orientation, multi-source viewing and advanced processing with Planar® ERO-LCD™ (Extended Ruggedness and Optics™), protective glass also available.