PLANAR | Installation Profile



Product

Planar DirectLight LED Video Wall System, Planar TWA Series

Location

Stuttgart, Germany

Industry

Government & Military

Application

Control Room

Parters

Command and Control Communications Engineering & Logistics (C³EL)

C³EL

Video Walls Support Mission-Critical Operations for the United States European Command

United States European Command

Headquartered in Stuttgart, Germany, the United States European Command (USEUCOM) is a joint forces community of approximately 1,000 U.S. service members and government civilians. The mission of the USEUCOM is to conduct military operations, international military engagement and interagency partnering to defend the U.S and enhance transatlantic security. From its state-of-the-art plans and operations center, the USEUCOM directs the operations of more than 50,000 military and civilian personnel, integrating and synchronizing forces across Europe, portions of Asia and the Middle East, as well as the Arctic and Atlantic oceans.



Two key segments of the USEUCOM include the Joint Operations Center (JOC) and the Senior Decision Cell (SDC), both of which fall under the USEUCOM's Mission Command Center. The JOC is the strategic and operational hub of USEUCOM and is organized to accomplish missions, move resources and support the commander's decision cycle. The SDC—co-located with the JOC—functions as a high-end briefing center for general and flag officers and can be used as a situation room for senior staff members.

In the summer of 2017, the USEUCOM identified the need to replace two outdated projection systems which previously served as control room displays for the JOC and SDC. The projection systems had surpassed the manufacturer's estimated life cycle by several thousand hours, thus requiring increasingly frequent maintenance, repairs, lamp replacements and associated costs.

To develop a solution, the USEUCOM engaged Tampa, Florida-based Command and Control Communications Engineering & Logistics (C³EL), a specialized builder, designer and technology integrator for the Department of Defense (DoD). Offering an agile and comprehensive team of technicians, analysts, engineers, programmers and electricians with security clearances and extensive military background, C³EL is uniquely qualified to deliver end-to-end command center and control room solutions within secure DoD locations worldwide.

It was important to the USEUCOM that a display solution offer a long lifecycle, quieter operation, higher efficiency with respect to head and load calculations, and be able to scale with new technology, according to Lavar McDowell, C³EL project manager. "We presented a cost analysis to upgrade the projector systems, including ongoing costs for lamp replacements, and that presented the idea of using a different type of display technology."



‘Make it happen’

C³EL was familiar with Planar, having partnered with them on past installations, and this successful track record encouraged McDowell and C³EL to pitch a solution featuring Planar display technology, and specifically, the Planar® DirectLight® LED Video Wall System and the Planar® TWA Series LED video wall.

Engineered with a fault-tolerant design for 24x7 reliability and performance, the Planar DirectLight LED video wall addresses the unique challenges of mission critical environments. Planar DirectLight supports a range of fine pixel pitches featuring 16:9 aspect ratio and precise pixel pitches to ensure that every model achieves exact Full HD, 4K or 8K resolutions.

The Planar TWA Series is a line of fine pitch LED video walls that are architected to support the highest pixel density and feature advanced calibration for maximum full color and brightness uniformity. The high-quality black LEDs of the Planar TWA Series delivers a crisp, high contrast image—a key advantage when the finite details are critical.

Initially, the investment cost for a 51.2-foot-long, 6.6-foot-high Planar DirectLight LED video wall in the JOC and a 26.6-foot-long, 4.4-foot-high Planar TWA Series LED video wall in the SDC encountered some resistance. To convince USEUCOM that the cost was justified, McDowell knew the decision maker would need to see one of the video walls for himself. At that point, he made a call to his contact at Planar.

“I brought up the idea of shipping a demo video wall all the way to Germany,” McDowell explained. “It was a financial risk Planar, but they agreed and sent out a Planar DirectLight along with a representative. When it arrived, we set up the demo right in the JOC.”

“Our team delivered and closed out the project on time and within budget.”

— Billie McDuffee, CEO, Command and Control Communications Engineering & Logistics

Being able to observe the Planar DirectLight video wall alongside the projector screen completely changed the USEUCOM's perspective on cost, according to McDowell. "Literally, the decision maker—a two-star general—walked in the room, took one look and said 'Yep, I want it. Make it happen.' After that, everyone around him scrambled to do just that."

Engineering the integration

To support the large Planar DirectLight LED video wall in the JOC, the C³EL team, led by CEO Billie McDuffee, determined that a new load-bearing wall would need to be engineered and built. McDuffee deployed to Germany with a crew from C³EL that included technicians, a structural engineer and a master programmer.

"We demolished the old wall down to the concrete and rebuilt a new wall with a structural design to accommodate the mount, the video wall equipment and the power supplies, as well as the control and audio systems," McDuffee said.

With the JOC and SDC serving as true, mission-critical environments, it was extremely important that the project integration minimize impact or interference with operations and did not exceed the timeline that was set. "When you commit to a finish date with the DoD—and especially for a mission command center project—a delay of any kind is not an option," McDuffee said. "Our team delivered and closed out the project on time and within budget."

Next-level clarity and performance

The completed Planar DirectLight LED video wall and Planar TWA Series video wall installations are fitting for a state-of-the-art command center and provide both the JOC and SDC with a seamless, high-performing digital canvas to help direct mission operations, according to McDuffee. "The video walls really elevate the level of technology in those rooms," he said.

"In terms of the quality of the picture, a projector system cannot be compared to those LED video walls," McDowell said. "Personnel working in the JOC and SDC must view very detailed sources, including maps, videos, images or other content, and the improved clarity of the LED video walls definitely enhances their capabilities."

"Personnel working in the JOC and SDC must view very detailed sources, including maps, videos, images or other content, and the improved clarity of the LED walls definitely enhances their capabilities."

— Lavar McDowell,
Project Manager, Command and Control Communications Engineering & Logistics

Planar is a trademark of Planar Systems, Inc. All other trademarks and service marks are property of their holders. Copyright © 2020 Planar Systems, Inc. All rights reserved. This document may not be copied in any form without permission from Planar. Information in this document is subject to change without notice. 2/2020