Products
Clarity Matrix Video Wall

Location
Philadelphia, PA

Industry
Transportation

Application
Digital Signage & Advertising

CLARITY MATRIX VIDEO WALLS GIVE TRANSIT AGENCY
A 21ST CENTURY COMMUNICATION, REVENUE-GENERATION

SEPTA

Southeastern Pennsylvania Transportation Authority (SEPTA), the nation's sixth largest transit system, has deployed Planar displays to better communicate with passengers and generate additional revenue for the municipal agency. At its Suburban Station in Center City Philadelphia, the installation of three Planar Clarity™ Matrix LCD Video Walls was completed this past January, replacing decades-old CRT displays that had become incompatible with SEPTA's new-technology initiatives. The Clarity Matrix video walls currently serve users of the SEPTA subway system. "They beautifully present passengers with detailed maps of the SEPTA subway lines, and real-time departure and arrival time on all trains. Portions of each of the three video walls also show advertising and other information including a five-day weather forecast for the region, giving us a versatile and up-to-date communications platform that better serves customers, is more convenient, and directly contributes to our bottom line," says Jim Dellipriscoli, Advertising Manager for SEPTA.

SEPTA's partners in the Suburban Station video wall project include Titan, the New York City-based transit advertising company; and Diversified Media Group – of New Jersey – involved in the selection, design, engineering and configuration of Planar's Clarity Matrix and handled the installation of the video walls. Both firms have worked with Planar on other video wall projects and give the company high marks for the superior engineering and performance of its products as well as its industry-leading commitment to customer support and satisfaction.

The right solution for a high-traffic transit environment

The Suburban Station features three video walls of 46" Clarity Matrix MX46HDS displays. Each video wall contains 12 displays arranged in a four-wide-by-three-high (4x3) configuration that is recessed into the mounting surface. All 12 displays feature Planar® ERO™ (Enhanced Ruggedness and Optics™) technology, an optically bonded glass front that protects the LCD from damage in high traffic, public environments.

"When you have as many as 25,000 people passing through an area each day, as Suburban Station does, it's comforting to know that we have a solution like ERO that will keep the video walls from being damaged if people bump into them or they are inadvertently hit with luggage, backpacks, umbrellas, packages or other items," says Raquel Coward, Project Manager for Diversified Media Group.

Additional benefits of ERO include the fact that it was designed to minimize the effects of glare thereby enhancing clarity and ease of viewing. Also, it allowed SEPTA to provide protection for each Clarity Matrix display independently, thus avoiding the need for a single pane of glass over the entire video wall, a solution that would have been much more costly, more time-consuming and difficult to install, and one that would significantly complicate the maintenance process. "Without ERO, attention to problems with any single Clarity Matrix display would require shutting down the entire video wall and removing the single, large pane of glass. In a busy environment like Suburban Station, lengthy maintenance is not feasible, and SEPTA would not want any of its video walls to be non-operational for a long period of time," Coward adds.

And more than just wanting to upgrade from CRT technology, SEPTA and its partners also wanted a video wall solution that truly provided a better viewer experience and would give the station a modern, innovative look. This led to the selection of the Clarity Matrix LCD video wall over other technologies including LED. The top portions of the video walls contain the SEPTA system maps – which are highly detailed – and status information on all trains, all in 2560 x 1440 resolution. Passengers need to view this information close up, which they can do with Clarity Matrix but was much more challenging with the older, darker CRT displays. Enabling factors include Clarity Matrix's brightness (800 nits), native resolution (1920 x 1080) and contrast ratio (3500:1). Also Clarity Matrix MX46HDS delivers a tiled bezel width of just 5.5 mm – much thinner than competitive LCD displays, so the textual and graphic information, as well as the advertising content appears seamless. "The effect is that the video walls attract attention because everything is so big, bright and easy to read," says Jon Roche, Vice President/General Manager for Titan. "With this kind of platform, it makes the selling of advertising so much easier."

Easy installation, set-up and performance monitoring

Each Clarity Matrix video wall is installed on Clarity Matrix VESA 400 x 400 mount, combined with a third-party push-pull panel installation system that enables display panels to be put in place and then precisely aligned in relation to each other. This mounting system also accommodates Clarity Matrix's distributed electronics design under which controllers and other components can be mounted away from the video wall thus reducing depth and heat at the video wall. Further, Clarity Matrix is supplied with a hand-held remote that installation technicians use to perform set-up and color balancing.

A video wall solution for SEPTA had to provide extended operational capability – Clarity Matrix is 24/7 rated – and the means for remotely assessing how all panels in the video walls are performing at any given time. This need was met with Planar® WallNet™. This is a web-based system that Titan uses to provide control and management of the Clarity Matrix displays. "Planar WallNet is an especially beneficial option because it lets us do so many things to keep the Clarity Matrix video walls functioning at the optimal level," Titan's Roche says. "From our offices, we can use Planar WallNet to power displays on and off, adjust settings and display pre-sets, do additional color balancing, program and test custom commands, and so much more. It helps us assure the very high level of reliability and performance that SEPTA requires."

In addition to meeting the need for optimum communication of train and service information, Clarity Matrix provides an impactful and flexible platform for

"With Clarity Matrix, textual and graphic information, as well as our client's advertising content appears seamless and is eminently more readable than it was on the older, darker CRTs."

- Jon Roche,
Vice President/General Manager for Titan

Titan's client advertising content, which is UHD 3840 x 2160 resolution. The display's image quality ensures that high definition video content – in user-defined play-back sequences and loops – appears on the screens with the appropriate color saturation and balance. And depending on the content, Titan can easily map it to the entire video wall area dedicated to advertising, or apportion it to certain sections of the display area to draw viewer attention.

Taken together, these capabilities in Clarity Matrix define a solution that exceeds our performance expectations and more than meets the return-on-investment goals we had set for the video walls," SEPTA's Dellipriscoli says.