



# Leveling Up: The Creation of a Stunning eSports Center at Harrisburg University

## Case Study

Harrisburg University of  
Science and Technology

<https://harrisburgu.edu/>

## Summary

New Era Technology was engaged by Harrisburg University of Science and Technology to develop a design solution for a new eSports practice space. The task entailed working with both Harrisburg University's faculty and selected manufacturers, to create the ultimate eSports practice facility.

## Challenge

New Era had to create a design solution that overcame challenges presented by the size of the Harrisburg space and the need to ensure the image displayed on the wall matched that of the player's terminal. The concern was how to best translate the fast-paced action of a match to a large video wall with such a relatively close viewing distance while maintaining the high frame rate needed.

## Solution

Ultimately, a seventeen (17) panel Barco UniSee video wall solution, along with supporting audio and signal processing control system was selected. Infrastructure needs were identified, and New Era provided solution drawings for inclusion in the general contractor's package. A user-friendly Crestron control system was developed to allow for flexibility of signal routing and content layout on the video wall.

The signal, distributed via a proprietary 10GB network utilizing SDVoE (Software Defined Over Ethernet) technology, allows for a high bandwidth signal to be sent over ethernet with zero latency. This technical spec was a critical design component to support the graphics intense game play. The video wall allows for several screen layouts giving users the flexibility for multi-player gaming or focusing on one or two players at a time for coaching analysis. To provide sound masking during gaming sessions for players seated nearby New Era strategically mounted pendant ceiling speakers throughout the facility.

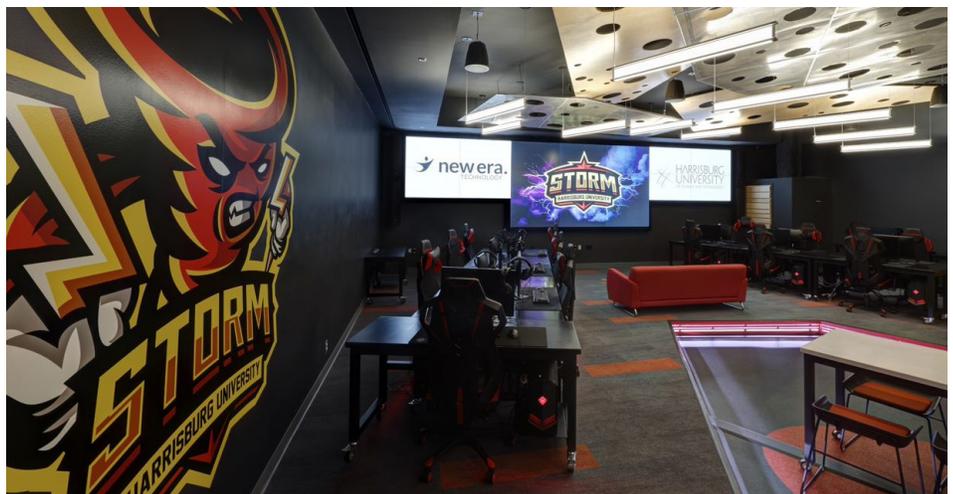


CRESTRON PANEL

“This facility has become a jewel not only for HU but the entire collegiate eSports community...”

The UniSee wall also provides for a variety of screen layouts depending on what the players most want to focus on. With this flexibility, The Storm has the ability to choose between displaying several players during a multi-player match or to get hyper-specific on the play of one or two players. The bezel-less design ensures that regardless of the configuration, the uniformity of the images remain the same.

In addition to Barco's UniSee panel, the Harrisburg center includes Aurora's IPX-TC2 SDVoE AV over IP transceiver boxes and IPX-TC3-WP SDVoE AV over IP transceiver wall plates. These 10-gigabit AV over IP transceivers allow for zero-frame latency resulting in a clear, high-resolution image when transferring the gaming sessions from a PC to the video wall.



While many other 10-Gigabit SDVoE solutions exist on the market, Aurora Multimedia IPX series was chosen to fulfill the requirements for this unique application due to its exclusive features. The transceiver design allowed for simplified ordering and troubleshooting, while the integrated video wall processing and scaling eliminated

the need for additional hardware. Dante expansion cards were used to independently route the digital audio from the gaming PCs direct to the audio processor, on the same network and cabling as the video, control, and other data signals.

## Process

An aggressive implementation schedule was developed to ensure installation of the practice suite before Harrisburg University's national eSports tournament and festival, HUE Festival, hosted in September. New Era began the project with commitments from the entire production team and manufactures to confirm the rigid deadlines. New Era's project team conducted daily reports and regular meetings to maintain momentum to keep everything on track and moving forward. Facility access and infrastructure considerations were coordinated with Harrisburg's general contractors.

## Outcome

"Working closely with Keith Thomas at Harrisburg University and the New Era Technology design team, we were able to come up with an impressive system that met all of their needs while giving them room for future growth. This facility has become a jewel not only for HU but the entire collegiate eSports community, and I'm proud to say it aided the HU Overwatch team to capture the 2019 National Championship," said Mike Morgan, CTS, New Era Technology.

## Want to learn more about this project or solution?

Call us at 877-696-7720 or send an email to [solutions@neweratech.com](mailto:solutions@neweratech.com).