



GVSU Laker Esports Center Takes the Win with Extron

“After attending Extron webinars and studying their Esports Design Guide and other reference materials, I felt confident that we could design our esports center in house. With a little help from Extron engineers, we did.”

John F. Klein
Associate Director & Program Manager
Information Technology, PMO
Grand Valley State University

Challenges

Grand Valley State University, the fourth largest university in Michigan, had an initiative to add an esports gaming center. However, allocating funds for this entertainment space had been a low priority. When incoming university President Philomena V. Mantella took the helm, she was determined to establish the Laker Esports Center for students on campus.

To adhere to a strict budget for this student entertainment venue, the university's design team carefully compared furniture and AV equipment. The AV system had to provide optimal image scaling and high performance switching and routing while being an economical solution. The system components had to have proven reliability, durability, and flexibility, as well as be easy and practical to operate and support. Also, system control had to be intuitive for users at various skill levels.

Players would wear headphones with a microphone to help maintain their focus. However, the coaches and spectators needed a way to see and hear the action and player exchanges. In addition, the AV system components would be the same or in the same family of products as used in existing campus spaces. The solution was an esports AV system based on Extron switching, audio, and control systems.



For the Laker Esports Center, GVSU partnered with local furniture manufacturer Herman Miller for the tables, Logitech gaming chairs, and accessories. Photographs courtesy of John F. Klein of Grand Valley State University

Design Solution

The next step was to locate the ideal esports gaming space. The Facilities Planning team repurposed an underutilized workout room on the lower level of the Kirkhof Center building. The space was cloistered, windowless, and with minimal direct light. Lighting levels within the room were adjustable. An adjacent dining hall allowed students and staff to observe gameplay between classes. These features made the room highly conducive to computer-based gaming and competitions.

The room is small, at 36' x 32.5' with 996 square feet of usable space. The esports center layout takes advantage of every square foot, encompassing a total of 25 gaming stations in five groups, or pods. Four of the pods consist of three to four stations each and are located around the room perimeter. A long table down the center provides 10 stations in two rows of five. The coach's station is at one end of the long table, and dual 75" displays are mounted on the opposite wall.

To furnish the space, the university was able to partner with local furniture manufacturer Herman Miller® for the tables, Logitech® gaming chairs, and accessories. Dell™ provided Alienware™ Area-51 gaming PCs.

Students can play individually or as a team, and two or more pods can be involved in group play simultaneously. The large displays can show the same content or a combination of gameplay, player stats,



Each of the 25 gaming stations provides the same high-powered gaming PCs, enabling the student to have a personal gaming experience, play head to head with another, or form a team for group play and competitive events.

and background data or information with commentator contributions. The coach selects the content for each wall-mounted display within the room, as well as for the three 75" wall-mounted displays in the dining hall. To extend AV and control signals from the rack-mounted components in the esports center's utility room to the five displays, content is distributed over an economical, shielded twisted pair cable infrastructure.

As with the other installations on campus, the AV system is Extron. The IT team designed the AV system in-house using a DTP CrossPoint® 4K seamless presentation matrix switcher, a ShareLink® Pro wireless



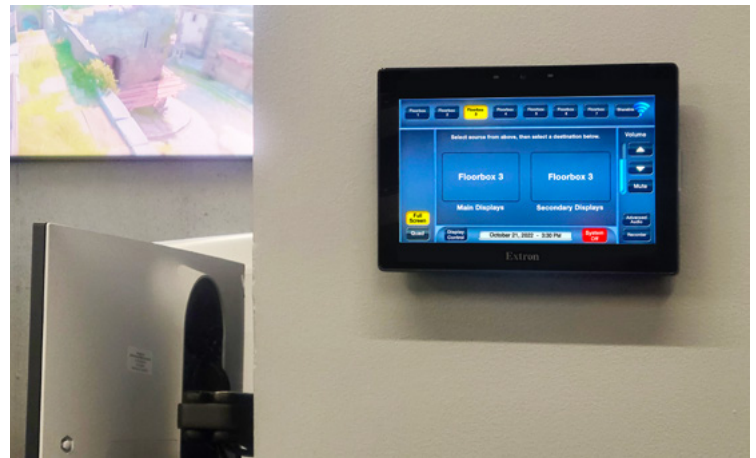
Large displays at the front of the center and within the adjacent dining hall are fed by the Extron DTP CrossPoint 4K scaling presentation matrix switcher, offering viewpoints of gameplay and avatar or player stats.

collaboration gateway, and pendent speakers. TouchLink® Pro touchpanels provide system control. Innovative Communications, Inc. assisted the university team with design validation and equipment procurement.

DTP System Engages All in the Game

An Extron DTP CrossPoint 8x4 scaling presentation matrix switcher is the heart of the installation. It facilitates display of content from seven source feeds. One feed is available from each of the three- and four-station gaming pods, and three feeds come from the central 10-station pod. Signals are run over twisted pair cabling with interconnects via floor boxes. Two Extron DTP distribution amplifiers support the wall-mounted displays in the dining hall. To enable up to four windows on the center's main display, the installation includes an Extron MGP 641 multi-window processor.

The selected DTP CrossPoint 4K matrix switcher model includes a built-in 2x50 W stereo audio amplifier, streamlining integration and conserving rack space. The audio amplifier works in concert with Extron SF 26PT pendent speakers provide engaging sound throughout the room. They selected the black version of the pendent speaker so they would blend completely into the room's high, black-painted ceiling. After numerous requests from spectators, the school is in the process of installing speakers in the dining hall to allow them to enjoy the sounds as well as the visuals of the frenetic gameplay. An Extron audio amplifier and



The AV system is controlled using one of the Extron TLP Pro 1025M 10" TouchLink® Pro Touchpanels, which work in conjunction with the IPCP Pro 355MQ xi control processor built into the DTP CrossPoint matrix switcher.

TouchLink Pro touchpanel with volume control are already in place to support this system expansion.

TouchLink Pro Provides System Control from Multiple Points

The AV system can be controlled using any of the Extron TouchLink Pro touchpanels that are working in conjunction with the DTP CrossPoint 4K matrix switcher's integrated control processor. Typically, the touchpanel at the coach's station or the wall-mounted unit within the room is used to operate the presentation system and select the content for display within the esports center and the dining hall. A tabletop touchpanel is mounted

to the top of the equipment rack. While it can be used to control the AV system, the support staff primarily uses this touchpanel to perform system maintenance and advanced control functionality.

Results

The Laker Esports Center draws students from across campus to this previously under-utilized space to participate. Its popularity has grown exponentially simply by word of mouth. The next stage is to launch learning programs that instruct students on the business of esports, such as videography, statistical analysis, and organizing and hosting competitions. Offerings will include theory and practical first-hand experience working with the AV equipment and the related technologies.

While the esports center is unique for GVSU, integration of the same types of reliable AV products used across campus ensures that the support team knows just what to do to keep the action going. "We standardized on Extron because they're built well, have the features we want, and they last," says John Klein at GVSU.



Three displays in the dining hall adjacent to the Laker Esports Center enable casual diners and observers to feel involved in the action.

Extron Equipment - Partial List

Model	Description
DTP CrossPoint 84 4K IPCP Q SA	8x4 Seamless 4K Scaling Presentation Matrix Switcher with Integrated IPCP Pro 355MQ xi Control Processor, 2x50 W Stereo Amplifier, and AV LAN
DTP2 T 202 FB	Two Input 4K/60 DTP2 Transmitter for Floor Boxes
DTP HDMI 4K 330 Rx	DTP Receiver for HDMI, Audio, and Bidirectional Control up to 330' (100 m)
DTP HD DA4 4K 330	Four Output DTP Distribution Amplifier for HDMI, Audio, and Control up to 330' (100 m)
MPG 641	4K/60 HDMI Multi-Window Processor with DTP2 Extension
ShareLink Pro 500	Wired and Wireless Presentation Gateway
ShareLink Pro WFA 100	USB to Wi-Fi Miracast Adapter for ShareLink Pro 500
SMP 351	H.264 Streaming Media Processor with 400 GB Solid State Drive
XPA 4002-70V Amplifier	70 V Two Channel Amplifier with 400 Watts per Channel
SF 26PT	SoundField® 6.5" Two-Way Pendent Speakers
TLP Pro 1025M	10" Wall Mount TouchLink Pro Touchpanels
TLP Pro 725T	7" Tabletop TouchLink Pro Touchpanels



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