



FROM LEGACY TO MODERN: CANON-MCMILLAN'S AUDITORIUM TRANSFORMATION

THE CHALLENGE

In the winter of 2025, Canon-McMillan High School in Washington, PA set out to modernize its aging auditorium. The 1,000-seat space had been operating with a mono sound system that had not been updated since 2010. With frequent assemblies, performances, and community events, the district recognized the need for a significant technology upgrade.

Installing a high performance audio-visual system in the older building presented challenges. The original building's limited pathways required current network cabling using existing routing.

THE SOLUTION

With a longstanding relationship already in place, the school partnered with Intertech Ci to design and install a modern AV system capable of supporting both live performance, presentation and every day needs. The system was designed with flexibility and long-term reliability in mind, while remaining easy for staff and students to operate.

The project began the day after New Year's and took approximately three months to complete. Because the auditorium remained in active use, the installation required careful coordination with school staff and students. The process also became an educational opportunity, as technical theatre students were able to observe and learn from the installation work.

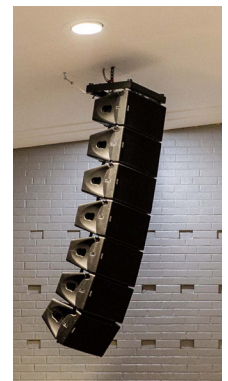
To support the new system, the Intertech Ci team completed extensive conduit work and installed new cable pathways throughout the building. While time-consuming, this work ensured the auditorium could support modern, network-based audio and video distribution.



Main center loudspeaker array & subwoofers



Yamaha digital mixing console



Left & right line array



TECHNOLOGY UPGRADES

The completed system transformed a dated auditorium into one of the most technologically advantaged performance space in Western Pennsylvania. The upgrade focused on three key areas: sound reinforcement, live performance, video and presentation capabilities, and integrated control systems.

Advanced Sound System

- Main center loudspeaker array
- Left and right line arrays
- Two side-mounted subwoofers, to the right and left of the main center loudspeaker array
- Floor wedge stage monitors across 20 locations
- Up to six independent monitor mixes available from the console

The system was designed to provide consistent sound coverage across the entire auditorium, ensuring speech, music, and performances remain clear and balanced throughout the space.

Professional Audio Control

- Yamaha digital mixing console
- Network-driven audio architecture for flexible routing and control
- Left, center, and right professional sound system with dedicated subwoofer feed

Video and Presentation Capabilities

- Upstage scenery projector
- PTZ (pan-tilt-zoom) camera for video capture
- Main presentation projector
- Low-lux stationary camera for low-light environments

Integrated Control Systems

- Central equipment rack housing core AV infrastructure
- Portable touch panel for system power, displays, video routing, and audio levels
- Stationary control panel in the booth
- Wall-mounted control panel for quick access

Together, these systems create a fully networked audio and video environment that allows staff and students to manage productions and presentations with professional-level control.

THE RESULT

Canon-McMillan High School now operates a fully modernized auditorium capable of supporting performances, assemblies, and large-scale presentations with professional sound and visual quality.

The upgraded space also supports hands-on learning, giving students experience with the same technology used in professional venues while strengthening the school's performing arts and theatre programs.

