# Immanuel Lutheran Church Amplifies New Sanctuary Building with Tech Electronics

#### **COMPANY**

Immanuel Lutheran Church

#### **CHALLENGE**

Provide quality audio and visual systems for the new 12,000-square-foot building; coordinating all systems within the aesthetic and acoustic limitations of the building.



#### SOLUTION

Tech Electronics installs new cutting-edge main sound reinforcement system, audio and video monitor system, video projection, and TV distribution system throughout the new Sanctuary building including the Narthex, Cry Room and lower level Nursery. All systems were designed by DSH Audio Visions LLC; a Milwaukee based A/V consulting firm specializing in House of Worship projects.

#### **RESULTS**

New sound, video monitoring, and TV distribution solutions integrated seamlessly into the new worship space, providing quality sound and video systems throughout the Church.

The Immanuel Lutheran Church in Washington, Missouri is located approximately 50 miles west of downtown St. Louis. The church serves the Washington area with various programs, activities, volunteer opportunities and worship services for the community. Established on April 21, 1862, Immanuel Lutheran Church has evolved into a network of preand elementary schools, and recently built a new Sanctuary building; however, the church had not updated its building technologies since 1997, making the systems inadequate to its members.

Sound quality ranks as one of the top priorities of Immanuel Lutheran Church and its members. Due to the number of worshippers, Immanuel Lutheran Church realized it needed a new Sanctuary building and audio system to accommodate its staff and members.

### Taking Acoustics to the Next Level

Immanuel Lutheran Church turned to longtime partner and systems integrator, Tech Electronics, to implement the new installation plan for the 12,000-square-foot venues' unique architectural and acoustic properties, with improved sound quality, clarity and efficiency of the system as the Church's primary goals.

The new capacity level of the Sanctuary building and balcony allows for an increase in the number of members the space can seat. The new sanctuary has seating for 550 members, while the former Sanctuary only seated 220. As part of the construction, Tech Electronics proposed a main sound reinforcement system, a secondary sound reinforcement system for the choir, a monitor sound system for musicians, and a video projection system with two large rear projection screens. Additionally, Tech proposed a camera system to enable the organist to view the service while facing the rear of the building, as well as a TV distribution system that feeds video signals to other areas of the Sanctuary, specifically the Narthex, Cry Room and lower level Nursery.

During the construction process, space limitations were uncovered and Tech Electronics was responsible for recommending solutions that would fit the specifications provided by the Church's design consultant, DSH Audio Visions LLC.

Based on the building's specifications, Tech Electronics provided a Roland digital mixing console, Roland digital snake wiring system, Electro-Voice speaker systems and amplifiers, Symetrix digital processing equipment and wireless microphone systems by EV/Telex – all leading manufacturers of top-of-the-line communications equipment.

Since the building had drywall ceilings attached directly to the main structural roof beams, all speaker suspension cables had to be precisely positioned prior to drywall installation. Tech Electronics carefully engineered the speaker suspension system and provided drawings that were accurate to within ½" to the project's electrical contractor, Schaeffer Electric. Precise CAD drawings were required to show exactly where the drywall penetrations for the support cables needed to be placed since those supports had to be installed before the drywall was mounted. These drawings had to factor in the tilt angles of the speaker systems so that the cables allowed exact aiming.

It was also discovered that some of the choir speakers would not fit into the spaces provided. Working carefully with the General Contractor, Lawlor Construction, an alternative mounting system was developed that allowed everything to fit properly.

Two large rear projection video screens completed the Sanctuary technology upgrade. The rear projection feature enabled the Church to conceal the two large projectors, allowing attendees to focus their attention properly.

"The new systems provided the Church with a tastefully done upgrade to their technology," said Steve Knese, System Sales Manager for Tech Electronics.

## An Upgraded System Helps Church's Future Growth Plans

The investment for new sound reinforcement and video projection systems allowed Immanuel Lutheran Church to enhance their ministry by utilizing new technology to ensure its congregation is able to hear

and see the messages clearly. Immanuel Lutheran Church was impressed with the level of expertise and professionalism of Tech Electronics.

"We now have superior sound and capabilities to communicate with different parts of the building to provide an enhanced worship atmosphere for our members than ever before," said Sachs Electrics' Terry Witthaus, project coordinator of construction for Immanuel Lutheran Church. "We look forward to working with Tech Electronics in the future."

#### Conclusion

Tech Electronics effectively worked within the construction process, with an ever-present focus on the customers' needs, to provide Immanuel Lutheran Church with a solution that enhances the worship experience with sound and AV systems, allowing the Church to now accommodate its congregation well into the future.





With over 50 years of experience as a solutions-based systems integrator, Tech Electronics offers a full range of systems and services that help our customers work smarter, feel safer, and collaborate more effectively. Tech Electronics specializes in technology solutions designed to best fit each site's unique layout and priorities. Our tailor-made systems deliver connection and protection, ensuring that our customers are at their technological best as they work to advance their own meaningful missions. From Fire, Security, Telephone, IT Services, Professional Sound, Intercom, and Audio/Visual Systems to Monitoring and Service Support, Tech Electronics is a significant and unparalleled partner to the education, healthcare, government, commercial / industrial, SMB, and worship industries.