

Ford Audio-Video staff working with staff on training at Holy Spirit Catholic Church in Las Vegas, on the recently installed Yamaha TF5-CA digital mixing console



# Las Vegas Church Shines with Meyer Sound LINA in New Space

After years spent at a local high school, Holy Spirit Catholic Church completes a new building project with an extensive audio design that clearly reaches every seat in the house. **BY ANDRES CAAMANO**

**A**FTER SPENDING more than a decade holding services at an adjacent high school, Holy Spirit Catholic Church turned a significant corner with the completion of their first permanent facility last year.

For a church that has been growing steadily in recent years, the building project also involved an extensive audio and video installation in its worship space, as well as elsewhere throughout the campus.

As explained by Ivan Diaz, Holy Spirit's director of IT and media, the installation involved "a lot of factors to consider, as there can be 1,600 people seated in the pews. We needed to have enough punch to reach every

seat in the venue," within a structure built in the style of a traditional Catholic church.

Among the most notable elements added to the worship space were a trio of Meyer Sound LINA line arrays, each comprised of six self-powered boxes (made up of dual 6.5-inch woofers and a 3-inch high frequency driver), a 750-LFC low-frequency subwoofer, and three Panasonic PT-RZ970LW 10,000-lumen WUXGA DLP laser projectors.

Serving as the design firm handling the audio and video needs for the new facility was Coherent Design, based in Las Vegas, while Ford Audio-Video, with offices also located in the city, worked on the install.

In describing how the space was modeled, Coherent Design AV systems designer,

David Starck remarks, "The head priest (the Rev. William Kenny) is very aware of the environment they are in (in Las Vegas), and that people have high expectations in terms of the systems they see around them, and he wanted the new facility to reflect the best available."

Explains Randy Robbins, project manager from Ford AV, a major goal of the install was "speech intelligibility, and that was achieved -- and exceeded -- with the LINA line arrays," while adding, "Don't forget the delay row (of 18 full-range pendant JBL speakers installed in a low ceiling section), as those also fill in for that area in terms of speech intelligibility

Such a multifaceted speaker system was needed in a circular worship space that re-

quired 270-degree coverage, while having the flexibility of handling performed music, ranging from traditional choir to contemporary ensembles.

In terms of what was the most integral aspect of the install, both Starck and Robbins referenced the Meyer Sound line arrays, with Starck stating, "That's what everyone hears ... the face of the system." Robbins also highlighted the Yamaha TF5-CA digital console set up in the worship space, serving 48 channels and 32 inputs, with an added Yamaha NY64-D digital interface card, to go with the church's personal mixing system, made up of eight Aviom A360 personal mixers, each capable of 36 channels with Dante distribution.

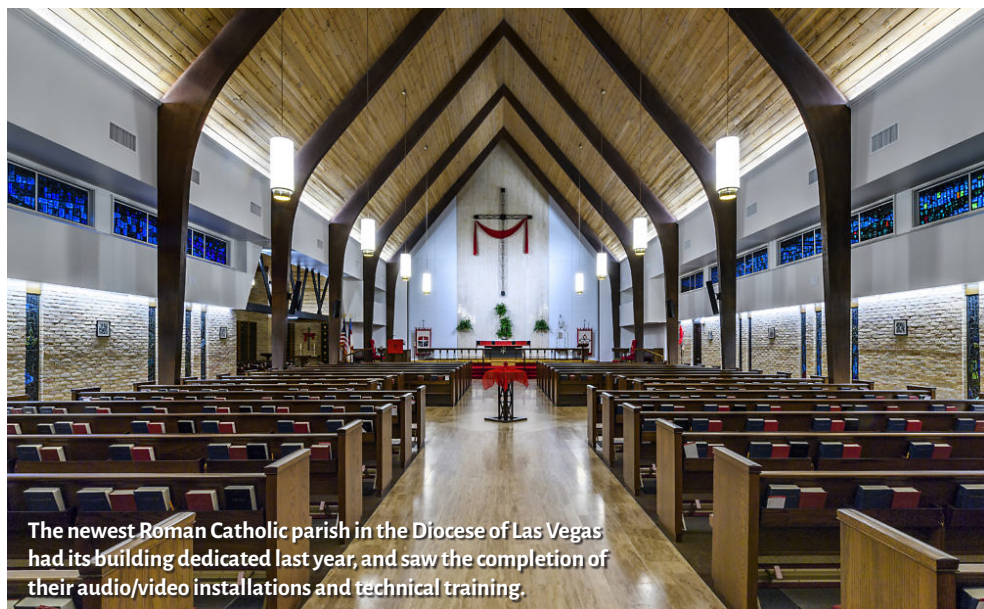
For Diaz, what stood out from the install, were the projection screens and the Meyer Sound line arrays.

"Definitely everyone can see (with the projection screens), since they might not know all parts of the Mass, but they can read and sing along," he notes. About the LINA speakers, he adds, "It's fantastic, as we are able to articulate individual voices and instruments. We have people who have been listening to the same person or song for years, and they say it sounds the most beautiful now."

Helping the LINA system in its performance is a tandem effort, as it works with the Meyer Sound Galileo GALAXY Network Platform (using 408 and 816 units in the space), with each unit designed to drive and align loudspeaker systems across multiple zones, along with the Meyer Sound RMServer Remote Monitoring System, providing an up-to-the moment, exact status of every loudspeaker in the system.

The newest Roman Catholic parish in the Diocese of Las Vegas had its new building dedicated on June 22 of last year, with the audio and video installation work, along with the associated training, completed eight days earlier. The installation earned a Solomon Award last year, in the category of Design and Installation of Audio System or Sound Reinforcement.

Following the install's completion, Ford AV coordinated training with the church on its new systems. As explained by Robbins, "We have a specialty training department, educating the customer on their new system, and the option for advanced training." Beyond just familiarizing staff and volun-



**The newest Roman Catholic parish in the Diocese of Las Vegas had its building dedicated last year, and saw the completion of their audio/video installations and technical training.**

teers with the new equipment, he added, "we will videotape the training for you, and will show them how to operate the equipment to the best of their ability."

The line array installations required some prerigging, taking about three days, after which, he says, "the duration for hanging the Meyer arrays took another three days ... a day per line array and sub." The hanging of each line array involved a complete alignment to Meyer Sound and Coherent Design specifications, with Ford AV connecting with Meyer Sound engineers, matching the parameters provided through Meyer Sound's mapping program.

In addition to line arrays and the projection system, other major elements included an extensive microphone package, featuring a mix of AKG, Audio-Technica, Audix, Shure and Countryman mics. Among those installed were an AKG gooseneck, the CGN521 STS, as well as an Audio-Technica gooseneck, the ES931, an Audio-Technica cardioid condenser mic, the AT4041, and a drum pack kit of seven mics, of the cardioid DP7.

For the choir, a trio of boom mics from Audix, the MB8450, were used. Lavalier mics added by the church were by Countryman, four B6W4FF05BS mics and four E6XDW6L2SL headworn mics. The Shure microphone gear included in the system featured a dozen ULX2/58 handheld mics, three wireless ULX-D4Q quad channel receivers, to go with a dozen ULXD1 digital bodypack transmitters.

The extensive investment in microphones by the church has been worthwhile, noted Diaz, adding, "We are a very musical parish. By upgrading the mics, it has been magnificent, allowing our congregation to engage in the homilies."

In addition to the worship space sound, to power sound for offices throughout the new building, was a Crown DCi 8|600, an eight-channel, 600-watt, 70-volt distributed amplifier.

For the video system in the worship space, working with the three Panasonic projectors are three custom tension D-Lite screens, serving left and right in the front of the worship space (each 220 inches and motorized), paired with a confidence screen at the back of house for the pastor.

The church began to live stream services, thanks to three Vaddio ClearVIEW HD-20SE PTZ cameras, each featuring a 20x zoom lens, mounted to the ceiling. The cameras offer the church an opportunity to record weekly homilies to YouTube, explains Diaz, along with projecting to the screens during special events or baptisms.

Once the congregation was introduced to what had been installed in the space last June, Starck said, "I think the head priest and the congregation have been very pleased with it." Robbins adds that what he's heard about the install has been "two words ... high praise." **WF**