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Uplifting Experience

Ascending Screen Solves Sanctuary Space Problem

by Steve Harvey

House of worship architectural and aesthetic considerations often present challenges to the design of video, lighting and audio system installations. The First Presbyterian Church of Fort Collins, CO was no exception, offering designer Jeff Geiler of Gwynfyd Consulting only one option when it came to adding a video screen and projector as part of a general upgrade to support the church's incorporation of contemporary services.

"The crucial thing was that the screen could only be located in one place," said Geiler, who is based in Aurora, CO. The location of the stained glass and the sanctuary's architectural layout greatly limited the options. "We had to try and work it with the architect to carve out some sort of space. We were limited pretty much to one area, and it was pretty tight."

Although the First Presbyterian Church has been on its present site in Fort Collins since 1872, the present, traditional-looking sanctuary was rebuilt in 1974. The cathedral ceilings and architecture limited the options, says Geiler. The only available wall space was approximately 10-feet wide. A drop-down screen was out of the question, and, aesthetically, it was decided that a vertical lift screen would work best.

"We decided we wanted an ascending screen, as it would just look better in the space," Geiler explained. "If you hung a screen coming down you



▲ To solve the First Presbyterian Church's space problem, Vutec custom-built a screen that would fit into a box that fit exactly into the 10-foot space.

would have covered the traditional church banners that are hung in that area, or would have had to shorten the banners considerably. Whereas now, with the ascending screen, when it's closed, it's below the banners. We did shorten the banners a little bit, and when the screen rises, it covers the bottom of the banners, but you see the full banner when it's retracted."

Geiler contacted a couple of screen manufacturers only to discover that they were only able to offer standard-sized screens. "Because of our limitation to 10 feet we wanted to maximize screen size as much as we could. When we talked to Vutec, they were able to build a screen that would fit into a box that fit exactly into that 10-foot space. The projection image is 66 x 88. That has to do with the mechanics of the screen size in relation to the box."

Vutec's Vision XR rising arm screen system fully retracts into the floor

houses of
worship

or—as in this case—into a cabinet, and is covered by an automatic trapdoor. The company has designed Vision XR for situations exactly such as those encountered at First Presbyterian, where the aesthetic integrity must be preserved or architectural features, such as a cathedral ceiling, militate against any other option.

A conventional IR or RF remote-control unit is used to operate the system. The company's semi-rigid, heavyweight Vu-Flex Pro screen fabric, anchored top and bottom, eliminates screen movement from heating or air-conditioning ducts.

The projection and screen systems were just a part of a general upgrade at the church, explains Geiler. "It's a traditional church, but they've developed a contemporary service, so the intent was to support the contemporary service with audio and video. We redid the stage layout, the band inputs, and the whole system through to the amplifiers, except for the speakers."

Dan Shore, at the time working as installation project manager with Metroplex and now at Audio Analysts in Colorado Springs, takes up the story. "Vutec worked with us to fit as large as possible a screen into that box, with the aspect ratio that we had. It was the only solution for the job, and the engineering was spot-on. Vutec provided terrific customer support. We really appreciated working with them on that."

Metroplex was additionally involved in the church's extensive retrofit of the lighting and electrics, says Shore. "We also did some

head-end installation for audio—mostly processing and routing."

Next came the challenge of selecting and installing a suitable projector and lens, continues Geiler. "An Eiki LC-X1100 projector was chosen for its brightness, because we have a lot of stained glass. So to keep the image bright we picked a high-luminance projector."

The projector had to be installed a considerable distance from the screen and also required customization. "To get to the little screen, which is 86 feet away, we had to get a custom Navitar Buhl LCD lens. That lens had not been used before on that projector. There were some concerns that Navitar had with image warp and color shift, so they had to try the lens before they gave their blessing."

Shore concluded, "The general contractor mounted the screen box to the wall at Jeff's specified location, and we were able to focus the projector on the screen. We were at the extreme limits of the lens. It was one of those things where, if it had been back another two feet, it wouldn't have worked."

► **Vutec**
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