



Crestron AV Control Technology Helps Smoky Hill Vineyard Church Lead its Growing Congregation in Contemporary Worship

Summary

Smoky Hill Vineyard Church is a midsize house of worship that needed to accommodate a growing congregation. Driven by a contemporary worship style, SHV welcomes more than 2500 people to two Sunday services, with plans for a Saturday evening service in the works.

The church's existing AV design was inadequate from the beginning and became outdated after only four years. SHVs leaders knew it was time to upgrade the entire infrastructure for the future, the right way. They wanted a versatile, budget-friendly, yet powerful audio/video system that would enable the ministry to grow and serve the community for many years.

Background

The 1200-seat multi-purpose sanctuary is also used for concerts, weddings, and a variety of special events. Besides the sanctuary, other high-usage areas include a 225-seat

stage and café area and adjoining Starbucks, a large nursery/kids area, and the foyer/welcome area.

The audio/video system was causing frustrations that Worship Pastor Greg Russell is glad to leave behind. Unstructured wiring, multiple disparate user interfaces, and the inability to easily control and switch signals and screens at will, limited the distribution of media throughout the church.

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Shawn Hansson, President of Logic Integration, Inc.

The Solution

To help design and implement a fully-integrated and scalable AV control system to meet all its requirements for years to come, Smoky Hill turned to Denver-based integrator, Logic Integration, Inc.

Through a series of detailed discussions with Russell, the objectives/needs of the implementation were identified:

- > Switching 12 AV sources using four different types of video, with the ability to route every source to any screen
- > Utilize the café area as a local system, and run audio and video to the area independently – with the ability to also connect it to the main sanctuary's sources
- > Powering on the entire building AV system from one touchscreen interface
- > Integrate new LCD displays throughout the church and eliminate TVs and projectors being left on when not in use
- > Seamlessly mix both Mac and PC media for AV presentations
- > Incorporate existing equipment such as projectors, amplifiers and sound console into the new system design

"Greg is very knowledgeable about audio and sound, so he had a lot of ideas, especially knowing the frustrations from the old system," said Shawn Hansson, Logic's president and lead system designer. "The primary objective was to integrate all the disparate systems into one easy-to-use control interface, and the solution we recommended delivered everything they wanted to accomplish,"

Crestron control technology plays a leading role in the fully-integrated control and management system, streamlining campus-wide audio/video switching, stage lighting and house lighting. A Crestron PRO2 Dual Bus control system, CEN-RGBHV16X16 Wideband RGB Matrix Video Switcher, and TPS-6X and ST-1700C touchpanels make it easy.

Systems at a Glance

The PRO2 enables a complete integration of all AV switching and routing, power sequencing of 18 amplifiers, and house and stage lighting into one intuitive interface.

As a result, the café is now an extension of the sanctuary, serving as the overflow room, complete with direct audio and HD video feeds from the worship service. Conversely, the cafe can also be used as a dedicated space with independent AV feeds. A few button presses on the touchscreen produces the desired result immediately.

Six LCD TVs were installed across campus and can be remotely controlled from the touchpanels. "To turn off the old TVs, someone literally ran around the church with a remote, shutting down each TV/projector individually, which ultimately wasted electricity," said Hansson, who is also the drummer for SHV's worship band.

Any of the 12 AV sources can now be routed to any screen throughout the church with a simple button press. While the café and lobby displays are showing the live sermon, the display in the Kids Zone can be showing a Veggie Tales DVD.



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How the System Works

Control Authority, a Denver-based independent Crestron programmer, customized the touchpanels for intuitive, yet comprehensive command of house and stage lighting, versatile AV switching and routing, and audio system power sequencing. Touchpanel screens are easy to navigate and are designed for any level of user.

“SHVs staff was able to voice their desires for the Crestron system, and we collaborated to create a solution that was easy for them to understand and use,” explains Chris Jensen, Control Authority owner and lead programmer. “We created presets that set up the lights, sources, projectors, monitors, and auxiliary venues, with the push of a button.”

“This GUI design makes the media team more efficient, and shortens the learning curve for new people,” explains Hansson. “It’s basically - ‘What would you like to do? Turn system on? Ok, which room? Café, Sanctuary, ALL, etc?’ It works every time, it’s reliable and it’s consistent.”

One Touch Campus-wide Lighting Control

Since ambiance is such an essential part of the service, SHV wanted total control of all lighting right from the touchpanel. The new interface allows for six lighting presets that run both the house and stage lights.

Selecting the “Pre-service” button sets stage lighting for the band and house lights for people to be seated. Press “Music” and house lights dim while stage lights are set for the band to begin. The “Prayer” preset dims lights to 50%, with a spotlight

on the preacher. Once the sermon begins, the “Message” button brings house lights up to 70% for note taking.

When the message is finished, the “Exit music” preset sets stage lights for the band, and house lights at 50%. After the last song, the “Exit” button sets stage lights for the band to end, and house lights are set for people to walk out, but not too bright.

Results and Benefits

The staff can control five racks of equipment from one touchpanel, compared with three interfaces needed to operate the previous system. The system also allows SHV to easily expand when ready. Future plans call for adding two-four projectors and screens in the sanctuary for delay screens, confidence monitors for the stage, and high definition PTZ cameras, which will be controlled from the Crestron touchpanels.

“The staff is amazed that the touchpanels can control the entire system, from turning on the AV, the sound system, amp racks, house lights, and the DMX stage lighting,” concludes Hansson. “Requiring less staff to man the service makes it run more efficiently also.”

“The new Crestron system makes it easy to have seamless transitions in our services. With the touch of one button, we can adjust our lighting, change what is being projected in our sanctuary and alter what is being seen on our CCTV throughout the church,” said Ryan Bayne, Pastor Russell’s assistant. “It’s an incredible value to our everyday processes, and conserves energy, which saves the church money in the long run.”