



ascending screens



dual screens



acoustical panels



The Challenge

St. Paul United Church of Christ was in need of a face lift. Built in the early 70's, the Congregation was looking to update not only the aesthetics of the sanctuary, but also improve the acoustical and video aspects. They wanted to provide a setting that would not only please the traditional members, but also attract the younger generation with the latest in technological presentation equipment. With an audio system that was relatively new and a non-existent video presentation capability, Innovative Technology Group (ITG) had to provide a solution that would combine old technology with new.

The Audio Solution

Originally, the audio system was located in a small closet, left of the stage behind a brick wall. Individuals operating the audio system had no way of hearing it and had to, therefore, run back and forth assessing the sound.

To rectify this problem, a raised platform with a tech booth was built at the back of the sanctuary, elevated enough for technicians to be able to see over the heads of the Congregation when they stood, yet aesthetically pleasing. It was very important to St. Paul members that the room did not look too technical. A roll-top desk was designed, with the help of a custom mill-work company, that houses the operations for the sound, video and control system.

Further acoustical analysis found that the intelligibility of the audio for the center section of the sanctuary was weak. Working with the existing sound system, ITG augmented the house JBL speakers with a Bose Line Array speaker system that could be painted to blend into the decor of the room. ITG also added some sub cabinets for bass and built them into the stage. The church's existing 12 channel mixer was converted to 32, and included a DSP (digital signal processor) which allows one to

control the quality of the sound, shape, feedback control and zoning in the areas they want it to go. Originally, the audio bounced all over, so acoustical panels were also installed down the center wall to reduce this problem.

Video Incorporation

When deciding on the incorporation of video elements, there were two large obstacles to overcome: one being the beautiful organ pipes that the Congregation did not want to cover up with a screen; the other was the height of the ceiling for mounting projectors. To compensate for the pipe organ, ascending electric screens were installed in a custom-made shelf. When needed, a simple press of the button located on the Crestron touchpanels in the tech booth started that process. Custom-made chandeliers were created and added to the existing lighting system. They were designed in such a way that they

could hold one projector or theatrical lighting fixtures. A total of four chandeliers were installed for this equipment. Again, the integration of technology into the architecture eliminated that technical feel that the client wanted to avoid, while still creating a state-of-the-art audio and visual production.

Finally, the stage incorporates 9 floor boxes which include: 4 mic inputs and a speaker monitor for the musicians to be able to assess what the Congregation is hearing. Two of the boxes also have a video monitor output. One special floor box allows you to plug two mics in. These two mics are part of a design option for a non-technical operation mode via the touch panel control system. This gives the church the option to use the audio system on a lower scale for smaller services (with out video, lighting control, and full audio).

According to Mark Vogt, St. Paul Board member and client liaison, "the outdated sound system and inadequate lighting made it very limited to what we could do and how we could present ourselves. ITG designed a system that is user-friendly and seamlessly integrated into the existing style of the church, as well as aesthetically pleasing to its members. They (ITG) overcame all of the issues."

Equipment List

Media rolltop tech desk

AUDIO

Bose MA12 Line Array Speakers

Bose MB4 Sub Bass Speakers

Crown CL2 Power Amp

Biamp Audia DSP (Digital Signal Processor)

Mackie 32 ch Mixer

Tascam CD player and Recorder

Ace Backstage Floor Pockets

VIDEO

Christie LCD LX45 projectors

Da-Lite Ascending 9x12 Screens

Extron Scaler Seamless Switcher

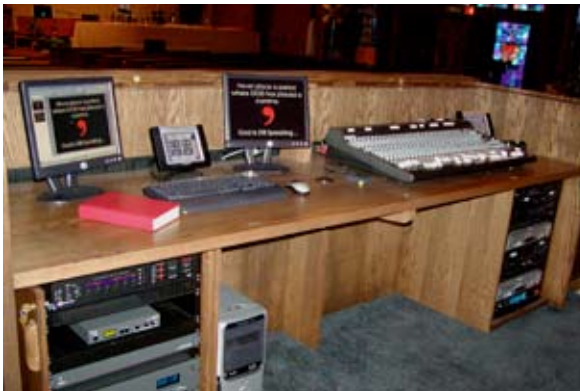
Extron Distribution Amps

Samsung DVD player and recorder

CONTROL

Crestron Pro 2 processor

Crestron TPS4000 touch panels



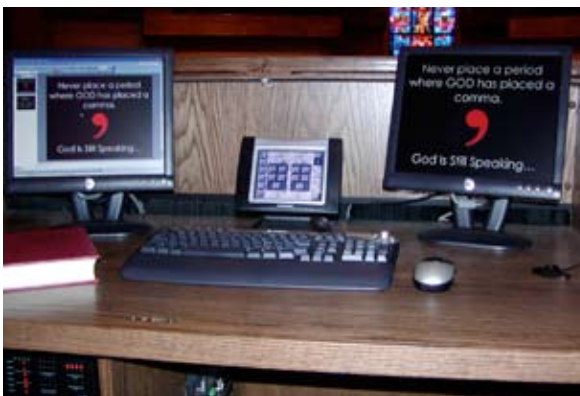
roll-top
tech desk
on raised
platform



bose line
array
speakers



32 channel
mixer



dual
crestron
panels



A Color Art Integrated Interiors Company

Because what's inside counts.