Forest Brook Bible Chapel

Our Vision
To provide complete communication, music, lighting, visual and performance technical arts solutions.

Our Mission
"To enable clear communication through the inspired use of the technical arts."

Our Objectives
To play a pivotal role in helping others communicate their message.

To provide informed and useful design, application and product information for effective technical arts solutions.

To make technology less complicated and more accessible.

To provide cost-effective solutions to our valued customers in a timely manner.

To empower our team to help you.

Our Commitment
Clear direction, thoughtful solutions, dedicated effort, promises kept.

Our Philosophy
Serving the needs of our customers.

Our Fans
Churches, Studios, Theatres, Schools, Corporations and Individuals

Our Services
- Complete consulting, design, installation, and training services
- Sales and service for a comprehensive range of Pro Audio, music, lighting, video projection, computer and data systems
- Full event production services
- A well stocked Rentals department Audio – Backline – Video – Lighting –Effects – Recording – Wireless Mics –Processing – Cameras – Drape –Staging – Screens – Audio / Visual
- Computer Services & Installations

Our Challenge
Forest Brook Bible Chapel was building a new worship facility in Ajax. This modern church structure seats between 600 and 700 people. The facility required complete audio, video and lighting solutions, including AV connectivity to other ministry areas such as their side chapel and multi-purpose rooms, nursery, foyer, etcetera. The project design competition allowed us to present the scientific methods of evaluation and prediction we use to develop audio-video-lighting system requirements, and ultimately lead to an efficient and effective system design.

Key Requirements
Some of the requirements laid-out by the ministry team at Forest Brook were:

- A Left-Centre-Right configured sound system, utilizing 3 way, bi-amped mid-hi cabinets supported by low frequency subwoofers, and fill speakers if necessary.
- An appropriate sound system control and processing package with high quality and reliable amplification.
- Proposals for minimizing stage volume from stage monitoring and instrument amps – this was a requirement due to the relatively reflective rear-of-platform wall surfaces (which work well in supporting congregational and choral singing).
- An integrated lighting system that would provide simplicity of operation, sufficient light for congregational use, and specific lighting of the platform that wouldn't conflict with the video screens, that would support the use of video cameras, and enable special services, church dramas, etc.
- A comprehensive but volunteer friendly video system for capture, control, routing and projection to enable the worship services and other ministry uses of video.

Solution Design
- The acoustics of the building were modeled in EASE (software used to analyze the acoustic properties of specific rooms, how sound systems work within the specific room etc). The EASE output data lead to the definition of the speaker system required to provide the specified-in-advance performance capabilities required of the system.
- Both digital and analog mixing consoles were considered, but the saving/recall features and built in processing available in the digital mixer made it the choice.
- A lighting grid was designed for over-the-platform and lighting "booms" were placed in strategic locations on the ceiling to provide proper lighting angles and overall coverage. Lighting fixtures used was a combination of focusable/aimable ellipsoidal fixtures, par cans (for wash lighting), and architecturally selected fixtures for over the congregational area.
- A carefully planned and integrated video capture/edit/display solution was designed.

Solution Highlights
- Yamaha O2R96 Digital Mixer, with save/recall functions, very flexible routing, on-board processing, expanded monitor routing, and future multi-track recording capability.
- EAW AX series 3-way, bi-amped main speakers FR series subs. A Media Matrix DSP based system controller feeds the QSC amplifiers used for the system.
- Platform volume levels are managed through the use of a Roland V-drum digital drum kit and the Aviom in-ear monitoring system. The Aviom system enables personalized mixing of up to 16 sources for monitoring using headphones, in-ear buds etc. Use of these systems significantly reduces "stage volume".
- The lighting grid design integrated a mix of Strand Ellipsoidal and Par Can fixtures.
- The video system makes us of a Newtek TriCaster, which provides "near broadcast quality" video switching, recording, editing, keying, overlays, transitions etc, and is very user friendly. The main projector is a 4000 lumen Eiki LC-X60.

About Artech Communications Inc.
Artech Communications Inc. provides quality service in the areas of consultation, design, installation of professional audio, video and lighting equipment; event productions; and rentals of professional audio, video, lighting, and computer equipment since 1989. We have helped many individuals, churches, businesses, educational institutions and corporations realize that their dreams are viable and attainable, whether for permanent, temporary, indoor or outdoor installations. We would be happy to share our many references.

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Forest Brook Bible Chapel: Picture Gallery

For additional information on installations, go to our website at: www.artechcommunications.com

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