

Personal Mixing, Digital Snake & Audio Distribution at Bartley Christian Church



The main sanctuary at Bartley Christian Church in Singapore

TESTIMONIAL

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Tony Clayton Chong
 Technical Director
 Bartley Church

INSTALLATION DETAILS

As part of a new construction effort to accommodate an ever-expanding congregation, Bartley Christian Church in Singapore employed PAVE Systems as systems integrators to help update its audio system. With plans for the new sanctuary to seat up to 1,200, but with attendance for services ranging up to 3,000, Bartley knew it would also need to utilize the new building’s smaller auxiliary worship space on the second floor and its multipurpose rooms for additional seating capacity. As a result, the church required a means to bring audio from the main sanctuary to the rooms used for expansion. Relying on the flexibility of Aviom’s Pro16 digital snake and audio distribution products, the church can very easily modify its audio setup to distribute audio throughout the facility.

The church has two main worship spaces, each equipped with Aviom gear. In the newest space, located on the third floor, the church installed three AN-16/i-M Mic Input Modules, three Y1 A-Net Cards in a Yamaha console, five AN-16/o Output Modules, a System Bridge, an AV-P2 Output Module, two A-16D Pro A-Net Distributors, and a monitor system consisting of six A-16II Personal Mixers.

APPLICATIONS

Digital Snake, Monitor Mixing, and Audio Distribution

MARKET SEGMENT

House of Worship

LOCATION

Singapore

PRODUCT LINES

Pro16®

PRODUCTS

- 3 AN-16/i-M Mic Input Modules
- 3 Y1 A-Net Interface Cards
- 5 AN-16/o Output Modules
- 2 A-16D Pro A-Net Distributors
- 6 A-16II Personal Mixers
- 1 AV-P2 Output Module
- 2 AN-16SBR System Bridges

FEATURES AND BENEFITS

System design flexibility allows expansion of the audio system into multiple rooms

Reduced sound levels on stage improve sound system intelligibility

“In our design, we wanted the flexibility to run a simulcast to other rooms should a larger event require it,” says Tony Clayton Chong, technical director for AV & Media at Bartley Church. “Using the Aviom Pro16 digital snake, we are able to broadcast digital audio easily to any room, anytime. Running Cat-5 network points to all of the multipurpose rooms as well as the smaller worship hall was a fairly simple process compared to running multiple analog audio cables all around the building.”

As part of the digital snake setup, all mic inputs in the main sanctuary are fed into three AN-16/i-M Mic Input Modules located on the stage and sent to front of house via Cat-5 cable utilizing an AN-16SBR System Bridge on stage and a second in the front of house rack for wiring simplicity. Three AN-16/o Output Modules feed the mic signals into the analog inputs of the Yamaha M7CL for mixing, processing, and routing.

At front-of-house, the engineer creates three 16-channel feeds that are each assigned to one of the Y1 A-Net cards for transport through the network via Aviom’s A-Net protocol. The first card is used to send the main mix outputs to an AN-16/o Output

Continued on reverse

Case Study

Module in the equipment rack on stage where it is distributed to the main sanctuary's PA system processors and amplifiers.

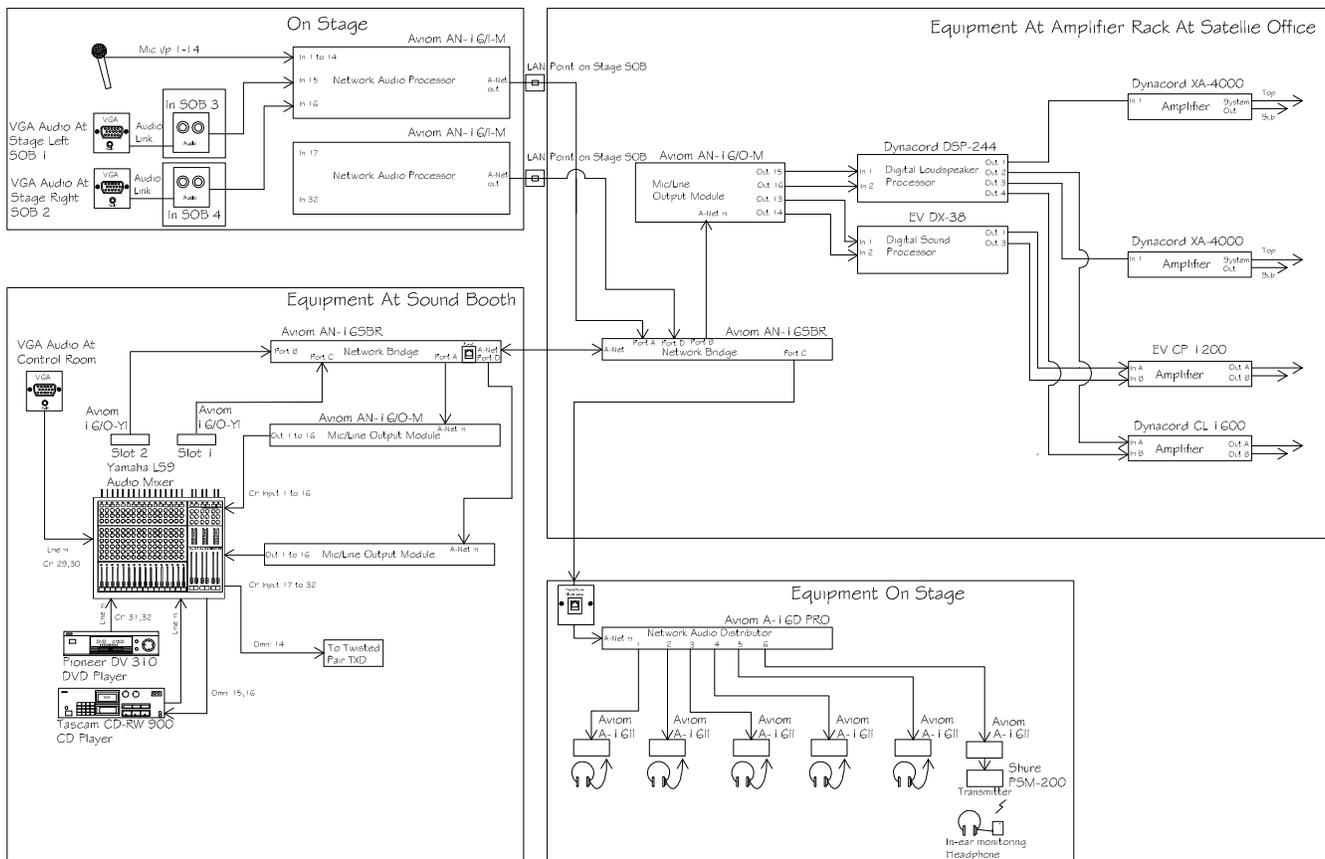
The second Y1 card is used to route audio to another AN-16/o Output Module, which is located in the multipurpose room and distributed to an interpretation room, prayer room, the AV room, and a control room. By connecting another Cat-5 cable to the digital output of this AN-16/o, the A-Net signal continues on to an A-16D Pro Distributor whose eight A-Net outputs are run to wall plates in the worship center, the smaller worship hall, classrooms, lobby, prayer rooms, and backstage receiving room. An AV-P2 Output Module connected to a room's Cat-5 wall jack allows the users to select any of the 16 program channels sent via the network and send that signal into the room's local amp and speakers.

While the Aviom digital snake and the first two Y1 A-Net cards provide the church with the flexibility to easily change its

audio setup and routing to accommodate larger events, the third Y1 card is connected to Aviom's personal mixing system for the live musicians. This helps to lower the stage volume in the new sanctuary.

Prior to the installation of the Aviom system, weekend services were always marred by spillover from stage audio from the worship band's amplifiers as well as their stage monitors. With the Aviom system and the use of in-ear monitors for the performers, Bartley Christian Church was able to minimize stage volume because wedge monitors were no longer required.

"All I can say is that the mixing engineer and musicians are very happy with the Aviom personal mixers," Chong continues. "The front of house mix is much cleaner without spills and the musicians play tighter as a result of being able to hear each other clearly. Also the ability to save their settings helps as well."



This 48x16 digital snake sends 48 mic channels from the platform to the FOH Yamaha® console. Three Y1 cards installed in the Yamaha console provide the main outputs, a monitor send, and signal distribution for the remote rooms.