

Singapore's Church

The Church of Singapore in Bukit Timah is the latest house of worship to benefit from a Clair Brothers system courtesy of Quad Professional. **Richard Lawn** reports



WITHIN JUST ONE GENERATION, churchgoers in Singapore have experienced a rapid evolution in their style of worship. One example is a church located at the foot of Bukit Timah Hill. From humble beginnings dating back to 1980, Church of Singapore (Bukit Timah) has come a long way from its predecessors and has emerged into one of the more vibrant churches in Singapore. It now houses many services catering for different languages, ages and nationalities. However, the progress has not stopped there – the style and professionalism of worship in the church continues to evolve.

The second floor sanctuary was earmarked for renovation in 2011 owing to the limited space within the hall and its difficult acoustic nature. As a result, the entire hall was stripped back to concrete and

expanded by merging the original space with a number of smaller rooms and the lobby area. Now completed, the new hall has been completely refurbished with 600 new seats and a fresh configuration that has seen it orientated 90-degrees from the previous layout in front of a newly built stage. The low 3.5m height ceiling has been acoustically treated as have the walls which are now panelled. Further acoustic absorption has been provided by draping being added to the rear glass windows while the floor has been carpeted.

With the painstaking and costly renovation taking place, the church decided to seek out audio, video and lighting systems that would truly lift its services to new heights. In a timely fashion, Quad Professional dramatically announced its arrival in



Church of Singapore is located in the Bukit Timah district of Singapore

the Singaporean house of worship market in 2011, supplying a huge i-212 Clair Brothers line array system to City Harvest Church at Suntec City. The company has since continued to make a name for itself. The latest system supplied and installed by the company into the Church of Singapore (Bukit Timah) may not be as large, but it is no less impressive.

Following EASE analysis, a point source system was specified for which a FOH L-R system consisting of two R2D-64 12-inch tops per side are augmented by two CS218 dual 18-inch subwoofers built into concealed under stage recesses. Two FF2-H 8-inch speakers plug the front fills whilst two F28 dual 8-inch speakers cater for the sides. Four



The main sanctuary on the 2nd floor of the Church of Singapore



A DataVideo SE-300 HD/SDI video mixer in operation during a service

Clair Wedge monitors are concealed beneath the stage and out of sight of the congregation. However they can be audibly heard on-stage by the musicians and singers as a 6.4m x 0.8m metal grille has been built into the outskirts of the stage.

However, the Quad Professional team headed by Dominic Koh wanted something more for the musicians who perform in the church's Impact Life services. The wedge monitor system is already capable of producing a maximum SPL of 131dB, but for higher energy services Quad opted to install a 32-channel personal stage monitoring system that is unique in Singapore.

Having embraced the myMix personal mixer system, all the musicians can now select up to 16 unique channels to mix from all available network channels. Individual adjustments can be made to channel volume, tone, effect send (from a choice of reverbs or an adjustable delay), and panning without affecting any other station on the network. The



Clair Brothers R2D-64 speakers deployed at FOH and combined with F-28 side fills

unit comes with two mic/line inputs with input gain adjustment, input LEDs with signal and overload indicators. A 16 channel IEX16-L input expander has been added to a rack at the FOH Yamaha M7CL-48 console position which comes with dual rear panel DB25 connectors for analogue line level signals. Two expanders were required with 10 myMix recorders on stage, which are now configured in dual stereo from within any myMix on the network. Eight sub mixes are taken from the console before being split to four other locations having been buffered and balanced by an ARX MaxiSplit distribution splitter. The signals are then routed to the individual myMix units which are Cat-5 enabled courtesy of two Cisco network switches via Klark Teknik Square One active microphone splitters.

On stage, the drums and percussion are fed by 11 microphones and the entire kit is completely isolated in order to prevent reverberation or any excitement of the room's acoustics. Sennheiser Series 3000 wireless microphones in addition to Shure wired models have been fully utilised to take up the remaining 28 channels feeding the console. The choir microphones have been discretely concealed into a recess



Clair Brothers PLM10000 and PL340 amplifiers power the FOH and monitor systems



The style of worship in Singapore has evolved rapidly

HD/SD live production switcher has a touch screen to select EFX, stills and balance colours, whilst offering dual multi-view outputs, chromakey, dual PiP, 3D functions, multi language support and a full size keyboard. Footage of the services can be displayed on plasma screens in other levels of the church via an Extron Crosspoint Switch. Also, a Crestron CP2E control interface has been implemented to wirelessly manage the AVL system in the hall through two iPads.

Technical system and sound officer Brian Ding has been worshipping in



The metal grille allows performers on stage to hear the wedge monitors below

beneath the stage, which can be opened when required and has resulted in losing further stage obstructions. The operators on stage at FOH and elsewhere in the building communicate with one another via Clear-Com CC260 headsets and RS601 belt-packs.

The A/V and lighting systems were designed and installed by Print Matters & Design, headed by Huang Muen, which similar to Quad Professional provided a system that wouldn't look out of place on any full rock production show. Six Clay Paky HPE300 spot moving heads in addition to washes, spots and LED fixtures are controlled via a Grand MA2 ultra-light lighting console. The video system has also been upgraded to a full HD system with all video equipment running on HD/SDI signal. Visually the audience is captivated by a 3.9m x 2.2m P6 LED screen at the rear-centre of the stage, plus two Remaco 4.0m x 2.25m motorised screens to the left and right, whose images are projected by two Mitsubishi 7,000-ANSI lumens Full-HD projectors. The content is fed through a Datavideo SE-3000 HD/SDI video mixer. The hall also utilises Sony NX-5 cameras to capture the live feed of any event. The SE-3000



A L-R FOH system consists of Clair Brothers R2D-64 speakers

the Church of Singapore for 20 years and has witnessed many changes since it relocated to Bukit Timah, including the swelling of attendances. Being offered a full time role at the church, the former IT employee and volunteer seized the opportunity. 'All our worshippers look forward to the weekend, coming here to worship and celebrate,' he enthuses. 'With the refurbished sanctuary on the second level, our style of worship has been significantly enhanced. Our suppliers and installers truly deserve credit for their recommendations, which led to our successful joint efforts in this wonderful project.'

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