

# WorshipAVL

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## THE HILLS ARE ALIVE

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# Three of a kind



**St Mary & St Merkorious Coptic Orthodox Church**



**St Michael's design comprises a pitched roof**



**St John's Anglican in Darlinghurst**

Proper installation is just as important as investing in the right gear. **James Cooke** follows Australian systems integrator The PA People as it completes multiple church audio installations

## THE PA PEOPLE HAS BEEN OPERATING FOR

more than four decades. A systems integrator that serves as a contractor in sound reinforcement, A/V systems, lighting and communications systems installation, The PA People specialises in a number of sectors. However, throughout the company's 40 plus year existence, it has gained vast experience in integrating systems at churches and educational institutions.

Recently, the systems integrator was contracted to provide upgraded equipment and draw upon its expertise at three churches in New South Wales.

The first was St Mary & St Merkorious Coptic Orthodox Church located in the suburb of Rhodes in Sydney, which required a new audio system as the old one had suffered from environmental damage. 'The audio system was located near the altar at the front of the church,' explains Josh Jones, senior project manager at The PA People. 'Because of this the equipment was covered in incense, which caused some of it to fail. It was also not secure with controls readily accessible within the church.'

The PA People replaced the old mixers with a Yamaha MTX-5 digital signal processor, delivering more secure control with the inclusion of a button panel, installed inside a locked box. The MTX device also facilitates iPad wireless control. 'We relocated the head-end and provided a custom-built rack that was sealed and ventilated to minimise impact of incense fumes and dust,' recalls Mr Jones. 'The solution was to upgrade the system components and move them to the floor below, out of range of the incense smoke. The existing speakers were reused with the new amplifiers supplied.'

Also deployed were Sennheiser EM-100 series wireless microphones that make use of the pre-existing mic input panels that were rewired. The mix can be controlled via the iPad control interface offered by the MTX5 when paired with a Wi-Fi access point.

In addition to providing coverage throughout the main sanctuary, the operational feed is also distributed to back of house areas, including the library and kitchen.

'All the existing mic points and speakers were retained, tested and re-used with the new system,' furthers Mr Jones. 'A wide variety of size and style of speaker was used throughout the church. The existing speaker connections, mostly 100V, were all joined together with terminal strips fed by one or two



**St Michael's new system meets its needs**

amp channels. We were able to employ the Yamaha XMV series 4-channel amps to separate the speaker feeds and provide a much-needed overhaul in gain structure.'

Next was St Michael's Church in Sydney's Baulkham Hills suburb. 'We had an old system that was not meeting the diverse needs of multiple users in our music ministry and church programme,' recalls the church's office administrator, Monica O'Callaghan.

St Michael's features a unique architectural design that comprises an octagonal floor plan and a pitched roof that meets in the middle, which results in an unusual acoustic environment. To combat the uncommon reflections that the sanctuary suffers, The PA People removed the existing system and deployed a left and right solution of JBL CBT 70J speakers.

'These provided a traditional point source speaker system with reasonably tight pattern control to give more definition to the preacher,' says Mr Jones. 'We also introduced a Yamaha MTX3 DSP that we were able to couple with new amplifiers. This allowed us to zone specific areas of the church including outside horns, cry room, foyer, sacristy and the main hall.'

The MTX3 enables control of the system wirelessly via an iPad. To allow the parish to continue using the same microphone setup, the previously installed stage mic input panels were reconnected. The install team was also tasked with integrating the church's existing mixer for the band feed with the new speaker system.

Following the installation, the church is reportedly experiencing 'renewed clarity' and is in the process of reorganising elements of its services, such as the choir. 'The PA People were fantastic. They listened to our needs and were very supportive throughout the process of change,' concludes Ms O'Callaghan.

Finally, the systems integrator was engaged to

upgrade the sound solution at St John's Anglican in Darlinghurst. Great care was needed for this project, as the church was built in 1849 and constructed from sandstone. In addition, it is listed on the Register of the National Estate as well as possessing New South Wales state heritage listing.

'The previous system was in need of an upgrade because of its age and the desire of the church to cater to its growing needs and activities,' reveals The PA People's manager, installed systems, Brett Steele. 'Not everyone could hear what was being said from the front of the church. The church also wanted to have more capacity for musical instruments.'

A Yamaha TF3 digital mixing console was installed with two TIO digital stage boxes, one for the north transept, the other for the chancel. JBL's CBT 70 J and JE speakers were also deployed and are driven



**St John's is a NSW heritage listed site**

by Crown amplifiers. The pulpit, lectern and prayer desk have all been equipped with Shure MX series microphones and radio mics. Fold-back speakers and an LCD screen deliver monitoring and lyrics respectively to the band onstage during services. Video sources are managed by an Atlona video switcher. Existing FOH speakers were repurposed as delay speakers to improve overall coverage.

'The FOH equipment was enclosed in a custom lockable timber cabinet colour matched to the church pews,' concludes Mr Steele. 'The speakers were also colour matched to blend in with the sandstone walls of the church.'

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