

SINGING IN THE RAIN

With an expanding congregation that is matched by its ambition, Bogor's Gereja Sidang Jemaat Allah Betlehem has installed an Adamson sound system, as **Tim Goodyer** reports



Left: The stage and PA system. Below: The congregation in the refitted sanctuary.



BOGOR IS A CITY IN WEST JAVA

in Indonesia, with a population of around 800,000 people in the City and upwards of 2,000,000 in its suburban area, giving a total of approximately 3m. Historically, it was the capital of Indonesia during the British occupation and was used as the capital by the Dutch during the dry season, then known as Buitenzorg. Today, Bogor bears the nickname Kota Hujan, meaning 'City of Rain' due to the fact that it is Java's wettest city, as it nearly always rains – even during the dry season.

In terms of its worship, the city was part of Tarumanegara in 450 CE, and was the first Hindu kingdom in Java, and the second in Indonesia after the Kutai Kingdom in Kalimantan. While Indonesia is reckoned to be 90 per cent Muslim (by head of population), there is a surprising diversity of faith and a healthy degree of tolerance, in spite of recent troubles.

Latterly, due to the expansion of Jakarta, more people from different ethnicities live in Bogor and hence Indonesian, the official national language, is becoming more common in the urban areas, although the traditional language of Bogor is Sundanese. West Java is predominantly Muslim, with less than two per cent of the population identifying themselves as Christians.

Gereja Sidang Jemaat Allah Betlehem (Assembly of God

Left, from top to bottom: The hall from the mix position; The stage with the Adamson speakers in position; Subwoofer installation.

Bethlehem) is a small to medium-sized church with a dedicated Christian fellowship that can trace its origin back to 1965 – a time when the Communist party was trying to take control of the government. The original main sanctuary was around 10m by 20m, and the full complex around 2,000-sq-m, so that it could only accommodate 400 people at most at that time. In 1992 the building was expanded so almost 600 people could attend a single service. The sanctuary has been re-modelled and extended since, and continues to grow, with Phase One of its present expansion programme around 50 per cent complete, and Phase Two planned to begin within the next two years. At present, the church has four sanctuaries that, when used simultaneously, seat 4,500 people. The main sanctuary's present seating arrangement holds 1,700 but, with cinema-style folding chairs, this can be increased to 2,000.

Where the sanctuary sound system was concerned, limited funds dictated that a temporary system was initially installed – this was comprised of a number of RCF Art 500 cabinets that would subsequently be used for the stage monitor system. Cast in a role to which it was not well suited, its limitations quickly became apparent.

'The sound clarity and intelligibility that we needed could be achieved with the RCF system,' recalls Rizal Setiadjaja, who is the church's project manager for the sound system's installation and oversees its operation.

After some consideration, an Adamson Engineering line array system was specified by Jesse Adamson and Kevin Nair of Team 108, Adamson's Southeast Asia distributor. Mr Adamson also

served as the audio consultant for the installation. The system design was undertaken by project engineer Reeve Long, also one of the Singapore-based supplier and contractor's team. They worked together with architect Aan Tanumihardja, who also acted as acoustic consultant, and acoustic designer Putra Ardhana of AcETS (Acoustic Engineering and Training Services). Before the final decision was made, however, a number of other systems were considered including EAW's KF730. A number of factors – including the respective exchange rates of the Canadian and US dollar led the church to the Adamson system.

Using the Adamson Shooter acoustic prediction program to model the system's performance in the sanctuary hall, Mr Reeve determined the optimum configuration and positioning of the loudspeaker boxes. The installation design features two single fly-point arrays on the left-hand and right-hand sides of the stage. Each array consists of eight Adamson SpekTrix three-way, 5° true line source array cabinets, with a single SpekTrix sub flown above them to attain bass coverage for the balcony seating area, as well as two 15° SpekTrix Waves in the bottom of each array for extreme down fill. The additional Subwoofer array consists of two clusters of three Adamson Y10 Subs, placed each side and under the stage. Four Vieta Professional VT8i full range speaker cabinets are used as 'lip-fills' in the front of the stage, adequately covering the first 6m (19.7 feet) of the congregation from the stage edge, complete with signal processing to establish an audio image on the stage as opposed to coming from the main arrays.

Two XTA DP-6i Installation