



From far left: Ozzie rockers The Dukes of Windsor; the awards in full flight; Hands on the DiGiCo desk at front-of-house.

AUDIO STEALS VIDEO'S STAR

When the MTV Australia Video Awards were held at Sydney's Acer Arena, they offered Norwest Production the chance to put Australia's largest Adamson PA system to the test. **Tim Goodyer** reports

WHEN BLACK EYED PEAS

front girl Fergie stepped up to compete the MTV Australia Video Awards this year, she was following the role previously taken by The Osbournes and Ashlee Simpson on the event's previous two outings. Staged at the Acer Arena in Sydney, and with reality show star Nicole Richie and pop punk band Good Charlotte putting in appearances, and live performances from Pink (taking time out from her tour of Australia), Jared Leto's 30 Seconds To Mars, Canada's Billy Talent, and New Zealand's Goodnight Nurse and Evermore, it promised something for everyone, including the sound team.

In 2005, the awards used an EAW 730 rig – admittedly in a smaller venue – while in 2006 it moved on to L-Acoustics' Kudo. This year saw another move, this time to an Adamson system, marking the event as the first time a large-scale Adamson PA has been used in Australia. The system was supplied by Frank Hinton at ATT to Norwest Productions, which had used its previous inventory of Adamson speakers at the 15th Asian Games in Doha where the Y10s were used as delays to the main PA system during the opening and closing ceremonies. The MTV Video Awards show used 54 Y10s flown in two drops of 19 and one of 18, along with two sub hangs, each made up of six T21 boxes. Although ATT was not directly involved in the MTV awards, the short lead-time meant that the cabinets purchased by Norwest were actually the ATT demo system. ATT also supplied the extra boxes needed for the show system.

Formally known as the Superdome, the Acer Arena is a 16,000-seat auditorium with a high roof (110 feet). The PA normally has around an 80m throw to the back of

the room, although the MTV Video Awards placed the stage forward by around 20m and limited its audience to around 8,000 people. 'The ability of the PA to throw high-frequency information to the back of the room is very important,' says project manager and FOH system technician Ewan McDonald of Norwest Productions. 'The earlier sound systems both worked perfectly well for what we were trying to achieve, and it wasn't because of any shortcomings in these systems that we switched to the Adamson. One of the points that attracted us to use the rig was the T21 subwoofer. In past years there has been room for subs on the floor but with the ever-expanding set, this year this was not possible, so we flew six T21 subs per side. The fact that the subs can be curved allows us to focus some more energy on the floor while not shading the main arrays. Also, being able to only use six subs a side and producing enough low-end to keep up with 56 Y10 cabs was very impressive. Another big selling point is that we could get 19 Y10s into a relatively small footprint. The height clearance of the bottom box is always an issue on this show and with the Y10 we could get enough SPL and vertical coverage for a 16,000-seat auditorium, all in an array that was less than 5m high. Of course the fact that we had heard nothing but great things about the sound of this PA was a big factor.

'Delay systems are often used here but the Adamson Y10 throw was sufficient to get the much needed top end to the back of the room with no problems. This venue has many reflection problems with balcony fronts and tin and concrete surfaces that produce very hard to deal with reflections [this includes the large metal ceiling]. The ability to fine-tune the PA in 1° tilt increments, and the

design software to ensure the PA does not directly hit these surfaces were paramount in minimising the reflections that can turn this room into a real mess. Low-end performance is also an issue, and the ability to fly the subs was very helpful to us for even coverage around the room. The T21s provide the tight low-end that we need.'

SIA Smaart 5 software was used for time alignment and rough tuning of the PA system with Norwest FOH engineer Ian 'Shappy' Shapcott using his trusty Yellow CD and a Shure B58a mic for the fine-tuning. 'Because it was the first time using the PA we took a lot more measurements than we usually would from near field all the way to the back of the venue,' Mr McDonald explains. 'These showed the level of consistency in frequency response, and the level was very good from front to back. Since Dolby Lake

Processors were used rather than the 428s with current Adamson settings, we plugged in a 428 and used Smaart to prove that the Lake settings we used matched the current 428 settings recommended by Adamson. When we first turned the PA on, we tested our Contour settings against the factory XTA 428 settings, and we found the traces were almost identical.'

The FOH console used was a DiGiCo D5, with outboard consisting of a TC Electronic M6000 reverb unit and some Empirical Lab Distressors. 'The PA feeds were digitally output to an Optocore fibre-optic system and digitally input into the Dolby Lake Processors. This meant that the signal was digital from the stage inputs all the way to the amplifier racks, which were placed in the roof gantry a 160m cable run away from FOH,' Mr McDonald continues. 'The Speech PA was four hangs of 12 L-

Acoustics Kudo boxes, each driven from a Yamaha PM5D. Because there was a separate stage for the bands and the speeches, two PA systems were used to focus peoples' attention to the point of action. This also meant that the music PA was never pointed towards the announcers' microphones, which was especially important for the broadcast mix.'

The monitor console for the show was a Yamaha PM1D, with Nexo PS15 wedges on the stage. The mic splitters were XTA DS800s, with the Yamaha PM1D rack and the DiGiCo rack positioned next to each other. Another Optocore Fibre Network was used to transport all the audio to an outside broadcast truck provided by Figure 8 Audio, which used two Yamaha DM2000s and a Yamaha M7CL. Optocore channels were digitally connected into the Yamahas, which had gain control over the fibre

network. The radio gear consisted of approximately 26 channels of the new Shure UR-series receivers, along with PSM600 and 700 receivers. RF management is always challenging on a show of this kind. With a total of around 40 radio mic channels and 18 IEM channels in use, the RF team had to stay on top of spectrum management and signal distribution.

Rapid changeovers on the music stage were handled by using rolling risers that allowed the crew to rig one band while another was on stage. The stage patching was done on a new L&K multipin system, with a total of around 30 multipin stage boxes. 'This meant most of the bands stayed miked up and were plugged in with a few snaps on some multipins,' Mr McDonald says. 'There was a Midas Venice backstage that was used to check multipin boxes before they rolled out onto stage. This system was paramount in ensuring that all 14 bands were plugged in without a line out of place in the changeovers between international acts – some were as little as four minutes. As this show is live-to-air around the world, there is absolutely no room for error and, yet again, our stage team delivered.'

All told, there were 14 bands performing, ranging from pop to rock to punk to dance, with some including 40-piece choirs and string sections. Along with those already mentioned, these included Good Charlotte, Ferige, Silverchair, Sneaky Sound System, Eskimoe Joe, Toby Rand, Teddy Geiger, TV Rock vs Dukes of Windsor, Damien Leith and Stephanie McIntosh. 'The PA handled all the bands perfectly, from deep lows and crystal-clear highs for the dance acts, to clean defined midrange for the rock acts,' Mr McDonald reports. 'The system was nice and linear throughout the frequency range, which meant it could handle any kind of musical style we threw at it.'

The event went off flawlessly with not a single line out of place and every band mix sounding great,' he continues. 'Shappy did a great job ensuring the PA was sounding fantastic and every band was rocking.



Ian 'Shappy' Shapcott at the FOH console.

www.mtv.com.au/avma
www.norwestproductions.com