## Capital Sound extends Martin Audio's PA to fit BST's enlarged stage



With artistes ranging from the Rolling Stones to Elton John and the Eagles gracing the new supercharged stage and fascia at this year's American Express presents BST Hyde Park the quality of sound literally needed to raise the bar at AEG Live's flagship event.

Martin Audio rental partners Capital Sound (part of the Solotech UK group) have been the exclusive suppliers of the manufacturer's ground-breaking MLA since the event's inception in 2013, and were able to respond by providing enhanced site coverage. This year, with its expansion across three weekends, the event broke all records, selling 530,000 tickets across the nine shows.

Taking note of the additional 5-metre height gain of Star Group's new Titan stage (which now reaches 19 metres off the ground), Solotech extended the two main PA and sidefill hangs and streamlined the 11 delay towers, introducing their recently acquired WPL scalable line array - the largest in the Wavefront Precision family.

This resulted in no fewer than 182 Martin Audio line array elements being deployed at the event as well as 44 subwoofers. Stated Solotech Senior Technical Advisor, Robin Conway, "Had we used the original plot, the hangs would have been out of proportion. So I looked at issues such as trim height, and both visually and performance wise, by increasing the box count we managed to achieve better results, with more energy at the front.

"On top of that, we also managed to achieve the trim height we wanted, with the main hangs trimmed this year at 16.2m from the ground as opposed to 12.5 previously, and the sides at 17.5m, compared to 14.5m."

Aesthetically the stage design also had to work around a newly-created tree, the central focal point of the stage, while mechanically a wrap-around video screen was introduced for the first time - also masterminded by Solotech.



The main PA this year was increased by four elements, and comprised 19 MLA and a single MLD Downfill each side, with 15 MLA and an MLD Downfill as side hangs (two each side larger than previously). Arranged in a broadside cardioid array were 32 MLX subwoofers while six pairs of MLA Compact provided front fills.

The delay positions had also been extended, with longer hangs. Of the 11 masts, positions 1-5 were identically configured with seven MLA and an MLD Downfill; the Delay masts 6-9 behind the FOH mix tower comprised an extended 10 WPL and three SXH218 in a cardioid stack, while Delay points 10 and 11 were each populated with eight WPC elements.

All Wavefront Precision enclosures were driven by Martin Audio iKON multi-channel amplifiers in the optimum 1-box resolution, and the sound was again carried site wide on an Optocore fibre ring, which offered full redundancy.

The quality of the PA this year was once again exemplary, no better so than for Adele ... a fact to which the many social posts attested. Once again Solotech fielded a highly accomplished technical team, working through the event's long-term production manager, Proper Productions' Mark Ward, with Tim Patterson as crew chief, Johnny Buck (monitor engineer), Mike Warren (FOH engineer) and Joseph Pierce system tech. Martin Audio's former technical director, Jason Baird, was brought in as consultant for the set-up.

Solotech senior project manager Martin Connolly, was delighted with both the onsite and offsite sound thresholds, which met the approval of acousticians / noise control consultants, Vanguardia. "Following propagation tests, we managed to achieve great level - an increase on what we have had in the past and with a bit more control," he said.

This was particularly evident in performances by Elton John and Adele, as Connolly explained. "Elton John was 100-101dB(A) and Adele was 102dB(A) LEq (1 min) and 101dB(A) LEq 5 mins, with 75dB(A) offsite."

He said the event had fully justified their decision back in Spring this year to invest further into Wavefront Precision - with an acquisition countenanced by Solotech. As a result, WPL and WPC now complement the WPS system they had earlier bought for the Tim Minchin tour.

Along with the two new WPs Solotech also purchased TORUS for their hire inventory - part of an order amounting to well over 100 enclosures. "Had we not done so, looking at our order book for the summer we would simply have had to sub-hire in," stated Connolly.

As for the video displays, Solotech provided a near 1500sq.m screen measuring over 16m high for main stage including 4500 Saco tiles and 540 Roe CB5 LED panels on main stage screen. A further 300 Roe CB5 were deployed for delays, relays and for Stage 2.

Summing up the event, and the technical excellence of the sound reinforcement, production director Mark Ward said, "There were a lot of conversations about how to make the PA sound great and feel in proportion on Star's vast new Titan stage. Solotech and Martin Audio got fully engaged in figuring out solutions and we more than achieved the result we were after - both sonically and aesthetically. It looked 'right' and sounded brilliant."

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