

# Martin Audio WPL for All Points East



Situated in London's East End, Victoria Park has been a popular festival venue for many years - but it has also traditionally been one riddled with challenges for incoming sound reinforcement teams. One person who has worked there many times is Solotech Senior Account Manager, Martin Connolly. He has generally specified Martin Audio's MLA multicellular array for its unique control ability, keeping the sound firmly focused onsite, with minimum bleed into the neighbourhood.

In recent years Victoria Park has played host to the popular All Points East [APE], promoted by AEG Live, which runs over two weekends. Here Solotech team up with LS Events and production manager, Mark Ward (Proper Productions) whom they also work with at British Summertime, Hyde Park. However, it has become increasingly difficult for production teams to achieve the required SPL in front of stage, sending all parties back to the drawing board for a 'root and branch' reappraisal.

This year LS Events responded by demarcating the East Stage listening area - effectively the sound field - with flags, inside which their aim was to deliver a uniform sound, evenly distributed between 98db(A)-100db(A) LaEQ15 at FOH, and no more than 75db(A) LaEQ15 offsite at the nearest measurement point. They

recognised that for a bill heavily tilted towards indie and electronic (ranging from Kaytranda to LCD Soundsystem) it needed to remain consistently 'banging' - all the way to the delay points, set some 150 metres back. Thus Solotech's Robin Conway set about revising the existing PA design to meet that challenge.

With six main hangs on East Stage, he upgraded the infill drops from MLA Compact to full MLA (eight MLA plus an MLD Downfill), and had them flown rather than groundstacked. The main hangs again comprised 13 MLA and an MLD Downfill, and outfills six MLA (and an MLD) flown. Subwoofers consisted of 20 MLX in a broadside cardioid array, arced across the front (with seven of these rear facing), while eight Martin Audio XD12 provided the nearfills. The outer hangs, in particular, had been required to bolster the sound on house right.

But arguably the bigger achievement was to introduce Martin Audio's flagship WPL into three of the five delay positions (in respective blocks of 8, 10 and 8 elements) which had previously been occupied by MLA Compact. Spanning the other two rear field delays Solotech deployed 20 MLA Compact (10-a-side), bolstered with three MLX subwoofers on each tower. Reasoned Martin Connolly, "Because WPL is physically a bigger box than the MLA-C, giving us a longer hang, it afforded us greater controllability on the low end."



As consultant and former Martin Audio Engineering Director Jason Baird put it, “The DISPLAY optimisations for these arrays were configured with an SPL profile of +2 at the front and 0dB (c/w FOH) at the coverage stop position. This was to maintain the same SPL level as at FOH, right up to the handover to delay ring 1. The tighter horizontal dispersion of WPL, and improved low mid pattern control of the larger product, were hugely beneficial. The delays yielded incredibly consistent sound levels, not only front to back but side to side too. It almost goes without saying that the DISPLAY files made full use of the Hard Avoid feature too.”

For the headliners Solotech ran uniformly at 99dBA on Friday, 100dBA on Saturday and 98dBA Sunday, while working within offsite levels. To verify the onsite measurements, and establish proof of concept, AEG had introduced audio consultants, Electric Star. How would this impact offsite? As a precaution Solotech had drafted in Jason Baird to act as audio coordinator between East Stage system tech Joseph Pierce and the event’s regular acoustic consultants Vanguardia, who were responsible for monitoring offsite sound.

The most sensitive (and nearest) of the measurement points was Waterside (75m to house right of stage). “With a normal PA side hang at 45° to the main PA it’s going



right down the throat of that measurement microphone,” notes Connolly. “Jason would look at the data and for example decide to pull one frequency down by 2dB, or notch out sub frequencies on an act-by act basis, to stay within the off limits rather than turn the whole thing down by 6dB in a knee jerk reaction.” With some judicious tilting and tweaks they were able to overcome this.

Solotech UK equipped two further stages with Martin Audio, implementing the same designs as last year. On West Stage, where Josh Bruty was system tech, they fielded main hangs: of 12 x WPL, side hangs of 12 x WPC; front fills of 8 x WPS and subs comprising 11 x SXHF218. There were two delay positions, each with six WPC. Finally they equipped L’Oreal Stage (rebranded last year from BMW Stage) with 10 x WPS; 4 x DD12 and 4 x SX218 subs.

This overall solution provided all concerned with a feeling of ‘mission accomplished’ as consistent sound levels were maintained. “We achieved great results and have had nothing but positive feedback from production,” declared Martin Connolly. He said he hoped this universal approbation would finally allay misguided concerns about insufficient levels. “Now we’ve increased by 1-2dB that argument has been kicked firmly into touch. He added that there was no reason to consider changing the main PA system. “MLA may be well over a decade old, but it still really delivers.

“Victoria Park is more difficult to work than any other site we do, including Finsbury Park, and we are delighted to have pulled this off.” And Jason Baird agreed. Stating that there is no ‘one-size-fits-all’ approach to festival PA design he simply explained: “Any festival site is a balancing act and for APE we found that balancing point.” Other key personnel on duty included (East Stage): Xavier d’Arifat (FOH engineer); Jonny Buck, Alastair Hellard (monitor engineers). West Stage: Will Hall (FOH engineer); Isabella Di Biase and Kieran Niemand (monitors). Finally, on L’Oreal Stage, Jason Barton was the sound engineer.

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