Martin Audio Wavefront for BSW Arena

Picture: Oliver Toth

Budapest-based production company BG Events recently deployed what is believed to be the largest total hang for a single event of Martin Audio's Wavefront Precision series. A total of 120 line array elements from the WPL, WPC and WPS series, together with 36 SXH218 subs, were specified for BSW at the Papp László Arena. Celebrating two decades since BSW first formed in 2006, the #BSW20 tour marks a defining moment for the group, charting their journey from the underground hip-hop scene to the summit of Hungary's live music industry as one of the country's premier stadium-level performers.

It was BG Events' extensive experience of working at the Papp László Arena - Hungary's premier venue for international touring artists - that helped secure their involvement. Bácskay Gábor Mazsi, System Tech at BG Events, begins the story. "We hadn't worked with the band before, but the production team were aware that we had delivered numerous shows at the arena and were very familiar with the venue.”

Having deployed Martin Audio MLA for many years, the company upgraded its

inventory to Martin Audio's latest-generation Wavefront Precision Series in May 2025. "When we talked with the BSW team about using WPL rather than MLA, they were very happy with it," notes Mazsi. "The Martin Audio WPL is very similar in character, and also has zero feedback to the stage. This makes bands and sound engineers happy because when they come from rehearsal and start sound checking, nothing sounds different in their ears. I'm personally also very happy with the WPL sound image."

The Papp László Arena presents a formidable acoustic challenge, not only in terms of throw lengths but also due to an unusual asymmetric design. "The first challenge is definitely distance," Mazsi explains. "The arena is 120m long from the stage front to the last seats. But oddly the building is also asymmetrical, with two seating tiers on the left and three on the right." BG Events knew the Wavefront Precision solution would deliver the extensive and uniform coverage required. The final system design comprised 18 WPL array elements per side as main hangs, all driven at one-box resolution. To address the venue's differing tier heights, the outfills comprised 12 WPL on the left and 14 WPL on the right.

First delays featured a further eight WPL per side, whilst second delays comprised eight WPC Series array elements per side to reach the far end points. Fourteen WPS models acted as front fills, configured in 4 x 3 and 1 x 2 box stacks, with a further six WPS per side deployed as flown sidefills. "All the boxes in the Wavefront family work so well together - the filters, amplifiers and DSPs are the same, and the characters are all the same," Mazsi confirms.

Low-frequency reinforcement - critical for the hip-hop performance - was provided by a total of 32 Martin SXH218 subwoofers. Two arrays of six were flown 1m behind the main PA, with a further 20 ground-stacked in ten pairs, with the bottom unit reversed in cardioid configuration. "We used the '40ms left-right cancellation' for the flown subs. It worked really well in this venue," describes Mazsi. "The ground-stacked ones had 70cm spacing and opened 60 degrees by time. The flown subs were powered by amps in bridge mode, whilst the ground stacks used one amp channel per box."

The entire system was powered by iKON iK42 amplifiers. "The iK42s have a separate DSP for each amplifier channel, which is very convenient - you can set any sub timing or front fills," says Mazsi. "The large hangs work well with six to nine amps, and if you were to have any issues, you can just hot-swap any of them, so you don't lose the whole array." On-site, the WPL's new faster rigging method and simplified cabling proved invaluable for the crew: "We prepared the correct length of breakouts in advance, then it was very simple to hang four WPLs cart by cart. We configured the setup and loaded the presets to the iK42s in the warehouse." Ultimately, the WP system delivered on all fronts. “FOH engineer Péter Agárdi was very happy with the result,” Mazsi confirms. “The show ran from 94dB up to 100dB, with excellent consistency and clarity throughout.”

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