ON TEST

d&b audiotechnik CCL system

Simon Allen heads to d&b's demo space for in-depth testing of the Compact Cardioid Line Array system . . .

ABOUT THE EXPERT
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Simon is a freelance, internationally recognised engineer/producer and pro audio professional with two decades of experience. Working mostly in music, his reputation as a FOH and studio mix engineer continues to reach new heights.
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The directivity of sound reinforcement has always been at the forefront of d&b's design mission, which it refers to as 'directivity control'. Its now legendary F1220 loudspeaker, launched in 1988, first employed directivity control via a constant directivity horn for dispersion control down to 800Hz. Then the infamous C-Series sported a horn-in-a-horn design to provide a fixed directivity control down to 600Hz. Q-Series was released in 2003 and achieved directivity control via two fixed drivers in a dipolar arrangement as well as the HF horn. This enabled d&b to control the dispersion down to 400Hz. Q-Series also introduced the first preset for cardioid sub arrays.

J-Series took the innovations from Q-Series and offered them as a large-scale format solution, but also introduced the first all-in-one cardioid sub by d&b. The B4 landed in 2010 as its first passive cardioid sub design, and 2013 saw the release of the V-Series, comparable to the J-Series, but more compact. Then, in 2018, the SL-Series arrived - initially with GSL, then KSL and later XSL - the company's first "broadband directivity control" solution, with low frequency cardioid behaviour. Not only was this its first system to control directivity of all frequencies, but it was a first by any manufacturer.

As we know, the SL-Series in now found all over the world on many major tours such as those by Coldplay and Taylor Swift, and has been installed in some of the world's most prominent venues. Following this success, the pressure has been on for d&b to design and deliver a system that provides these broadband directivity benefits to smaller scenarios, both in terms of scale and cost. Despite the challenges involved in making this a reality, earlier this year the new CCL (compact cardioid line array) system was launched. To find out more, I went over to the d&b UK office at Nailsworth and met with the two Alexes - Alex Lane and Alex Watts - from the EAS (Education and Application Support) team to learn more . . .

THE DEMAND FOR CCL

Let's recap on the benefits of a broadband cardioid speaker system, and the advantages of being able to control the directivity of sound. Ultimately we are trying to project sound from a stage to the audience. Any energy emitted on any other axis can be unwanted or detrimental. This could be for noise pollution/regulation reasons, such as avoiding residential areas or even other stages at the same festival. If sound between stages can be controlled,