

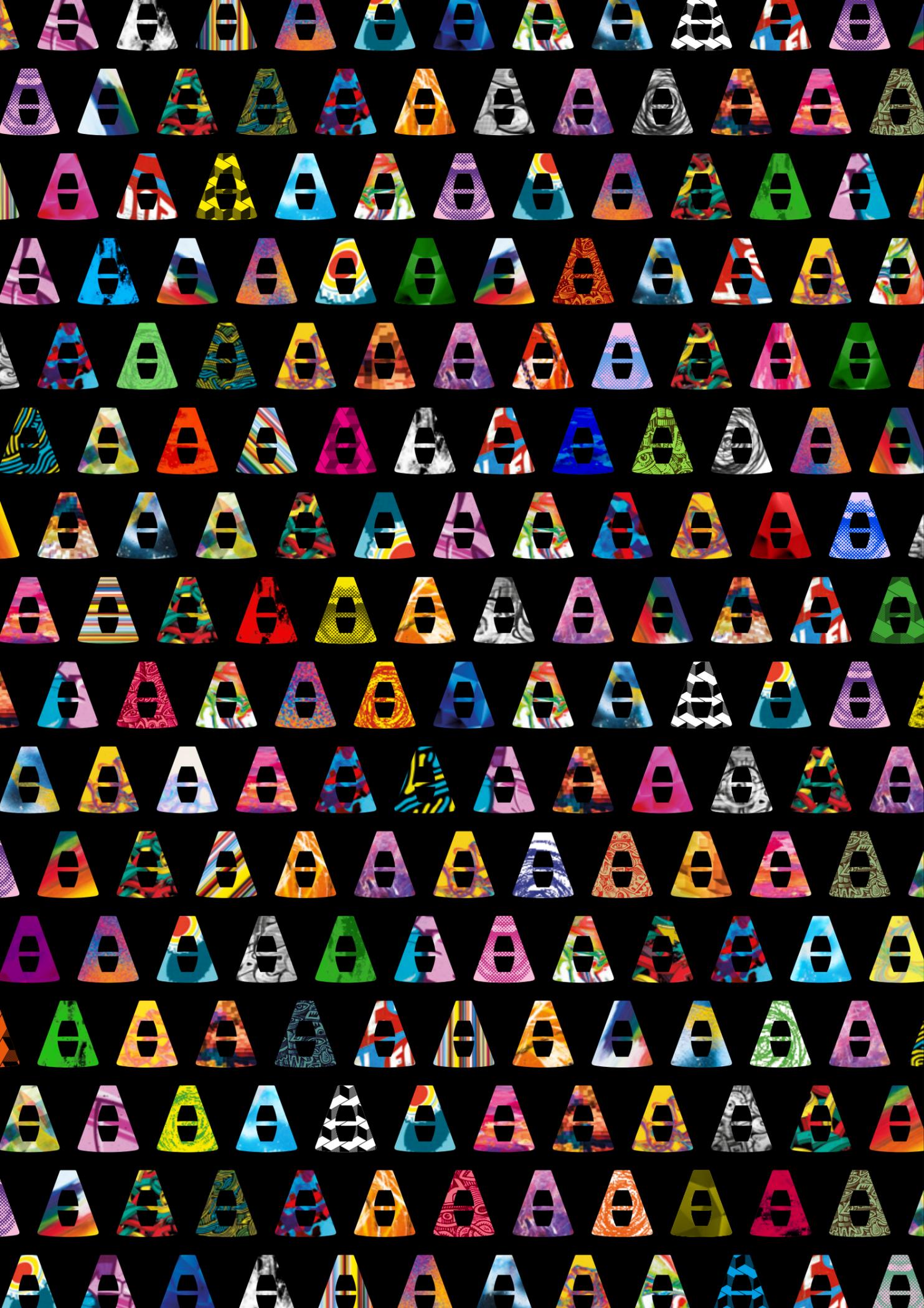
A-Series



Assume nothing.

More art. Less noise.

d&b
audiotechnik 



Question everything.

Must compromise always be unavoidable?

What if there was a new type of loudspeaker that expanded the scope of sound reinforcement possibilities?

What if a system produced full, powerful sound without sacrificing a single sightline?

Or offered acoustic optimization at the push of a button?

Could a new system concept redefine and reshape the meaning of 'flexibility'?

A system that would elevate the audio experience in exacting applications where point sources can't provide enough and a line array would be too much.

A new series that delivers the signature d&b sonic quality in an augmented format, combining the best elements of existing d&b system technology into an entirely new form.

Bending the rules of what a sound system can do, while maintaining the familiar d&b focus on directivity and system unity.

A unification of technologies that sits comfortably in the gap once filled with compromises.

This is the answer.

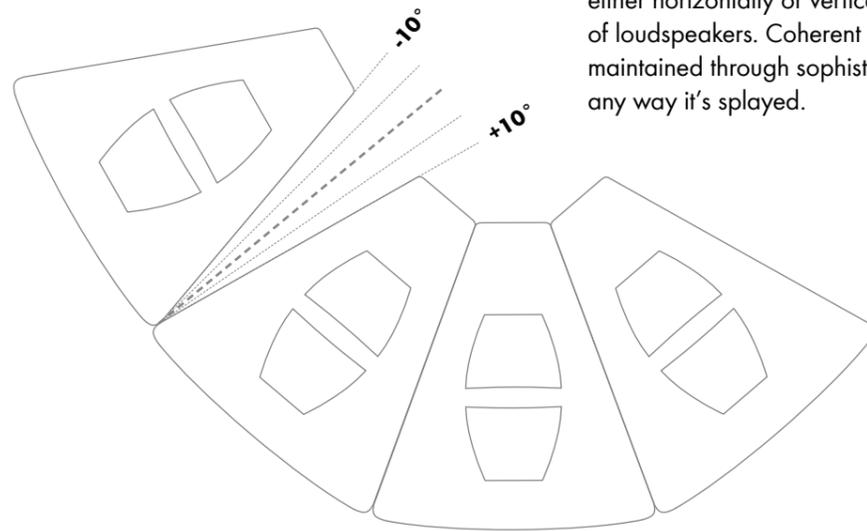
This is the d&b A-Series.

Augmented arrays.

Flexibility can now extend beyond its usual limits. The A-Series introduces a new sound reinforcement concept: the augmented array.

A system that is as flexible as a point source cluster, as controllable as a line array and introduces advanced features that alter the reality of perceived solutions to challenging application realities.

Variable splay angles allow arrays of up to four A-Series loudspeakers to adapt precisely to venue shapes in fine increments. Broad distribution is achieved either horizontally or vertically with a minimal number of loudspeakers. Coherent high frequency dispersion is maintained through sophisticated waveguide design, any way it's splayed.



Midrange Directivity Control provides one-button acoustic optimization directly from d&b amplifiers. Define where each loudspeaker sits within an augmented array, and Midrange Directivity Control ensures the even distribution of lower midrange frequencies. Two loudspeakers per amplifier channel, no additional latency, maximum speech intelligibility.

All this from a d&b system that scales from a single loudspeaker to a full sound reinforcement solution, serving applications where a broad coverage area, exceptional sound and scalability demands meet.

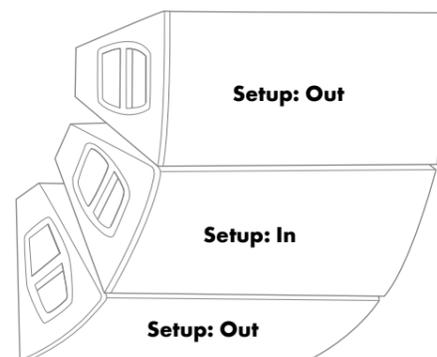


Adjust.

In keeping with the spirit of new concepts, the A-Series includes a new acoustic refinement approach: Midrange Directivity Control.

This function uses fewer amplifier channels than ArrayProcessing, while keeping midrange directivity symmetrical at every possible splay angle. Simply designate each loudspeaker within an augmented array as either In for inner cabinets, or Out for outer cabinets. Midrange Directivity Control ensures that the critical vocal range is crystal clear. A simple click and it's set.

Naturally, user-definable optimization tuned to the precise splay of each module is possible using the ArrayProcessing software function within ArrayCalc. ArrayProcessing applies a clever combination of FIR and IIR filters to each individual module in an array to achieve the targeted performance. Because ArrayProcessing employs the same frequency response targets for all d&b arrays in a project, it ensures all systems share a common tonality.



Adapt.

The A-Series has coverage covered. This is achieved through variable splay angles that allow dispersion adjustments in five degree increments from -10° to +10°. Narrow or broad coverage, horizontal arrays or vertical: sound is directed only to where it should be and no further.

Two loudspeaker variants provide even further options: the AL60 loudspeaker module provides a 60° dispersion while the acoustically and mechanically compatible AL90 has a dispersion of 90°.

The sophisticated waveguide design ensures the wave segments of each cabinet couple without gaps and sum coherently regardless of splay angle. Two 10" LF drivers in a dipolar speaker arrangement provide pattern control down to 550 Hz (AL60) and 370 Hz (AL90). Combinations of both variants can also be used within the same array for complete coverage in irregular spaces.

With a maximum of four loudspeaker modules per array, the d&b A-Series covers larger areas with fewer loudspeakers, fewer amplifier channels. And fewer compromises.



Applications.

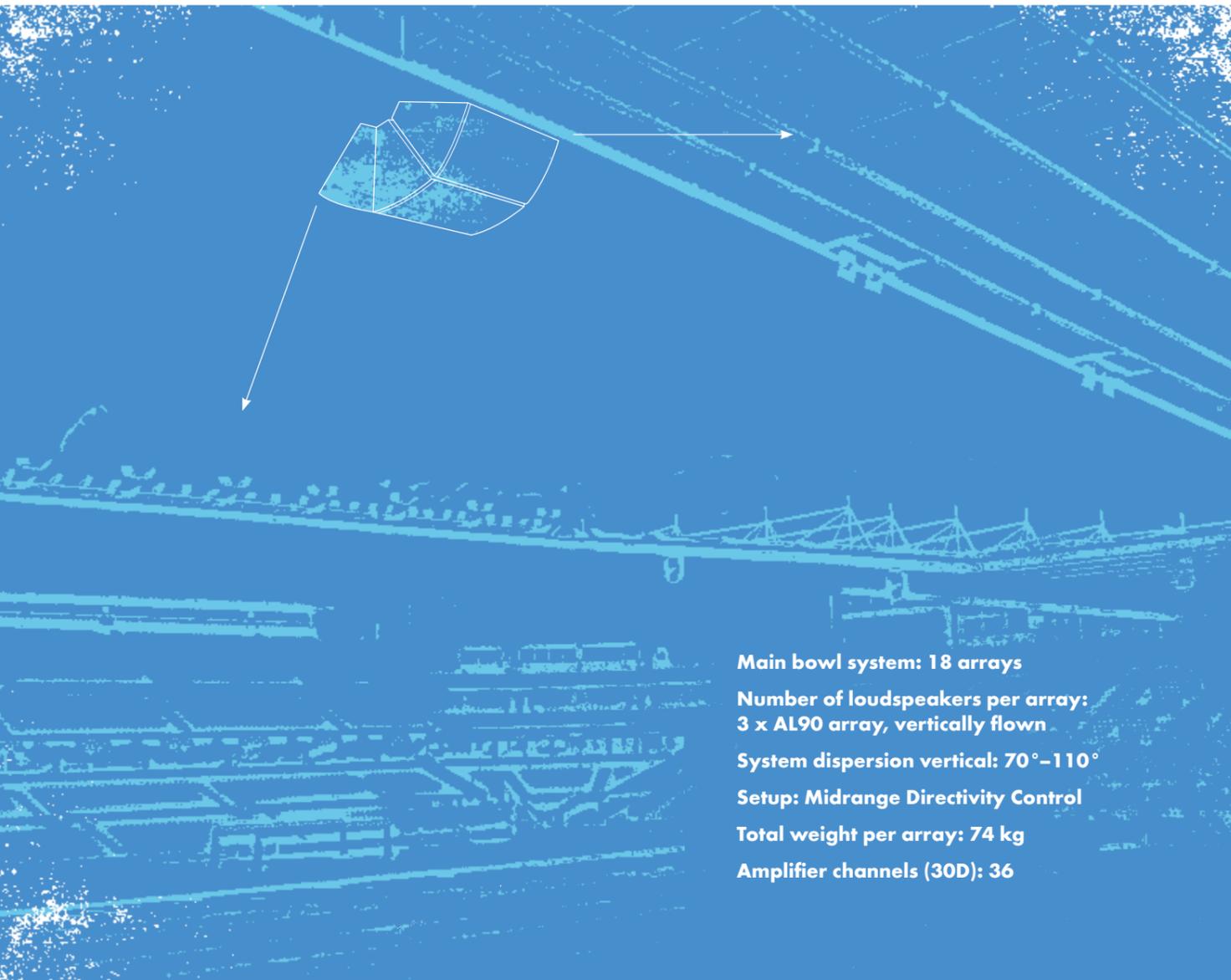
Variable splay angles allow the A-Series to accommodate an almost overwhelming number of venue shapes. Perhaps a few concrete examples might help?

Stadiums.

All eyes are riveted to the action on the field. The sound pulls the fans in, even those underneath the stadium roof. Normally an awkward audience layout to cover, the large vertical coverage requirement isn't a problem: the A-Series covers wider areas with vertical splay that spans a range of 50° to 150° degrees, and with more SPL than a point source system.

Everyone experiences the same full-impact sonic thrill that cuts through the roar of the crowd. A medium throw maintains intelligibility by reducing reflections off of walls, while ArrayProcessing distributes frequencies evenly across the entire section.

The number of loudspeakers required is kept to a minimum, reducing the overall weight of the system and without causing visual interference. Some fans go home flush with the excitement of a victory, others stung by the bitter taste of disappointment. To see, to hear... that is why they came.



Main bowl system: 18 arrays
Number of loudspeakers per array:
3 x AL90 array, vertically flown
System dispersion vertical: 70°–110°
Setup: Midrange Directivity Control
Total weight per array: 74 kg
Amplifier channels (30D): 36



Main system: 2 arrays
Number of loudspeakers per array:
3 x ALi90, horizontally flown
System dispersion horizontally:
70°–110°
Setup: Midrange Directivity Control
Total weight per array: 74 kg
Subwoofers: 6 x Vi-GSUB array
Amplifier channels (30D): 10

Live Clubs.

The A-Series hangs in the club, ready for a night of revelry.

A single rigging point keeps the compact array up and away from hands in the air. Strong vertical directivity prevents unwanted reflections from low ceilings and directs the music onto the dance floor.

The A-Series delivers more power than point sources, while the dipolar driver design prevents excessive level build-up close to the loudspeakers.

Wide horizontal dispersion ensures up to 110° of continuous coverage using only two arrays, while Midrange Directivity Control preserves even distribution of vocal lines and melodies.

The weekend is in full force, with A-Series delivering superior headroom, full clarity and a night to remember from a compact system.



Main system: 2 arrays
Number of loudspeakers per array:
 3 x ALi60, vertically flown
System dispersion vertical: 70°–110°
Setup: ArrayProcessing
Total weight per array: 74 kg
Center fill: One array, 2 x ALi90,
 vertically flown – Midrange Directivity
 Control setup
Subwoofers: 2 x Vi-GSUB (R/L)
Amplifier channels (30D): 9

Theaters.

Smaller theaters inject a vital, dynamic energy into the performing arts, developing new works and hosting established acts. A performance is nothing if it can't be heard, and heard well.

The A-Series offers the same exceptional sound quality heard in the world's largest theaters, fully scalable to suit any sized room. An audio experience that is every bit as elegant as the auditorium.

The A-Series provides ample vertical coverage while being able to hang unobtrusively out of view. Flexible vertical splay covers more of the audience,

using fewer cabinets. Or use each augmented array loudspeaker as a single point source. Setup options with the A-Series redefine the word 'flexible'. Sightlines are preserved, and system weight is kept to a minimum.

A combination of acoustic optimization tools ensures every line is delivered with the utmost clarity. Midrange Directivity Control refines the frequencies crucial to speech intelligibility. ArrayProcessing keeps sound directed at the audience, and off low ceilings and walls.

Performances have the power to change theaters. Sound has the power to change performances.



Corporate events.

A company-wide presentation designed to align each team member with the overall corporate vision. Engage just the few who can hear, or excite the entire room?

The d&b fixation on broadband directivity ensures the A-Series accurately reproduces any material, from a keynote speech to an energizing live performance. Corporate events scale in size, so does the A-Series.

Cohesive, broad horizontal coverage is achieved using arrays of two to four loudspeakers. Choose from

a range of d&b subwoofers or choose none at all. Variable splay angles extend coverage options and possibilities while respecting budget considerations and sightlines in equal measure.

Midrange Directivity Control targets the frequency range that transmits speech, so the unifying message is heard by all. ArrayProcessing ensures it is delivered with equal power throughout the space.

Performance target achieved. Now back to business.



Main system: 3 vertical arrays of 3 x AL90 each
System dispersion vertical: 70°–110°
Total weight per array: 74 kg
Amplifier channels (D20): 9

Upgradeable to Soundscape En-Scene
180 main system with AL90, 2 x D20,
1 x DS100 with En-Scene

The A-Series loudspeakers.



AL60

AL90

ALi60

ALi90

Components	2 x 10" LF driver with neodymium magnet 1 x 1.4" exit compression driver with 3" coil Passive crossover network	2 x 10" LF driver with neodymium magnet 1 x 1.4" exit compression driver with 3" coil Passive crossover network	2 x 10" LF driver with neodymium magnet 1 x 1.4" exit compression driver with 3" coil Passive crossover network	2 x 10" LF driver with neodymium magnet 1 x 1.4" exit compression driver with 3" coil Passive crossover network
Output (1 m)	138 dB (D20/30D) 139 dB (D80)			
Power handling capacity (RMS/peak 10 ms)	400/1800 W	400/1800 W	400/1800 W	400/1800 W
Frequency response (-5 dB)	60 Hz-18 kHz	60 Hz-18 kHz	60 Hz-18 kHz	60 Hz-18 kHz
Dispersion (H x V)	60° x 30°	90° x 30°	60° x 30°	90° x 30°
Splay angle settings	20°-40° (5° increments)	20°-40° (5° increments)	20°-40° (5° increments)	20°-40° (5° increments)
Cabinets per D20/D80/30D amplifier channel	2 ¹ 1 ²	2 ¹ 1 ²	2 ¹ 1 ²	2 ¹ 1 ²
Dimensions mm (H x W x D)	322 x 700 x 356			
Weight kg	23	23	22	22
Dimensions inch (H x W x D)	12.7 x 27.6 x 14			
Weight lb	50.7	50.7	48.5	48.5

¹ with PS (Point Source) or MDC (Midrange Directivity Control) mode ² with ArrayProcessing



Anatomy of the A-Series.

The A-Series is completed by a range of d&b amplifiers and subwoofers, so that the system in its entirety can be tailored to meet specific application needs. For installations, the 30D amplifier would suit nicely. Mobile options include both the D20 and the D80.

For low end extension, the A-Series was designed with the V-GSUB in mind, an actively driven high performance cardioid subwoofer powered by a single amplifier channel. But of course, as the A-Series stretches beyond flexibility there are many more options available for mobile and install, large or small.

The A-Series rigging and transportation have all been optimized to incorporate solutions for every setup. The A-Series Transport case carries two AL60 or AL90 loudspeakers. Use the AL Flying frame to fly up to four cabinets in a vertical column, or the AL Flying adaptor for horizontal deployment.

A flawless fit.

The A-Series may stretch the concept of flexibility, but once the perfect setup is achieved it is sometimes best to leave it just as it is. The d&b Custom solutions team works with venues to match rigging and loudspeaker solutions to the individual architecture and seating of the listening area.

In the case of open air stadiums exposed to the elements, acoustically transparent custom weatherization ensures robust protection of the A-Series and its components, achieving an IP55 rating. Through Custom solutions, the trusted d&b Vi-GSUB can also be flown with the A-Series if required.

If looks are especially high on the agenda, an expanded RAL palette and range of paint finishes will have the A-Series absorbed rather sensitively into its surroundings.

And next...?

Any further inquiries about the A-Series and augmented arrays? There are over 600 d&b co-workers and a world of d&b distribution partners on hand to help.





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