

d&b Soundscape.

A multi-dimensional sound universe.

**d&b
audiotechnik** 



Feeding the brain.

What if there is a way of listening that increases the excitement, deepens the emotions and enhances the impression of being carried by the sound, indeed of being enveloped by it? A listening that brings the best of feelings? Sound that is nothing less than food for the brain? One which no longer forces producers and sound engineers to choose between beautiful sound and true sound?

That's it, that's it: the d&b Soundscape where acoustic environments are exciting, engrossing and enveloping.

Undoubtedly this will be thought of as beyond the typical d&b picture. Something closer to the artist. Towards the nature of man. But d&b would not be d&b if these considerations were not pursued and listening not improved. The time, the technology and the ears are all ready for it.

Science meets artistry.

Right from the beginning d&b has strived to transfer speech, music and sounds as naturally as possible, and with notable quality. Now, with the d&b Soundscape a remarkable tool is available. On one hand this can improve the connection with the audience even more. Because the d&b Soundscape creates acoustic environments with less to compute, the brain is freed of unnecessary acoustic ballast, the listener's senses are stimulated, making it easy to stay aware and focused.

On the other hand, the d&b Soundscape – with its two software modules En-Scene and En-Space – makes system design and deployment more creative than ever, giving a tool kit for artists, sound designers and audio specialists. This way or that way, with enhanced interaction between the performers and spectators, the action on stage transfers without detours and compromises, right to the listener's ear. An intense realm of emotion and imagination opens – for both sides, artist and audience alike. And this is just the beginning.



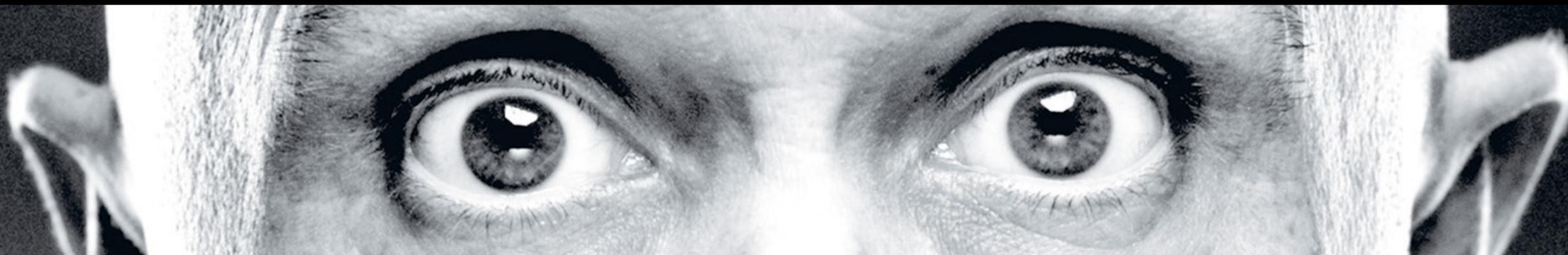
Mixing is not mixing anymore.



It's time to rethink mixing. No longer working in channels, constantly masking and unmasking to extract the crucial sound object at the right moment, making it audible above all others. With all the focused and concerted effort staying one-dimensional, while accepting interference and signal loss. In contrast, with object-based mixing and positioning of up to sixty-four objects, En-Scene calculates and accounts for all time and level differences. The same signal from one sound object arrives at each loudspeaker at the right time, be it a discrete audio signal or a stem, no matter.

And in the case of a second sound object, the signals add up without losses, creating a second dimension. Of course, there are also interferences in object-based mixing, but they do not cancel each other out. In sum, all signals are present, can be localized and differentiated, just like in real life. Acoustic reality, as said – d&b En-Scene.

The eyes are listening.



d&b En-Scene

The audience hangs on the lips of an orator or lecturer – but his voice comes from the loudspeaker above him. A guitarist rages along the edge of the stage, but his riffs hang in the left loudspeaker array. Everyone is confused about who is talking in parliament or in the conference room. The brain, this wondrous bio-computer, has a lot of trouble with such scenarios. It wants to bring alignment to what the eyes see and the ears hear differently, it is computing, orienting, completing. An unconscious process, no matter, the concentration required is more than enough.

The d&b software module En-Scene depicts stage scenarios with up to sixty-four objects corresponding both visually and acoustically, from the angle the eye views right round to hearing all 360°. It locates each individual sound object, tracks it when it moves, lines up eye and ear, brings together what belongs together: the audience now hears what it sees and vice versa. Listening fitting to human nature. While the loudspeaker system, which reinforces and positions, vanishes out of consciousness, just like being uninvolved in hearing and the enjoyment of art, not present, apparently off. So, can one say that d&b En-Scene, the sound object positioning tool, succeeds in acoustic reality? One can.

One day a concert hall?

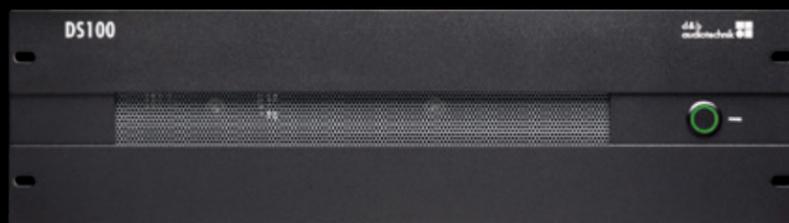
d&b En-Space

Whatever can be heard in a landscape – perhaps birdsong, the barking of a dog somewhere, or church bells in the distance – every landscape has its soundscape. As beautiful as it may be, this may disturb the evening open-air concert, not even consciously irritating the brain, which expects concert hall acoustics in this purpose-built setting. With d&b En-Space, the expectation can be fulfilled. It simulates corresponding realities using the acoustic footprints of small, medium and large concert halls. With these reverberation signatures, acoustics can be naturally modified, enriched to envelop the audience in such a way that the program and the acoustic environment feel harmonious.

The receptivity of the audience and their perception of the performance is undoubtedly increased. The d&b En-Space emulation software is a compact, easy-to-use, almost down-to-earth reverberation system for room simulations, a human-sounding reproduction that makes listening a more immersive experience and gives culture the space it needs. For a day, and for all days.

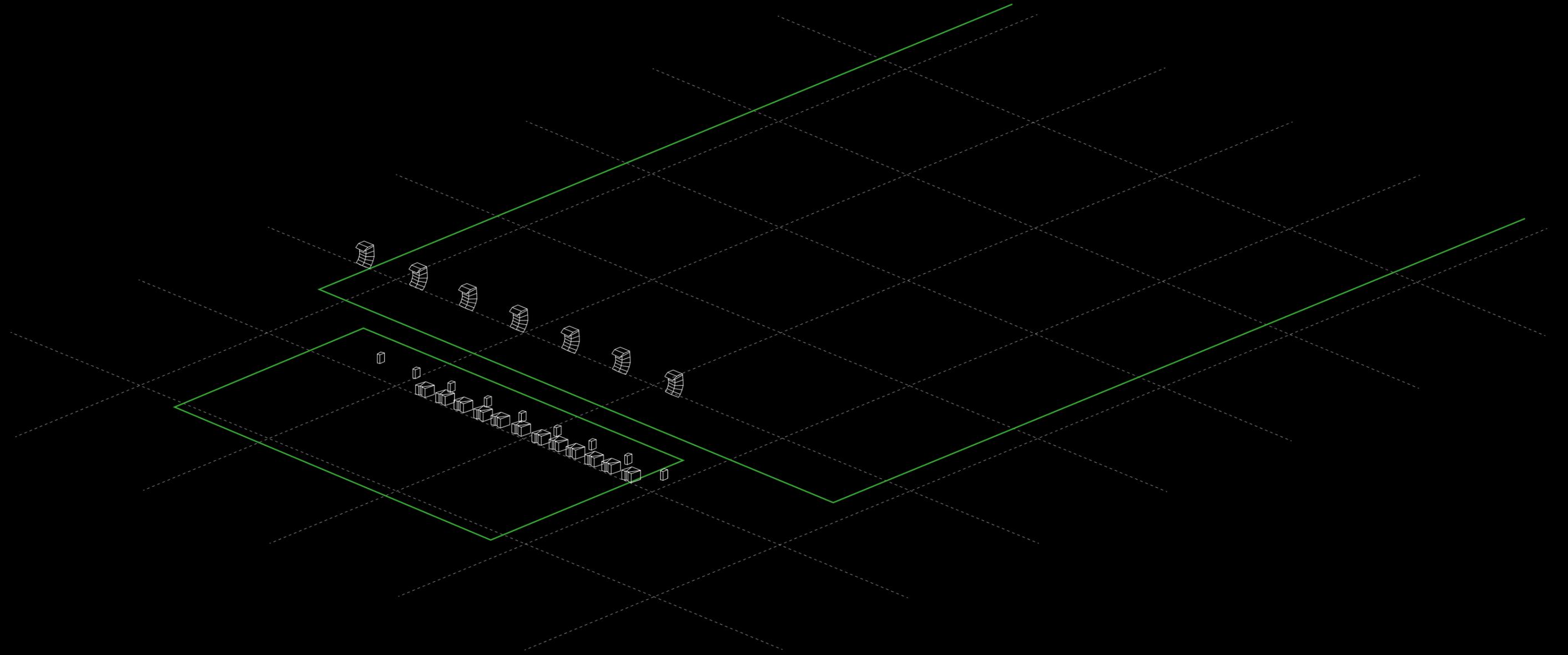


The truth and beauty matrix.



The d&b DS100 Signal Engine is a revolutionary audio system processor with Audinate Dante networking. A matrix to organize large numbers of signal paths, incorporating extensive control in the 64 inputs and 64 outputs, with level and delay settings at all crosspoints. A matrix with many uses, including the beautiful yet true listening delivered by the d&b Soundscape with its two software modules d&b En-Scene and En-Space. A matrix that integrates into the d&b System reality, which in turn comprises loudspeakers, amplifiers, rigging, transport solutions and includes networking accessories, not least the DS10 Audio network bridge, an interface between Dante audio network and the AES3 inputs of the d&b amplifiers.

Less is more.

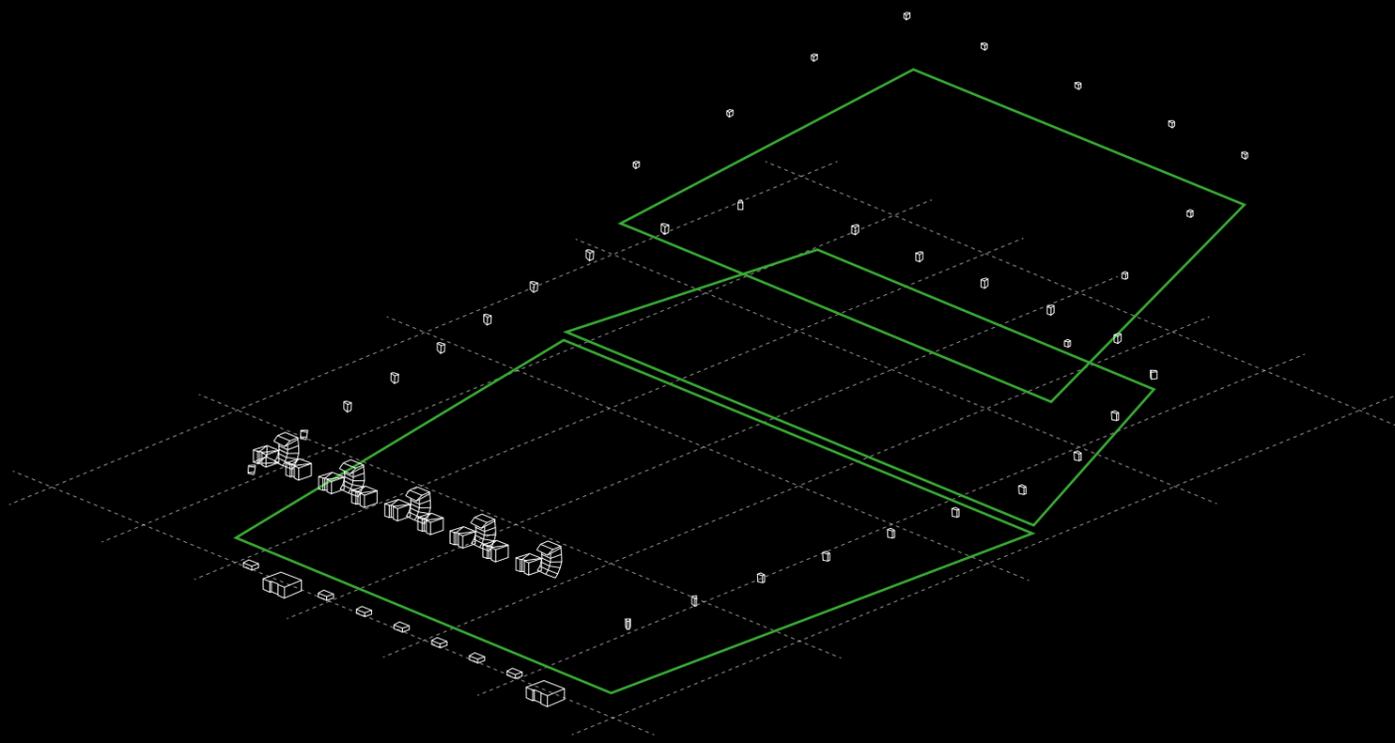


The d&b Soundscape is dedicated to be a comprehensive Sound Designer Toolkit. A toolkit that raises the quality of listening to a new dimension, conveying precise spatial experiences that are a pleasure for the senses. It is not just in a 360 system which does this, a proscenium system ranged on the stage front gives much more than the sound of customary right / left setup, it is a completely new experience.

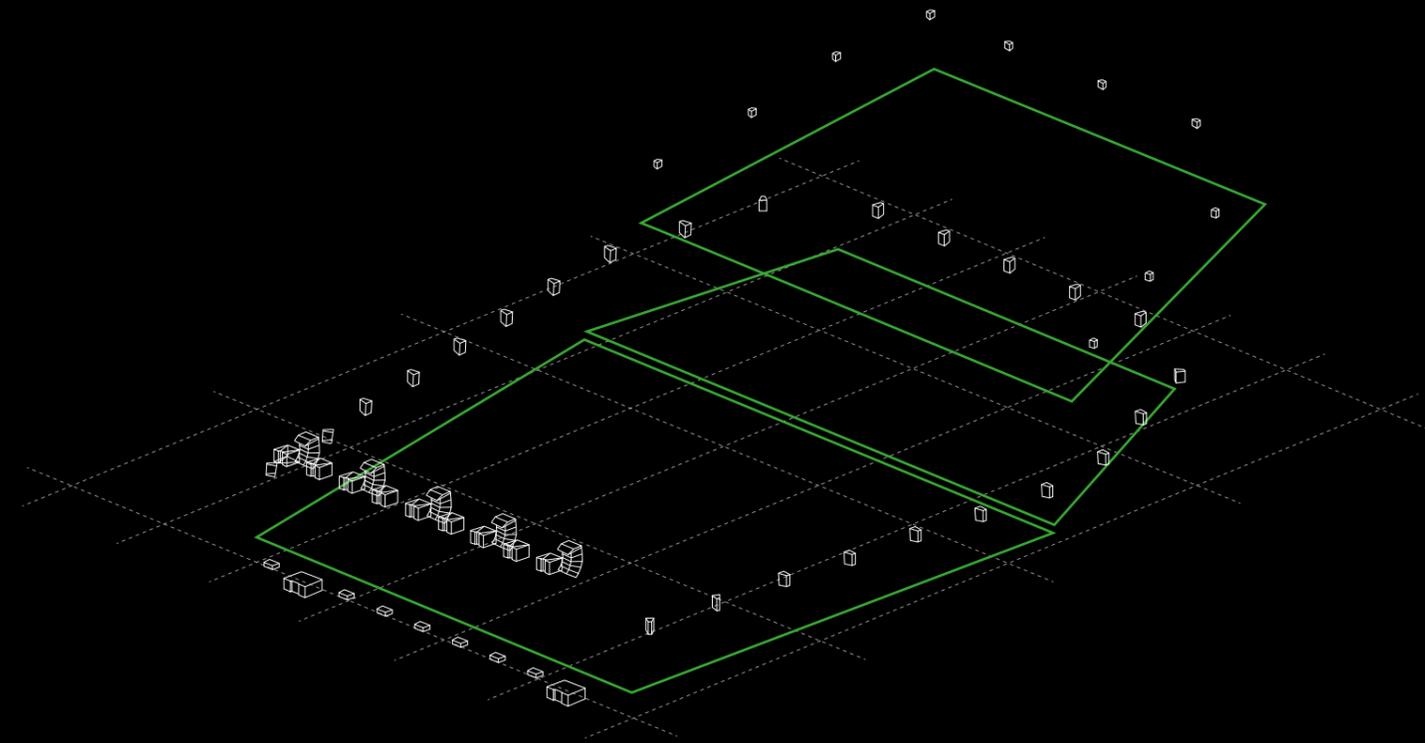
The graphic above shows a typical 180 system to deliver En-Scene for objects placed on the stage. This is a medium-sized venue with a flat audience area for approximately 2,500 people. The system uses seven Y-Series clusters above the stage, Y-Series point sources as front fills and an array of J-SUBs.

More is more.

Listening, seeing and feeling are as one thing, an experience surrounded by voices, notes and sounds. To put it short: the aural environments created by d&b Soundscape are audio solutions delivering benefit to all involved: artists, producers, designers, engineers and audiences.

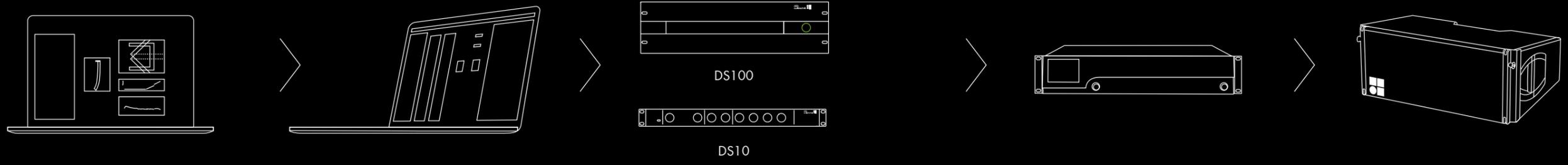


The graphic above shows a system where the En-Scene components will only deliver powerful objects that are positioned on the stage. The En-Space component uses smaller loudspeakers ranged around the audience as it is only intended to deliver reverberation information. For a theatre with a balcony and a capacity of 2,000-2,500 people the system uses Y-Series clusters and a Y-Series subwoofer array above the stage, T-Series front fills, J-SUBs ground stacked, E5 and E6 loudspeakers are positioned on the sides and rear of the stalls and balcony levels.



This second graphic shows a system where En-Scene can place objects all around the audience. It uses larger loudspeakers to the sides and rear to deliver both En-Scene positioning and En-Space reverberation. For a theatre with a balcony and a capacity of 2,000-2,500 people, this system uses Y-Series clusters and a Y-Series subwoofer array above the stage, T-Series front fills, J-SUBs ground stacked, 8S and 10S loudspeakers from the xS-Series are positioned on the sides and rear on both audience levels.

The new d&b Workflow member.



d&b ArrayCalc Simulation software

d&b R1 Remote control software

d&b network audio devices

d&b amplifiers

d&b loudspeakers

The d&b Soundscape is a completely different extension of the d&b System reality, an addition beyond the familiar loudspeaker system horizon: thanks to new technologies, an evolution. Nevertheless, or naturally, as it may be considered; the d&b Soundscape integrates with the d&b Workflow. It can easily be built up and configured with ArrayCalc.

In a second, creative step, using R1 Remote control software, objects can be positioned, room acoustics edited and the system can be operated via Ethernet using the OCA / AES70 protocol. As an entire efficient and intuitive process, from design and simulation to control and monitoring, the d&b Workflow is by no means a closed system. Rather, it is open and ready to connect with industry standard protocols to consoles, workstations, show control, as well as replay and tracking systems.

More art. Less noise.

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