

The show goes on with a Soundscape enabled virtual acoustic shell at Edinburgh International Festival

d&b Soundscape.



Photo Credits: Matt Beech

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David Sheppard Founder of Sound Intermedia

Almost every summer since 1947, Scotland’s capital gives itself to the performing arts. The long-established Edinburgh International Festival brings audiences and artists together from far and wide for what is now undoubtedly one of the world’s most anticipated cultural events. For three weeks, festival-goers immerse themselves in live performance, in venues as illustrious as Usher Hall – the nation’s only five-star concert hall.

Like many public events, the outlook for the International Festival in 2021 was a little different. With restrictions limiting the use of indoor venues, the festival looked to d&b Soundscape – and its acoustic shell – to unite the disparate worlds of classical music and sound reinforcement; to recreate the comfort and quality of the concert hall in a temporary open air environment.

On the grounds of Edinburgh’s Junior Academy and the city’s Old College Quad, two custom built pavilions, a hundred metres long, were

installed like giant bubbles, roofed, but open sided for free-flowing fresh air. Striking in scale and appearance and, as it turns out, entirely capable of the intimacy and focus essential to the arts.

Knowing they had a longstanding reputation for delivering exceptional classical performances, Edinburgh International Festival initiated an informal, exploratory, chat with sound design consultants, Sound Intermedia. With thousands of discerning listeners in mind, especially those accustomed to unamplified music, the necessary sound reinforcement would need to be imperceptible to the ears.

“At Sound Intermedia we’ve been embedded in the cultural world of classical artists and music for more than twenty years,” says founder, Ian Dearden, “serving as a bridge, or translator, between the art and the technology. A PA often brings an element of anxiety to classical musicians. Of course, we’re always thinking about the audience experience, but you’re



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Adam Hockley Application Support Specialist, d&b audioteknik

three quarters of the way there if you have performers who are comfortable and feel supported. And this year’s artists needed to feel at home playing in a tent.

“The tempo of the International Festival operation also meant constant changes,” adds Dearden, “involving over fifty ensembles and soloists across two venues, with repertoire ranging from orchestral, opera, and musical revue, to chamber, folk and spoken word. Almost all of whom are accustomed to performing in the natural acoustics of spaces like Usher Hall.”

Early on Soundscape piqued the interest of Dearden and his colleague at Sound Intermedia, David Sheppard. “We’re forever watchful of who’s doing interesting stuff and have been following Soundscape’s development; we knew for this year’s festival it was the enablement tool we needed, especially the virtual acoustic shell.

“We took on a downstream-upstream approach to the project,” Dearden explains. “David worked with d&b’s application support specialist, Adam Hockley, and the technical providers. Together they addressed the delivery

of audio to the audience and performers. It was my job to coordinate with the artists, orchestras, broadcasters, and recording companies, to put together a plan to capture and share audio from the stages. It was a huge challenge, but one that everyone became really excited about.”

Hockley set to work designing and building the Soundscape system in ArrayCalc, d&b’s proprietary simulation software. “The festival organisers were incredibly trusting, essentially handing everything over to us,” says Hockley. “We had CAD drawings of the proposed canopy structures, so we knew what we were dealing with in terms of scale and space. As for the audience experience, the goal was to recreate the ambience of the concert hall - to preserve the traditions on which classical music thrives.”

With similar pavilions at the quad and academy, Hockley’s system design concept was applied to both venues. The entire product infrastructure was installed and supported by local d&b partner FE Live. Thanks to their product knowledge and technical expertise,

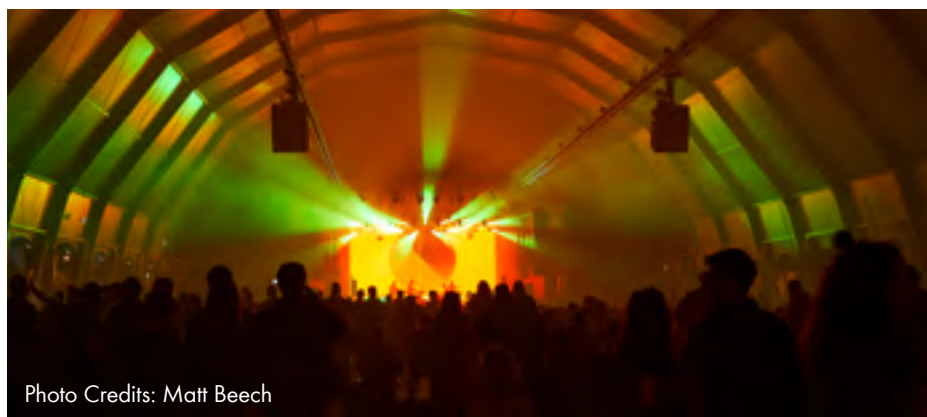


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they were able to deliver the two Soundscape systems, in addition to a d&b KSL rig on the Park Stage, in an extremely tight turnaround time. Thanks to FE Live's professionalism and attention to detail, the sound designers were able to get to work without delay, resulting in a speedy commissioning process.

A 180° source orientated design using En-Scene would effectively sync sounds to their source – a voice to the person singing for example – uniting the ears and eyes for a more intuitive listening experience. En-Space would enable the virtual acoustic shell; with a 360° configuration for surround, plus loudspeakers in the ceiling, the acoustic signature of a world class concert hall would become the reality effect for the audience, making an old friend of an unfamiliar physical environment.

"Generally speaking, the acoustic properties of a concert hall are essential for the natural amplification of acoustic and orchestral music," says Hockley. "So, what we're really doing is asking audiences to suspend their disbelief. Not only to believe they're sat inside a concert hall, but to experience music acoustically, as if it were unamplified from distances far greater

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From day one the sound of the festival has been commended by many, especially with regards to the Academy and Quad pavilions. Edinburgh International Festival's Head of Sound, Tom Zwisterlood, adds the detail. "Almost daily after a concert, Jonathan Green and Tim Hand received praise, thumbs up and compliments from departing audience members. On one occasion I witnessed two older chaps, who I would describe as experienced classical music purists, giving Tim an absolute raving review about how brilliant it sounded: 'the best and most natural sounding amplified performance ever'. The press has also mentioned the clarity and subtlety of it all in several concert reviews."

Zwisterlood describes further how the system can be used for everything from classical to cabaret. „d&b offers a lot of clarity, especially in the vocal range, which effects a lot of the shows we do. We've always found the brand a safe bet because it appears on so many artists' riders. I know if I put d&b in front of them it'll

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As for this summer's festival, in all its complexity? "Personally, I'm very pleased that everything worked out so well," concludes Zwisterlood. "I think we can all pat each other on the back for the achievement. It was always going to be an International Festival year to remember for many reasons, but now, within that, it'll also be a big golden positive memory for amazing sound too. Festival Director, Fergus Linehan recently touched on it, calling it a 'miracle, universally lauded as an outstanding audio experience'. A big thanks to everyone for their hard work and dedication to make it work!"



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> System: V10P, Y10P, T10P, E8, V-SUBs and DS10, DS100, D20 and D80