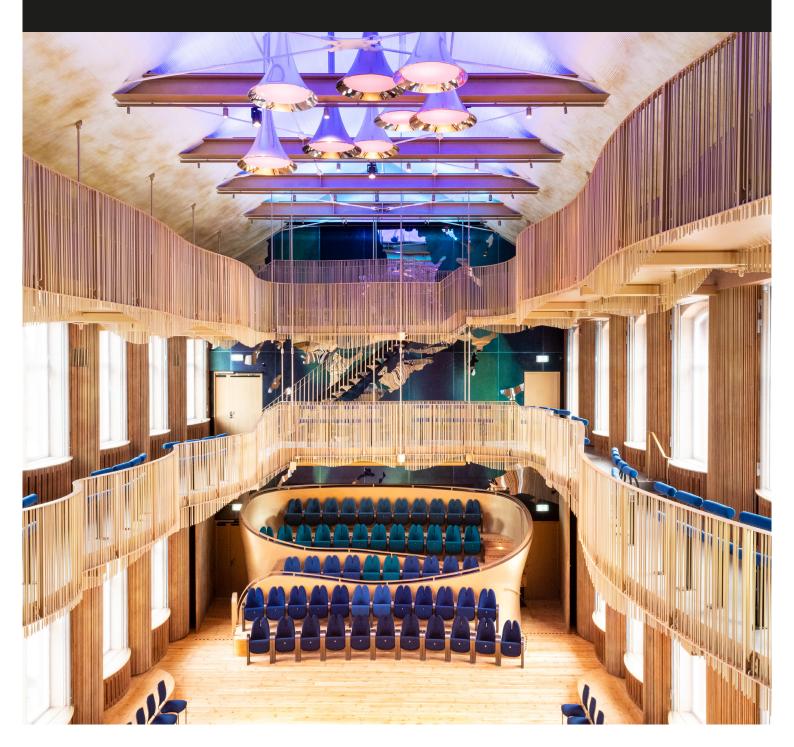
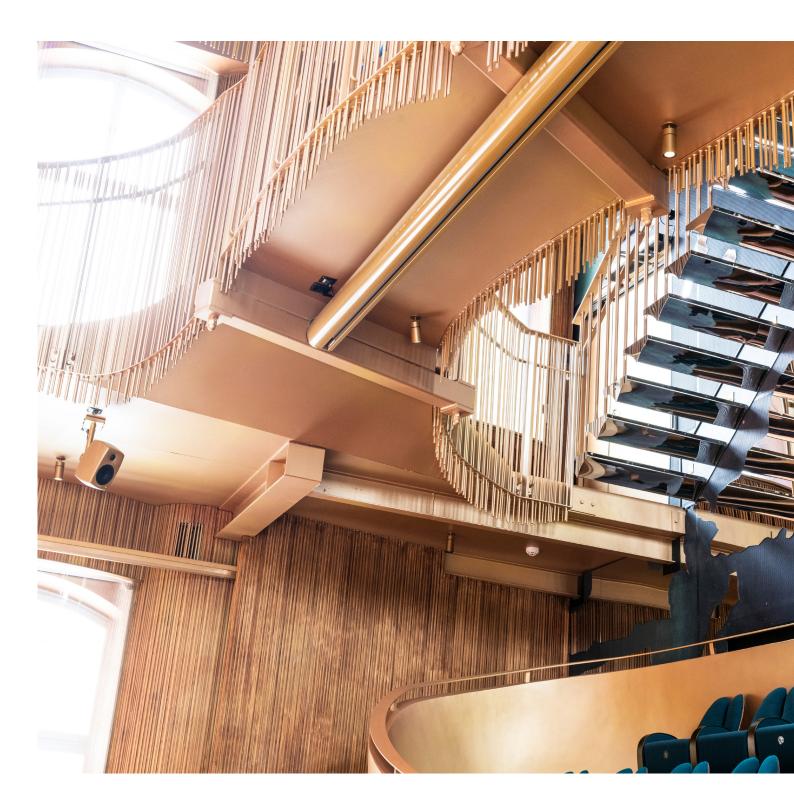
GENELEC[®]

"More than a room for music, it is a work of art" FIT FOR A QUEEN: GENELEC'S AUDIO SOLUTIONS SHINE AT STOCKHOLM'S QUEEN SILVIA CONCERT HALL





PRESTIGIOUS STOCKHOLM MUSIC SCHOOL BENEFITS FROM SOPHISTICATED GENELEC SMART IP SOLUTION FOR NEW CONCERT HALL



hen the directors of Stockholm's prestigious music school, <u>Lilla</u> <u>Akademien</u>, set about building a new concert hall on its existing

campus, their mission was to create a highly flexible venue, serving as a small performance space for professional live music concerts, a rehearsal room for the music school's students and an inspiring setting for creative learning.

Lilla Akademien's Artistic Advisor, Mark Tatlow explains: "We wanted to give students — and everyone who performs in the Hall — somewhere to truly immerse themselves in their instrument. For that, we needed a sound system that would work for live classical music performed acoustically,



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as well as for electroacoustic music and live-streamed concerts."

Work on the project began in 2020 and was completed and inaugurated in 2022, by Sweden's reigning monarch herself, also a patron of the music school. The result is a stunning auditorium, unlike any other: a harmonious blend of architecture, technology and lighting — with a world-class sound system from <u>Genelec</u>.

Unlike a modern, purpose-built concert venue, the Hall is hardly visible from the outside, hidden behind the austere red-brick facade of a 19th-century former orphanage, one of the many historic buildings lining the streets of Vasastan, on the edge of Stockholm's historic centre.

Having identified the most suitable building on campus, one which could maximise the potential for design and functionality, Italian architect Giorgio Palù set the bar high for the Hall's design aesthetics and left the venue's acoustics in the capable hands of Japanese acoustician, Yasuhisa Toyota, an established international authority in the field of Concert Hall design.

The unusual layout of the Hall required close collaboration from a team of international professionals across a range of disciplines, including leading Swedish integrators Informationsteknik.

Marcus Haraldsson Boij, Technical Director of the Informationsteknik team explains the challenges:

"Despite the relatively small 300 seat capacity, this is one of the most complex projects I have been involved in. The combination of a centrally located stage, the long reverberation



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THE NETWORK ALLOWS DISCRETE CONTROL OF EACH LOUDSPEAKER TO MOVE SOUND AROUND THE ROOM.

time of acoustic classical music — and a design requirement to minimise the number of visible loudspeakers — made it very interesting from an acoustic design point of view!"

Boij, an experienced musician with a background in sound engineering, understood all too well the constraints of the building's cavernous architecture and set about sourcing a flexible sound system that could work just as well for acoustic and non-acoustic music.

"We needed to distribute high-quality sound close to the audience without it playing louder than the reverb. Without a traditional 'left/right' stage and with the audience seated at three different levels surrounding the orchestra, it demanded a different way of thinking — and while I wanted more speakers, it simply wasn't possible given the design of the Hall." To limit the amount of sound bouncing around the room, it was important to reduce the volume from the loudspeakers and Genelec's <u>Smart IP</u> range of networked models, with their outstanding audio performance and excellent nearfield clarity, was an obvious choice: "By positioning them around the space" Boij continues, "we avoided using a traditional line array system, which would have been too obtrusive in this setting. Instead, we created a unique distributed sound system which utilised the volume of the entire Hall while still giving the audience a sound that felt both rich and intimate."

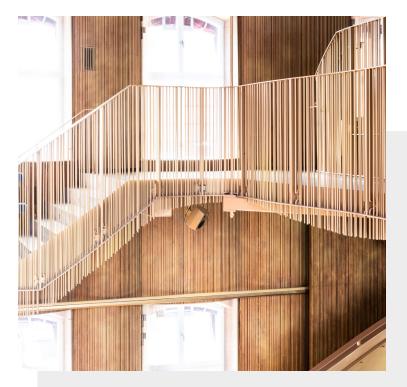
The Hall is built to the highest environmental standards with an unparalleled attention to detail; the pine-clad walls of the 14-metre-high room are finished in the same varnish as 'Cremona' violins — but it was the wooden ribs of this unique wall construction which posed an issue.



With a design brief that clearly prohibited too many visible loudspeakers, could the cabling and amplifiers be hidden within the sumptuous gold fittings and honey-coloured pine cladding?

"We knew that with the way the walls were constructed, and the design requirements imposed upon us, pulling cables was going to be a problem. This led us to the Smart IP loudspeaker family — since this avoided having to worry about housing external amplifiers and their single cable technology made cabling MUCH easier," notes Boij. "It was a great solution for us."

The team at Informationsteknik specified twenty-two Smart IP <u>4420</u> models and four <u>4430</u>s. Painted in RAL 1036 gold, the 4430s were the only visible loudspeakers of the entire installation. Two pairs were suspended



below the first level balcony, blending harmoniously with the décor. Additional pairs of the compact 4420s were installed every few metres across each section of the curved wall in between the windows, cleverly hidden in specially insulated recessed boxes.

For Lilla Akademien, it was essential that the Hall could meet the dual demands of classical music tradition and the music of tomorrow. Not only did the active design of Genelec loudspeakers eliminate the need for external amplifiers, but providing multichannel sound over the <u>Dante</u> network was an unexpected bonus for the school's students:

Tatlow concludes by explaining: "Using a digital audio workstation, our composition students can connect to the Hall and create pieces by combining the live acoustics of the Concert Hall with electronic sounds or music. The network allows discrete control of each loudspeaker to move sound around the room. The design of the Hall itself encourages students to take the next step in their music making — and the possibilities are huge."

THE KIT

- 22 x 4420A
- 4 x 4430A RAL 1036 (Gold)

System Integrator:

Informationsteknik Scandinavia AB

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