CASE STUDY

Portlantis Exhibition Centre

MAASVLAKTE, NETHERLANDS

Integrated AV helps navigate the past, present and future





IMMERSIVE STORYTELLING

Portlantis is an exciting new visitor and exhibition centre for the Port of Rotterdam, located at the port's western-most point in Maasvlakte, Netherlands. First opened in early 2025, the educational space invites visitors to journey through the port's 100-year history, experience the port of today, and take a glimpse into the future. This modern, multi-use building spans five rotated spaces, catering for school trips, tourists and business meetings. Three floors are dedicated to exhibits, situated between office space on the ground floor and a restaurant with a panoramic viewing platform at the top. To help immerse visitors in the port's fascinating story, systems integrator Ata Tech BV and project sound designer Danny Weijermans selected Genelec's 4410 Smart IP loudspeakers to deliver engaging sound across every floor.







A CONNECTED VISITOR EXPERIENCE

Connected by a 22-metre-tall atrium, the three exhibit levels host their own individual displays for visitors to discover, covering the port's history, its impact on the economy, as well as its climate-neutral goals and exciting innovations.

Much more than just a standard exhibition space, each floor has been designed to engage visitors with touch screens, motion sensors, games, interactive labs, AR and VR experiences. The goal was to bring this all together into one unified AV system, streamlining the sound as visitors walk through each connected space.

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Danny Weijermans, Project Sound Designer





CREATING AV HARMONY

To achieve this unification, an ecosystem of technology was carefully chosen to underpin the entire experience. Show control, audio and lighting are managed by a Pharos Architectural Control system, while Netgear AV Line switches form the foundation of the network infrastructure. BrightSign media players and compact NUC computers drive the interactive content, with projection from BenQ and Optoma units, and lighting by CLS fixtures. Together, audio, video and visual effects are tightly synchronised across the centre.

Balancing clarity and coverage

"The brief was to create a three-dimensional experience with sound that enables you to 'feel' rather than just 'hear'," explains Weijermans. "From very early on I knew that the project would need many small loudspeakers on every level rather than a few large ones — this avoids the impression of sound coming from one specific direction and creates a smoother flow between exhibits." Ata Tech installed over 80 Genelec 4410 Smart IP loudspeakers over the three exhibit

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Danny Weijermans, Project Sound Designer



floors, delivering extraordinary coverage, clarity and intelligibility—essential in such a complex, and often noisy, space.

"The centre's acoustic landscape reflects the port environment with sounds like hammers on metal, wind turbines and birds, but also more abstract music that takes you on a journey," continues Weijermans. "The 4410s bring these natural harbour sounds to life, ensuring visitors feel as though they are in the heart of the action."

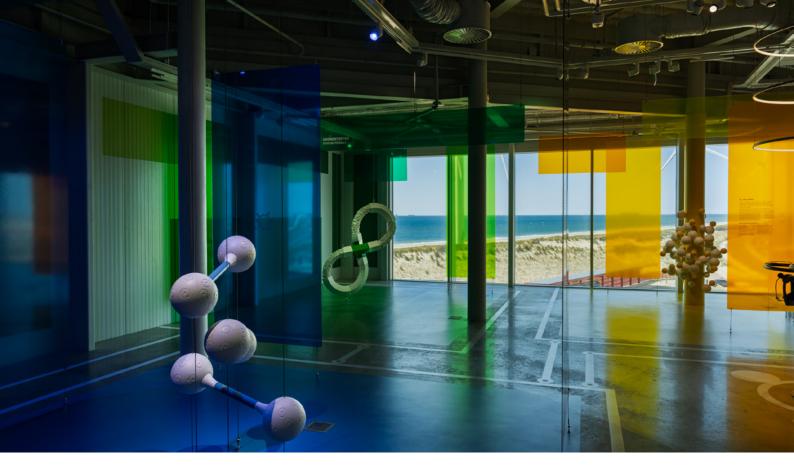
The building's open, central atrium created its own unique challenge, with the sound from each individual exhibit needing to blend into one balanced, central soundscape. Together with exhibition designer Kossmanndejong, Weijermans meticulously planned the location of each speaker for optimum directivity, whilst also designing a specific tempo across every level to create a complete sound in the central space.

"I'm very proud of how this project has come together. It's great to see it all working harmoniously after many years of planning," says Weijermans. "Genelec loudspeakers provide the most natural sound. Even in a large space, you really get to experience the port in a vibrant, lively way that flows beautifully. With so much advanced technology used throughout the centre, the audio really brings everything together for a captivating experience."

Genelec's innovative <u>Smart IP</u> technology made the installation process incredibly simple, delivering power, audio and loudspeaker management over a single CAT cable using PoE technology. Setup and configuration was equally straightforward. "Genelec's <u>Smart IP Manager</u> software provided a clear overview from a single interface that enabled us to adjust the different loudspeaker setups in each room as a group or individually, as well as giving us straightforward status monitoring," explains Ata Tech's Tom Aarts.







Streamlined network control

When it came to control, Pharos' control solutions were seamlessly integrated to create one central control system for all AV outputs, bringing all core technologies into a single, unified, easy-to-manage system. Pharos panels are installed at various points across the site to give staff easy access to audio, video and lighting controls including volume, site announcements and rebooting options. "If we decide we need to increase the sound level on one particular floor, it takes just seconds to do — it couldn't be easier," adds Aarts.

"The integration allows staff to not only control the sound system but also see the status of the speakers directly, so we can see if they are still online, give any warnings if necessary, switch indicator LEDs on or off and view relevant information all from one place," explains Bas Hoksbergen, Business Development Director at Pharos. "It's great to walk around Portlantis and see how our touch panels are used to control the complete installation — not only the lighting and show elements but also directly integrating with the Genelec Smart IP system. We love how it's turned out!"

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Tom Aarts, Ata Tech Owner



BRINGING THE PORT TO LIFE

Since opening, Portlantis has quickly become a popular destination for tourists, schools and business visitors. Genelec's powerful yet compact 4410A loudspeakers proved integral to bringing the centre to life, combining interactive exhibits and immersive audio to deliver a unique educational space. The quality and precision of Smart IP along with Pharos control ensures sound, light and interactivity work in harmony to tell the port's story — so visitors can explore the historic port of Rotterdam like never before. The future-proof experience centre demonstrates how thoughtful integration can transform complex technology into a truly engaging experience for every visitor.



THE DETAILS

Client

Port of Rotterdam Authority

Architect

MVRDV

Exhibition Designer

Kossmanndejong

AVC-Consulting

SemMika

Exhibit Builder & Main Contractor exposition

Bruns

Audio Design

Danny Weijermans

Integrator

Ata Tech

Genelec Distributor

Audio XL

Loudspeakers

80 x Genelec
Smart IP 4410A

Network switches

Netgear AV

Audio, show and lighting control

Pharos Architectural Controls

Media

Brightsign and NUC

Lighting

CLS

Projectors

BenQ and Optoma

