

Performance venues

AMSTERDAM ROYAL CONCERTGEBOUW

Amsterdam, Netherlands

XILICA



Digital signal processors from Xilica's acclaimed Neutrino series were selected to handle conversion duties and selected processing at the Amsterdam Royal Concertgebouw. The DSP was implemented as part of an ambitious upgrade effort undertaken by Jan Panis and Koen Keevel from **Panis Musical Engineering (PME)**.

Opened to the public in 1888, the Concertgebouw is celebrated for its natural room acoustics and is one of the world's most renowned classical music venues. It is also the home of the Royal Concertgebouw Orchestra, which famously enjoyed long associations with composers including Gustav Mahler and Richard Strauss. But despite its historical provenance, the technological infrastructure of the venue is decidedly contemporary, with the venue team always keen to do what is possible to enhance the visitor experience.

The centerpiece of the latest upgrade project was the specification of a Meyer Sound MINA Compact Curvilinear Array Loudspeakers, but the PME team also took the opportunity to review the DSP configuration. For this they needed "utmost flexibility in terms of analogue and digital I/O conversion - specifically to and from Audinate's Dante and AES/EBU - as well as superb DSP audio quality," says Panis.

The PME team had become aware of the Xilica Neutrino range through a series of trade show visits and contact with Xilica's European office in Amsterdam. Once the upgrade project had been initiated, it became evident that robust support for Dante as well as straightforward system control were also priority requirements - hence the eventual specification of two Xilica

A1616-ND Dante-enabled DSPs with AES/EBU, and a single Xilica Touch 7 touch panel.

Built on the audio performance reputation of the company's 40-bit floating point DSP engine, high performance 24-bit converters, and premium grade mic preamps, Neutrino is designed to bring a new level of audio performance and 'drag and drop' ease to fixed audio installations. Meanwhile, the interactive, programmable, multi-page Touch 7 panel enables users to create and customize presets to be controlled by simply touching the screen. At the Concertgebouw, once all parameters were copied into the Neutrino DSP via its Xilica Designer software, the A1616-NDs were connected and adjusted accordingly.

The Neutrino products, says Panis, are "extremely flexible, good sounding DSP modules with very clever software. During the process of developing the audio system, we had to make many adjustments in terms of processing, routing and presets, and these could be achieved more or less instantaneously. So we are delighted with the choices we made here."