



NEXO

Celebrating four decades as a staple within the world of pro audio, French loudspeaker manufacturer NEXO continues to innovate its offerings to the events industry. Prior to the launch of its latest product – the NXAMP4X4MK2 – TPI’s Stew Hume travels to the company’s Parisian HQ to meet the team responsible for bringing these products to life.

There is little doubt that the world of pro audio is a very different one to when NEXO founders Eric Vincenot and Michael Johnson put together the initial building blocks of the company in 1979. With endless technical advancements, customer demands and the expansion of market players, it’s testament to all the companies that have weathered the tide of change. But while speaking to various members of the team that populated the various offices, workshops and testing areas of NEXO Paris HQ, it seems one of the keys to this longevity has been adaptability.

Although NEXO in its early days was famed for working in the touring sector, over the decades, the company has refocused its target markets. Although still involved in large-scale events, the company also caters for other areas, including theatre and stadium installs. “We are still very present at the elite level of entertainment events with our flagship STM series modular line array, but we have evolved our product design in the directions of the much larger mid-market,” explained CEO Jean Mullor. The CEO also stated that to remain successful, a product line also has to be

adaptable. “A good example of this is the GEO S1210-ST – a high-output, long-throw version of the standard GEO S1210 cabinet – which has been optimised for stadium installations,” said Mullor.

Despite various changes within the company’s ownership – notably with the successful acquisition by Yamaha in 2008 – NEXO has remained fiercely independent. All speakers are still manufactured in France, and the company has retained its in-house R&D department, which is responsible for creating new speaker systems, compatible software and liaising with the amplifier manufacturing, which is handled by Yamaha in Japan.

As well as celebrating its 40th anniversary, 2019 has also seen the launch of a number of new products in the NEXO range. On the speaker side, it has been ‘The Year of the 12’ following the launch of the P12 high-output point source cabinet, along with the GEO M12, the final piece of the large-format line array system puzzle. If that wasn’t enough, TPI’s visit coincided with the launch of the company’s latest NXAMP 4x4MK2 amplifier, the successor of the previous flagship system. NEXO’s Director of

NEXO's Director of R&D, Joseph Carcopino and Electronic Engineer Julien Dorel; NEXO's Managing Director Denis Baudier.



R&D, Joseph Carcopino, walked TPi through some of the company's latest innovations. Having been at the company since 2001, there are few who know the intricacies of the NEXO product line better than Carcopino. "When it comes to creating a new product, you can go one of two ways," he began.

"The first is to create a new product each time a customer requests something specific. The only issue with this is that you end up with a very large product catalogue. The other option is to work with a smaller number of products and attempt to make them as flexible as possible. We've kept a limited range over the years but, as we are a smaller company, we are able to work very closely with manufacturing to ensure each box is customisable and will fit a whole array of applications."

The manufacturing and R&D process in the creation of NEXO's speakers appears to be a very entwined process, with the R&D building and the warehouse a 30-second walk from one another. The warehouse is testament to the company's mantra of efficiency. One of the earliest adopters of CNC machines in speaker manufacturing, it has continued to be at the forefront of modern speaker engineering.

"The decision of which parts of the process are done via machinery comes down to cost," explained MD, Denis Baudier during a tour of the warehouse space. An example of this cost-effectiveness could be seen behind a mystery door, which housed the company's sanding robot – which is able to do the job of 20 men with no human error. "The importance of the human touch is still held in high regard, especially during the painting and testing of each box," asserted Baudier. "Before any product is assigned an RF ID tag, it undergoes an intensive test, which measures a variety of elements including impedance, tonal and frequency response and distortion. If it doesn't pass, it doesn't get a tag and it never goes out the door."

During the tour, Baudier unveiled one of the company's latest investments that had been purchased as a direct result of the work with the R&D team. "The design of the P12 is unique, with its curved wood surface,"

he commented. "We knew from first looking at the initial designs, our current CNC machines would not be able to cut the various pieces to size due to its 3D nature. The result is a brand-new CNC machine, which is able to work on the X, Y and Z axis. Now we have this new machine, it opens the door to brand-new designs that would not have been possible before." Further down the production line of the P12, TPi got to witness another innovative process that the NEXO team had borrowed from the aeronautic world. Doing away with conventional screws, the P12 is glued together using a vacuum process that bonds the structural elements by putting the cabinets under 130kg of pressure.

Back over on the R&D side of the site, Carcopino explained how his team had developed over the years. Currently NEXO's R&D division consists of 13 individuals covering a number of fields, including acoustic, mechanical, electronic and software. "The development of our software arm came really late," admitted Carcopino. "We previously subcontracted the advancement of our digital networking but, in recent years, we took the development in-house."

One of the people behind the development of the company's software arm is Maxime Grimonet. One of Grimonet's latest projects was the development of the graphical interface of the NXAMP4X4MK2, where he worked closely with Yamaha's Japan office.

"I've been at the company for almost seven years, and my first project was working on NeMo – our system management software," Grimonet added. NeMo allows users to control a range of NEXO devices, including the NXAMP Powered TD-controllers, DTD Digital TD-controllers, via a Wi-Fi network with a range of interfaces.

"It's already compatible with several Apple devices and we are in the process of working on a Windows version," he stated. "Another one of my focuses has been the development of our NS-1 system configuration software. We are constantly trying to find new ways to give greater control

of array coverage." Another individual who has been part of the growing R&D department is Julien Dorel. Hired as an electrical engineer, he has been part of the strategic growth of the team.

"There has been real growth within NEXO's R&D department, but especially on the electronics side of things, rather than just the speakers and acoustic research," he commented.

"Our overall demographic is quite young," reflected Carcopino, adding that a number of his team – including Grimonet and Dorel – were hired straight from university. "Having a youthful team is fantastic as they are constantly questioning 'why?' This curiosity often leads to finding a different way of tackling a problem and, in-turn, creating an innovative product."

With a selection of new products for NEXO's global network of customers, the R&D team is now set to get feedback from those who are

now getting their hands on the new systems. "The in-the-field knowledge is essentially in product development," commented Carcopino. "It's only with these experiences that you get a real sense of the needs of the end-user and can start to see small tweaks that could be made on the product or could be developed for the next project."

With a renewed product list, Carcopino and his team are set to ride the wave of further improvement. "There is a really great dynamic within NEXO right now," he enthused. "We are pushing hard on R&D and encouraging each one of the team to take the momentum and continue to push forward. We might even have a few more surprises by the end of the year..."

TPi
Photos: TPi
www.NEXO-sa.com