Software Suite
Configure. Manage. Update.

www.nexo-sa.com

Thinking. Inside the box.
A powerful set of free software tools for every step of your workflow, from sound design to final event monitoring.
A powerful and intuitive system configuration and simulation tool ensuring uniform SPL coverage in any venue with any NEXO system.

**Perfect coverage made easy**

**All NEXO speakers on tap**

Once the geometry is defined, loudspeakers can simply be dragged and dropped into the project, and configured into flown or stacked clusters.

**Surfaces**

Sound pressure can be received differently on the venue surfaces. Venue items can be:
- Simple surfaces
- Standing-up or seated audience areas
- No audience areas, simply taken into account as obstacles
- Hidden to calculation.

**Line-source calculations**

NS-1 helps you to find the perfect series of angles for your clusters, by calculating acoustic pressure on the surfaces. Results can be displayed using NEXO’s meaningful dB MIF, or other metrics of your choice.

**Direct sound and time coherency**

NS-1 performs direct sound calculations on your geometry. They allow you to tend towards the best speaker ratio, gains and positions to match your target coverage. Furthermore, NS-1 makes it easy to align the delays of the speakers thanks to time-coherency calculations.

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**Your venue is just a click away**

**Drawing**

NS-1’s drawing tools enable the user to design a venue very quickly. You can even import one or several images of 2D drawings such as plane or cross-section views, and design your 3D model accordingly.

**Imported venue**

NS-1 supports many 3D formats to import a model of your venue including: Ease, SketchUp, 3D via Collada, Google Earth and STL files.

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SketchUp is a registered trademark of Trimble in the United States. Ease is a registered trademark of AFMG Technologies GmbH. Collada is a trademark of the Khronos Group Inc. Google Earth is a trademark of Google.
Complex calculations
NEXO enjoys close collaboration with the world’s leading experts in electro-acoustic simulation programming. NS-1 models the radiating behaviour of the speakers by spatially sampling them into a large number of monopoles and dipoles. In every mesh point of the venue’s surfaces, the contribution of each one of the speaker monopoles is calculated for the frequency band of your choice. The simulation results are mapped to the surfaces, giving a 3D representation of the SPL coverage.

Sub design
NS-1 makes it easy to control the beam steering of horizontally arranged sub-arrays. Optimal electronic delays are calculated depending on the sub settings (omni/cardio, etc.), the beam width, and steering angle.

Report editing
A complete speaker list, with specified positions, angles, gains, delays and pressure plots, can be exported from NS-1.

Fly safe
For NEXO, safety is the number one priority. Capable of so much more than acoustic predictions, NS-1 also calculates the working load of the flown clusters, and gives you the green light.

NS-1’s mechanical database is always double-checked by an independent expert. The advanced algorithm takes into account the hanging points, the bumper type and, most importantly, the angles between the speakers, providing an accurate result that is certified according to Eurocode 3 “Design of Steel Structure” by TÜV, the world leading certification company.

Detailed Features

GENERAL
Creating, opening, saving and duplicating NEXO NS-1 Project Files (.nexo, .nexo3). Project file includes speaker systems, venue items and simulated contours.
Accessing NEXO technical documentation (System Manuals, Structural Analysis, TÜV Certificates).
Importing venue as NEXO Venue (.nxv), Collada/Sketchup (.dae), 3D Systems (.stl), Google Earth (.kmz), Ease Audience/Face (.zar, .xfc), plain text (.txt).
Exporting venue as NEXO Venue (.nxv), Face File (.xfc), or Image.
Configuring Air Absorption.
Expressing distances in Metres or Feet.

PROJECT 3D VIEW
Viewing a 3D representation of the venue’s surfaces and speakers. Moving and rotating the camera.
Moving the speakers, systems, venue planes or vertices using the mouse, or through a dialog (translation, rotation and/or predefined transformation like mirroring).
Selecting and editing speaker systems or venue items.
Viewing or hiding the Direct Sound or Time Coherency contours mapped on the venue surfaces.

EDITING THE PROJECT
Adding speakers from the library by dragging and dropping. Choosing between Horizontally or Vertically Flown or Stacked Cluster, or Single Unit.
Naming and adding comments to speaker systems and venue items.
Duplicating speaker systems and venue items one or several times, applying transformations (translation, rotation, flip,...) to duplicate.

EDITING VENUE ITEMS
Creating surfaces as quadrangles (vertical) or polygons (custom number of vertices).
Assigning audience type to surfaces (no audience, surface, seated, standing, disabled).
Inserting side view or plane view drawing or any picture (.jpg, .png, .bmp) in a venue surface.
Editing vertices using a Range Finder device (e.g. TruPulse 360).

EDITING SPEAKER SYSTEMS
Editing cluster arrangement and processing presets setup on NXAMP, gains, delays and mute.
Specifying dip angle, single sequence, stack between speaker, horizontal coverage, Minimum Sub configuration, etc.
Viewing the side view for the cluster (with radiation rays) and the venue surfaces as well as audience levels. Viewing the sound pressure field in this cross section.
Populating a pressure plot (sound pressure along distance on the surface), with various settings (dB A, dB B, dB Peak, SPL, or fixed frequency).
Adding measure points, and viewing sound pressure dB level along with frequency as curve or bar graph, at this point.
Calculating beam steering of horizontal or vertical sub-arrays. Calculating electronic delays depending on the steering angle and beam width.
Checking mechanical computations (dimensions, weight, forces, working load and safety factor) with various settings (bumpier type, rigging point, wind,...).

SIMULATING
Calculating direct sound pressure field at audience level. Calculation is optimized depending on the selected frequency range, with surface shadowing options.
Calculating time coherence (i.e. time alignment quality), or low frequencies only, or high frequencies (between main).
Calculating ISO’s frequency bands or broadband, with user defined resolution, bandwidth, and SPL range (optional headphones).
Choosing between fast or slow calculation time, for rough or precise simulation.

REPORT EDITING
Printing or exporting a configurable PDF containing:
- The equipment list for speakers and quantities.
- For each cluster, a side view, pressure plot and/or mechanics (angle sequence, electronics, horizontal coverage details, ...).
- A picture of the venue with calculated contours.
A complete system management and remote control solution for networked NEXO Powered TD Controllers (NXAMP), and Digital TD Controllers (DTD).

Prepare the show from the best seat in the house

One session, multiple functions
NeMo saves everything from the devices, groups and zones that you have created offline or online into a session. You can share this document with other NeMos, running on Mac, iPhone or iPad.

Prepare your session offline
Creating and arranging devices
Offline device prototypes (NXAMP, NXAMPmk2 or DTD) can be created and grouped together in groups of devices, or zones of channels. All are represented on a map where they can be moved and stacked together, with a customizable background picture.

Full control at your fingertips
Thanks to intuitive and secure UI controls, many parameters can be edited while devices are offline or online, including preset selection, input patch, gains, delays and EQ. Several devices can be edited at once, and everything can be undone, even online.

and match with online devices
Intelligent matching
NeMo suggests a matching between online and offline devices, that you can customize. NEXO devices can be easily identified thanks to flashing screens or LEDs. NeMo allows you to choose the synchronization direction: data is taken from or sent to the online devices.

NeMo saves everything from the devices, groups and zones that you have created offline or online into a session. You can share this document with other NeMos, running on Mac, iPhone or iPad.
**NEXO Software Suite | NeMo**

**Easy to set up**

NEXO introduces Direct Control: with your NXAMPs and NXAMPmk2s equipped with NXDT104, NXAE104 or NXRM104, and your DTD-Ns, you can simply connect your NEXO Devices to NeMo with Ethernet and/or Wi-Fi, and they are automatically discovered.

NXAMPs can also be equipped with NXES104, but AVS-Service is needed in addition to NeMo.

**Never miss a thing**

NeMo comes with a powerful logging and alerting system. When online, alerts are reported and conditional red alerts can be activated.

A Log can be recorded and displayed in real-time to review useful information about the devices and their usage. Recorded parameters include levels, levels, status (sense, peak, protect) and parameter values (volume, delay, EQ…).

Checking up and monitoring

The Recap' Tab provides a full view of the input, preprocessing and output channels of the system. It makes it easy to perform a system check, by isolating the output channels one after another.

It’s also the perfect view to monitor the input and output levels and the channel status, as well as to check the preset and settings.

**Detailed Features**

**GENERAL**

Creating, saving and sharing sessions (fermo), containing devices and their parameter values, as well as groups and zones.

Connecting to the network using one or several network adapters wired or Wi-Fi. Automatic discovery of compatible devices.

Muting, soloing and locating the devices and channels from almost anywhere in the application (Selector, Network Tab, Recap Tab and Control Tabs).

A Log can be recorded and displayed in real-time to review useful information about the devices and their usage. Recorded parameters include levels, levels, status (sense, peak, protect) and parameter values (volume, delay, EQ…).

Matching from NeMo to online devices or reversely, on a common or individual device basis.

**NETWORK TAB**

Grouping devices or channels into groups and zones, for multi-device control.

Adding custom background pictures, editing pictures’ position, blurriness and opacity.

Grouping devices or channels into groups and zones, for multi-device control.

**MATCHING**

Automatic matching based on history, or custom matching: viewing devices ID and previews. Device IDs can be edited while offline.

**RECAP TAB/QUICK MUTE SOLO**

Muting, soloing or locating devices, groups and zones, monitoring input or output levels, and channel status (sense, peak, protect).

**CONTROL, SETUP AND SCENE TABS**

Editing parameters of one or several device(s), channel(s), group(s) or zone(s), in absolute or relative way.

Selecting presets from NEXO factory setups, or per-channel custom setups.

Patching input channels to preprocessing channels and to output channels.

**LOG AND ALERTS**

Recoding, visualizing and exporting a log of all the values of the online NEXO devices (including temperatures, voltages, currents, warnings, ...).

Viewing and exporting alerts (connections, disconnections, alerts and errors).

Configuring red alerts with value and time thresholds on many parameters of NEXO devices.

Periodically emailing log and alert reports.

**Recommended maximum number of devices**

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**Recommended maximum number of remote control sessions**

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**Supported platforms:**

- macOS 10.11 or later
- iOS 10.0 or later

**Pricing:**

- Available for free on the App Store and Mac App Store

**Demo mode:**

Test the application.

**Presets library:**

Can be automatically downloaded from the internet or from the online devices.

**Undo/redo and copy/paste:**

On most functions, offline and online.

Accessing a fully configurable Live mode, where user interaction is limited.

Connecting to the network using one or several network adapters wired or Wi-Fi. Automatic discovery of compatible devices.

Creating, saving and sharing sessions (.nemo), containing devices and their parameter values, as well as groups and zones.

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Dory

Because every hero needs a sidekick

A highly intuitive remote control solution for any NEXO Digital TD Controller (DTD) over USB, available on desktop and mobile platforms.

NEXO Dory

Choosing audio sources and patching
A wide range of audio sources can be selected for the stereo inputs: analog, AES/EBU, Dante, or even USB.
Preprocessing EQ can be applied independently to L and R inputs.

Configuring output channels
The R and L inputs can be independently patched to Main L, Main R or Sub output channels, on which gain and delay can be edited. A user compressor can be applied in addition to NEXO protection and compression layer.
The easy way to keep your NXAMP and NXAMPmk2 Powered TD Controllers up to date.

Simple. Fast.

Updating in parallel
Now several NXAMPs can be updated at the same time, making the update process much faster. You can even start updating some devices while others are already being updated. NeFu has advanced upload mechanisms that enhance reliability.

Straight to the point
When connected over network or from a serial port, NEXO devices are automatically discovered. NeFu updates only the parts (NXAMP or extension card) needing to be updated to the selected LOAD version.

Detailed Features

**GENERAL**
- Opening a LOAD file (.dld) and reviewing its content (included firmware versions for NXAMP and extension cards).
- Automatic discovery of NEXO devices on a network. Filtering the available network interfaces.
- Selecting one or several NEXO devices and, if needed, starting to update them and/or their extension cards, in parallel.
- Emailing log report to NEXO.

**COMPATIBLE DEVICES**
- NXAMP with NXAE104, NXDT104 or NXDT104mk2
- NXAMPmk2 with NXAE104, NXDT104, NXDT104mk2 or NXRM104 (*extension card can be updated*).

**COMPATIBLE LOADS**
- NXES104 (no audio)
- NXAE104 or NXDT104 (mk1 & mk2)
- NXES104

**NXAMP**
- 4x1 and 4x4 (limited control on NXDT104mk1 and NXES104)

**NXAMPmk2**
- 4x1 and 4x2 (limited control on NXDT104mk1 and NXES104)

More software for NEXO systems

**NEXO NXWin**
- Compatibility application to update NXAMP NXES104, NXAE241 and NXAE242.
- Latest version: 4.2.1.8
- Supported platform: Windows
- Pricing: available for free, download link in NXAMPs LOAD Packages.
- https://nexo-sa.com/software

**Auvitrans AVS-Monitor**
- Remote control application for NXAMP and NXAMPmk2 over network.
- Latest version: 5.11
- Supported platform: Windows
- Pricing: available for free on Auvitrans’s website.
- http://www.auvitran.com

What do I need?

**Discover the software tools you need for your project**

**Prediction and configuration**
- NS-1
- Dory

**Digital TD Controller**
- DTD-T-U and DTD-I-U
- Update and control

**Control**
- Dory
- NeMo

**NXAMP**
- NXAE104
- NXDT104
- NXES104
- NXRM104
- NXWin

**NXAMPmk2**
- NeFu

**AVS-Monitor**
- (requires AVS-Service)

**Online Documentation**
Download our Software QuickGuides at nexo-sa.com or contact us at technical@nexo.fr if you have a question.