

Open-air festivals are close to the heart of d&b system applications and so there was a real drive within the enabling technology evolution to address the shortcomings in the available modelling software for complex sound system emissions.

The result was **d&b NoizCalc**, a tool to predict noise immissions of d&b PA systems from one or multiple stages, developed in collaboration with noise consulting and software development company SoundPLAN in 2016.

NoizCalc allows users to take all these very complex electroacoustic behaviors of sound sources and model how a system's various parts truly work together. The software takes into account air absorption, ground effect, buildings, even varying weather conditions to an extent – though no one can predict that exactly!

It uses either the widely accepted international ISO 9613-2 or the advanced NORD2000 standard to predict the propagation of sound and produces an assessment that is true against all the criteria we can currently model. Ultimately, what NoizCalc represents is a bridging of the language, or skill set between the system tech's and the people looking after environmental noise, whether that's the local council, the stage/production manager or an acoustic consultancy.

Sound people are a passionate lot and we're naturally drawn to new developments in our industry. NoizCalc undoubtedly enabled communication between the teams involved in open-air events, and optimum sonic results for everyone through a more informed decision making process – with not just the party goers in mind but the people who live in the surrounding area.

But in the end, we actually address the entire open-air event industry in its total essential core.

For > 90% of all concerned events it is certainly true that if there was no amplified music / art there would likely be no event at all. And this is true for all festival stakeholders from beer to pee, from entrance to backstage, from merchandise

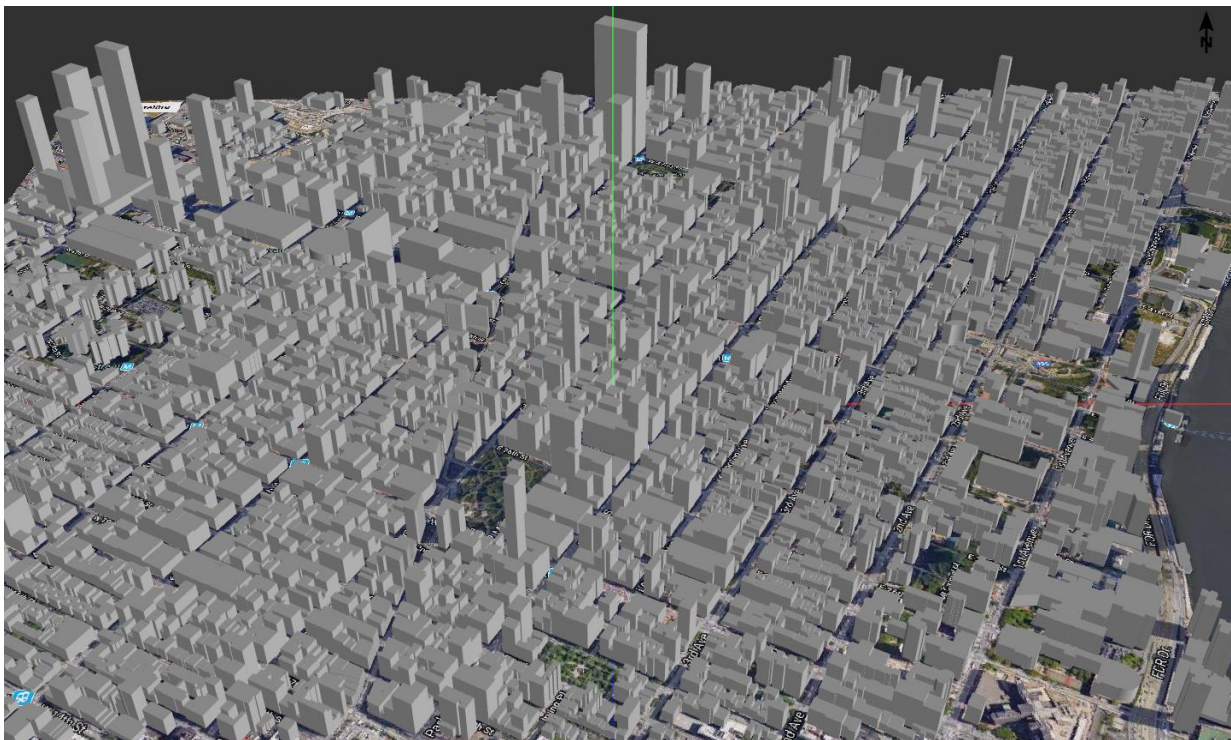
to piercing, from artists to fans, from stage to lights, video and - last but not least - the amplified delivery of making art audible - the sound systems and the providing team.

This is the wider horizon of what we all should bear in mind and this is what we are actually addressing when we talk about: **More art. Less noise.**

NoizCalc 2.4 – now featuring import of buildings!

Buildings are now automatically imported from OpenStreetMap!

NoizCalc 2.4 supports ArrayCalc 10.6 and is available at www.dbaudio.com.



Example of import in New York City

Together with the bitmap and elevation data, NoizCalc 2.4 automatically imports buildings from OpenStreetMap. Availability and accuracy depend on the active engagement of OpenStreetMap users in the respective region. An adjustable default building height is used where height data is not available.

The import is a major enhancement of the workflow because it drastically reduces modelling time. The import includes:

- Bitmap of selected viewport
 - Google Maps: satellite, terrain, labels, POI
 - OpenStreetMap
- Elevation data from Google Maps
- Buildings from OpenStreetMap

Support of new loudspeakers

- SL-SUB upright
- B8-SUB

Changed ArrayCalc file handling

An irritating hiccup regarding the ArrayCalc file handling has been addressed. NoizCalc integrates all files required for a prediction in the current project directory – consequently, this now also applies to ArrayCalc files. When selecting an ArrayCalc file that has not been integrated in the project directory yet, a move or copy dialog for further action appears. NoizCalc only refers to data in the current project directory. Please keep this in mind when editing a copied ArrayCalc file!

NoizCalc 2.4 is available for download at dbaudio.com, alongside the d&b ArrayCalc simulation software and the R1 Remote control software. NoizCalc 2.4 can be installed parallel to previous versions.

For any questions or queries, please contact support@dbaudio.com.