d&b ArrayCalc V11 Release notes

The d&b ArrayCalc simulation software is the simulation tool for d&b line arrays, column and point source loudspeakers as well as subwoofers. This is a comprehensive toolbox for all tasks associated with acoustic design, performance prediction, alignment, rigging and safety parameters.

OS requirements

Windows: macOS (Intel): macOS (M1/M2): Win7 or higher 10.14 or higher 11.0 or higher

Notes:

With upcoming ArrayCalc V11.2.x, available as from mid 2023, the minimum supported operating system versions will be Windows 10 and macOS 10.14.

The Windows version starting from ArrayCalc V10.16.1 is created for 64bit operating systems. This is the recommended version for all users. If a 32-bit version of ArrayCalc is required, use ArrayCalc V10.14.1 which can be downloaded from the <u>Software archive</u>.

Project file compatibility

To check whether your project will open in ArrayCalc, please refer to the project file compatibility table at the end of this document.

V11.0.5

Bug fixes:

- Soundscape example projects reworked.
- HeadroomCalc:
 - "Auto trim" no longer causes a crash when using speakers without acoustic data.
 - Unrealistic HeadroomCalc results for upright KSL-SUB and KSLi-SUB fixed.
 - Occasional inaccuracy in results for main arrays with enabled ArrayProcessing fixed.
- Vi-SUBs now selectable below Vi Mounting frame top.
- Slightly wrong weight of XSL/XSLi-SUB and XSL-SUB Mounting frame fixed.
- Linking limits of 44S clusters corrected.
- Help content for signal selection updated.

06/2023

V11.0.4

Bug fixes:

- Crash when changing a 5D supported system to a system not supporting the 5D fixed.
- Crash when loading a project with certain stacked systems fixed.
- On Mac OS V10.14 (or earlier versions) the message "Identity of developer cannot be confirmed" is no longer shown.
- Missing update in the ArrayView diagram after duplicating a source fixed.
- With Yi mounting frame bottom, the number of Yi8s below SUBs is no longer limited to one.
- Long source names no longer truncated unexpectedly.



- Point Source "Level over distance diagram" now updates correctly after changing the position or rotation of the cabinet.
- After changing the horizontal aiming of the SUB array, the UI is now correctly updated again.
- Unexpected handling of uncovered data points in 3D plot data export fixed.
- SPL mapping no longer shows unsymmetrical results for symmetric source positions and venue.
- With Vi/Yi mounting frames, ArrayCalc no longer offers forbidden mixed SUB/TOP setups.
- Project settings dialog no longer shown twice when opening a new ArrayCalc instance.
- Single pick point information added for flying adapters.
- Mirror function for a set of venue elements now correctly maintains the order of elements.
- Sketchup plug-in import no longer triggers a warning.

05/2023

V11.0.3

Bug fixes:

- Issue with A-weighted spectrum SPL calculation in 3D plot and Level over distance diagram fixed.
 - Please note: This might result in a different SPL as compared to ArrayCalc V10.
- Crash when changing loudspeaker series for an array fixed.
- HeadroomCalc: Calculation now also allowed for sources without balloon data provided they are muted.
- Issue with rotation of point source loudspeakers to 0° fixed.
- "Failed to save project" error after importing sources fixed.
- Auto-incrementing remote ID using CTRL/CMD+Enter now also works when the first cabinet is linked.
- Wrong rigging hardware setup after importing an array fixed.
- ArrayCalc no longer shows an AP symmetry violation when the curvature value of a super-elliptic plane is increased.
- Parts list print-out (detailed) now also contains D40 amplifiers.
- Changing frequency for point source group simulation no longer resets "Interferences < 163 Hz".
- Level over distance diagram update issue when changing signal type for point source groups fixed.
- When changing an array's x/y position, the pick point position on the rigging view is now correctly updated.
- Dispersion lines of point sources are now correctly updated after moving venue origin.
- Mac OS: Issue when changing simulated frequencies using up/down keys fixed.

02/2023



V11.0.2

Notes:

This version is installed separately and can be used in parallel to an existing ArrayCalc V10 installation.

Features:

 Brand-new HeadroomCalc feature allowing you to accurately quantify system headroom and output SPL metrics based on user-defined audio files, such as specific evacuation messages or representative music samples, to precisely predict compliance with tender requirements or legal specifications:



- Please note: HeadroomCalc needs to be enabled in the project settings ("Advanced features" tab).
- The time-averaged spectrum at the NoizCalc Reference point is saved in the project file for predictions in NoizCalc 3.2.
- Rigging hardware now selectable in Cabinets table.
 - V, Y and Q flying adapters added.
 - Vi and Yi top and bottom frames added.
 - Vi8/12 and Yi8/12 loudspeakers added.
 - Ti Flying bar, T Base plate, V Stack adapter and Y Base plate added.
 - XSL now offers both Compression frame and Pullback frame in pullback mounting mode.
- Group tree view for function groups on Soundscape view:





- Support of E15(X)-SUB, Ti-SUB, E0, E3 and xA line array loudspeaker setups for 5D amplifiers.
- Venue database now accessible from Home view and offering enlarged image view.
- Pullback frame now visible in required space diagram on rigging view.
- Parts list now only lists parts that are actually used in the project.
- For point source groups and additional amplifier groups, different amplifier models and input modes can now be configured.
- Project report now shows a warning when a function group but no matrix output is assigned to a source. This warning is also shown when opening the project with R1.
- ArrayCalc now always uses the maximum level of antialiasing for all diagrams. The respective configuration has therefore been removed from the Preferences dialog.

Bug fixes:

- Crash when quickly changing splays of A-Series arrays fixed.
- Y values of SUB array cabinets updated again after applying layout.
- X, Y, Z values of point source and SUB array cabinets now updated again after applying layout.
- Description of KSL-SUB filter switch of Mixed SUB array corrected.
- Layout issues of parts list summary printout with several arrays fixed.
- B6-SUB no longer listed as B6-INF in parts list.
- Graphical artifacts in Level over distance diagram while autocalculate is enabled fixed.

01/2023



Project file compatibility

The following table lists the supported software versions required to maintain project file compatibility.

Created in	Open with			
ArrayCalc	ArrayCal c	ArrayCalc Viewer	R1	NoizCalc
11.0.x	11.0.x	1.20.x	3.30.x 3.26.x	3.2
10.26.x	10.26.x	1.18.x		3.0 2.8
10.24.x	10.24.x 10.22.x		3.22.x	
10.22.x	10.22.x			

Note:

In general, project files are upward compatible, i.e. later versions of an application open project files created with previous versions of the same application.

