d&b ArrayCalc V10 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: Win7 or higher
MacOS: 10.7 or higher

V10.6.13

Bug fixes:

- Wrong profile diagrams fixed.

- Function group setting fixed to apply to both hangs when changing a single array into a paired array.

06/2019

V10.6.12

Bug fixes:

- Wrong pick point values for Q Flying Adapter fixed.

- Wrong number of loudspeakers for an additional amplifier group shown in the Parts list on Summary tab fixed.

- Crash when dragging and dropping cabinets and then reducing the number of cabinets in the source group fixed.

- Part numbers of the xS/xA Series updated.

- Possible change of position of a multiselection of locked venue elements with different shapes fixed.

- Possible change of the type of a locked venue element fixed.

- Automatically generated amplifier channel names no longer use the input number but the cabinet number when the channel is patched to a DS10.

- Issue with the import of source groups regarding non-linked cabinets on the same amplifier channel fixed.

- Maximum number of linked cabinets for Ci80 fixed to 4.

- Missing update of the symmetrical twin of a point source regarding horizontal aiming fixed.

- When using the tab key to just switch through input fields of a multi-selection with different values, the existing value is no longer taken over for all selected elements.

- Unused 2-way active channel of a 10D set to not supported C3 fixed.

- Issue with the test point not following the plane profile in SUB array alignment diagram fixed.

- Missing curve of J-SUB in diagram of section 5.8 in TI385 added.

- Issue with zooming Venue editor back in again after zooming out to maximum fixed.

- Issue with displaying the data of the wrong cabinet of a point source group fixed when changing source group selection.

- Using "Configure amplifiers" now also recreates the amplifier names.

06/2019

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V10.6.9

Features:

- Support of B8-SUB.

Bug fixes:

- Smaller bug fixes and improvements.

04/2019

V10.6.6

Bug fixes:

- Crash when opening a project on MacOS using double click or 'Open with' fixed.
- Incorrect warnings that a file saved in the cloud is used by another application while saving fixed.
- Wrong default value of relative delay of a newly added SUB array fixed.
- Export problems to Dante controller when project names contain an ampersand fixed.

03/2019

V10.6.4

Bug fixes:

- Crash when reading snapshot entries during project load fixed.
- Shrinking speaker type field after changing the speaker type in a point source group fixed.
- **−/+** buttons now properly aligned with input fields of a point source group.
- Possible changes in dock height fixed when switching between Sources, Alignment and 3D plot.

02/2019

V10.6.3

Features:

- Support of upright SL-SUBs in the SUB array.
- Inclinometer laser beam shown for GSL and KSL systems.
- Rigging comment field added.
- Saving of project file improved.
- New option in Preferences regarding zooming direction using the mouse wheel.
- New option in Preferences regarding diagram rotation.
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Notes:

- When installing ArrayCalc V10 on Windows, no desktop shortcut will be created any more.

Bug fixes:

- Locking mechanism added to prevent accidental overwriting when working with R1 & ArrayCalc on the same project at the same time. (Requires R1 V3.6.0 or higher).

02/2019

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V10.4.7

Bug fixes:

- Issue with missing update of the compression load limits when changing the value for the compression hoist fixed.
- Issue with wrong loudspeaker type shown in R1 fixed when source groups contain linked cabinets.
- Crash caused when saving a project after reducing the number of cabinets or changing remote IDs for a source group with linked loudspeakers fixed.
- No more unintended password prompt when opening a project created using the Western Arabic numeric system on a computer that does not use this setting.
- Issue caused when reordering cabinets with drag&drop and trying to link the cabinets fixed.
- Level over distance diagram now properly updated when importing or pasting an array.
- Conflicted snapshot fixed when loading a project in R1 that uses C-Series loudspeakers.

01/2019

V10.4.4

Bug fixes:

- KSL data (weight, center of gravity, splay offsets for both Compression- and Tension rigging modes) updated with production average.
- KSL stacked option temporarily disabled as it does not support KSL carts yet.
- Venue: Issue with editing the corner points of quadrangular planes fixed.
- Issues with SUB array print preview and printout missing 3dB per division text fixed.
- Display issues when using various screens with different ratios or different scaling settings fixed.
- Issues fixed when reading .dbac project files from older ArrayCalc versions.

12/2018

V10.4.3

Bug fixes:

- Crash after splitting an array and copying the data of the left hang to the right hang fixed.
- Crash when opening a .dbac (old project file format) project fixed when the project contains an array without a loudspeaker system selected.
- Issue with disabled splay angle dropdown of the lowest box in a stacked array fixed.
- Issue with loading a project containing a mixed SUB array with activated HCD filter fixed.
- Issue with ArrayProcessing symmetry warning fixed.
- Issue with linking not working after disabling ArrayProcessing fixed.
- Issue with empty temperature dropdown in ArrayProcessing dialog fixed.

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- Issue with using Configure amplifiers option while symmetrical linking is activated fixed. Configure amplifiers did not start with channel A while symmetrical linking was activated.
- Wrong relative delay incrementation of a point source group containing linked cabinets fixed.
- Issue with odd round shapes drawn instead of a cuboid fixed when the cuboid was placed outside of the visible area of the Venue view diagram.
- Issue with high curvature values changing the coordinates of P1/P2 of a super elliptic listening plane fixed.
- Missing update of receiver channel names of DS10 on Devices view after running Configure patch option fixed.
- Issue with the selection of a D20 amplifier for an M4 monitor in a Point source group fixed.
- Selection of Mix TOP/SUB output mode for a D12 amplifier no longer needs to be made twice to be activated.

11/2018

V10.4.1

Features:
- Support of KSL loudspeakers.
- Color (green) for GSL and KSL loudspeakers Compression ok sign updated.
- Symmetrical pair linking for point source groups, the SUB array and additional amplifier groups.
- Permitted number of source groups and sources increased: 40 arrays, 30 point source groups with maximum 50 loudspeakers each and 20 additional amplifer groups.
- Start of ArrayCalc sped up by loading only acoustic data of loudspeakers used in the current project.
- Markup for Early reflections areas on Venue view improved.
- Enabling and disabling of ArrayProcessing for a multiselection of arrays.
- Collapse option added in Details views.
- DS100 EnScene and EnSpace license settings can now also be edited in ArrayCalc.

Bug fixes:
- Crash when loading a project containing invalid CAN subnets fixed.
- Changing the loudspeaker type does no longer cause unsupported linking.
- Unnecessary SPL recalculation when changing pickpoint fixed.
- Issue with storing Alignment test point coordinates fixed.
- Opacity option in color picker of Venue elements removed.
- Issue with Configure amplifiers resulting in different output mode settings for a particular amplifier fixed.
- ArrayCalc no longer overwrites EnScene or EnSpace settings from R1.
- Wrongly added offset of around 40m (130ft) on printouts of Level over distance diagram fixed.
- Project can now be correctly saved after having changed a stacked array from 0 to 1 loudspeaker.
- Flat cuboids can now be properly edited and duplicated.
- Issue with SUB array alignment test point fixed when it "flies" away from the listening plane .

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- Issue with test point on Alignment view fixed when it does not snap to set the listener height of the respective listening plane.
- Issue with incorrectly triggered messages about file changes made by another application (e.g. R1) on MacOS fixed.

<div align="right">10/2018</div>

V10.2.5

Bug fixes:
- Crash when printing a 3D plot memory including non-transparent obstacles fixed.
- Issue with grey areas when printing or exporting 3D plot to PNG fixed.
- Issue with invalid SPL calculation resolution on 3D plot diagram and point source group mapping diagram fixed.
- Issue with HFC settings not taken into account for Q-Series in Level over distance diagram and 3D plot diagram fixed.
- Issue with not working deselection for a multiselection of planes fixed.
- Unintentional shift of a multiselection of planes after saving the project fixed.
- Drawing issues with V-, Y- and T-Series cabinets in Array view and 3D plot diagram fixed.

<div align="right">07/2018</div>

V10.2.4

Bug fixes:
- Crash when using drag & drop to move cabinets on Sources view fixed.
- Crash when printing or exporting 3D plot of projects containing venue element groups fixed.
- Permanently disabled ArrayProcessing feature fixed.
- Scale ratio of Venue profile view diagram corrected.
- Possible Remote IDs for D12, D6 and E-PAC outside of CAN range fixed.
- Misaligned column headers when scrolling on Devices view fixed.
- Non-rectangular listening planes no longer permitted as Early reflections areas.
- ArrayProcessing button now shows the progress when preparatory calculations have to be performed.
- Single pickpoint calculation for GSL arrays corrected.
- Issues with file saving after having loaded a .dbac2 project fixed.
- Issues with linking 12S-SUB fixed.
- Missing HF orientation dropdown menu for single xA-Series arrays fixed.
- Differences between live and memory diagram printouts on 3D plot view fixed.
- Issues with imported venues after saving and reloading projects fixed.
- Issue with setting the height (z) of a multiselection of quadrangular venue elements fixed.

<div align="right">07/2018</div>

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V10.2.2

Bug fixes:

- Issue with saving project files containing compressed GSL setups fixed.
- Issue with phase response calculation of SUB array on Alignment view fixed.
- Crash when using the undo function after deleting several planes with DEL key fixed.
- Crash when printing or exporting 3D plot quad view as PNG fixed.
- Color selection dialog now also correctly displays the currently selected color.
- Wrong channel naming of linked cabinets fixed.
- Issue with cabinets not selected after using the respective splay angle dropdown menus in the cabinets table on Mac OS fixed.
- Configure amplifiers option now working correctly for mixed and linked SUB array.
- Issue with linked boxes of SUB array in .dbpr files fixed.
- Issue with opening .dbac files containing obstacles fixed.
- Issue with transparency of obstacles in y direction fixed.
- When selecting elements individually in All elements list of Venue view, the multiselection buttons are now disabled.

06/2018

V10.2.0

Features:

- Heritage loudspeakers now available in point source groups.
- All elements list on Venue view enhanced with additional functionality including drag-and-drop, multiselection using the shift key and display of the basic shape of an element.
- Separate comments section on Venue view added.
- Profile diagram for test point selection added on Alignment view.
- Using the mousewheel to change dropdown values can now be disabled in Preferences.
- Copying an array with ArrayProcessing enabled now also copies the the ArrayProcessing settings.
- Automatic patching option for DS100 devices added.

Bug fixes:

- Issue with triangular planes mirrored upside down fixed.
- Missing alignment of splay angles of left and right hangs of a duplicated paired array fixed.

06/2018

V10.0.14

Bug fixes:

- Crash when selecting a point source group on Devices view fixed.
- Delay values can no longer be set to less than 0.3 ms or to negative values.
- Backward compatibility with .dbac files fixed.

05/2018

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V10.0.13

Bug fixes:

- Issue with level incremented twice for linked loudspeakers fixed.
- Issue with P0 of arc segment in Venue editor no longer movable fixed.
- Issue with E-PACs in Additional amplifier groups and CPL fixed.
- Saving 3D plot to memory workflow optimized.
- 3D plot resolution value no longer missing after loading .dbac2 project files.
- Audio networking devices are now properly deleted after disabling the Audio networking feature.
- Issue with not correctly restored total delay of linked loudspeakers in a SUB array fixed.
- Issue with moving locked planes when using relative editing fixed.
- Issue with wrong positions of joined venue elements after importing a venue fixed.
- Issue with Structure type venue elements not always being transparent fixed.
- Missing update of frequency list in the simulated signal section of point source groups corrected when switching between these groups .

05/2018

V10.0.12

Bug fixes:

- Crash fixed when saving a project after disabling the ArraySight feature.
- Issue fixed where ArraySight devices are not removed from a project after deleting the relevant array.
- Issue with unreported duplicate RemoteIDs fixed when the same RemoteID is used for both an ArraySight device and an amplifier.
- Issue with Y7P/Y10P listed as V7P/V10P in Parts list fixed.
- Issue with level increased twice for linked loudspeakers fixed.
- Missing amplifier RemoteID in ArrayCalc viewer file (.dbev) fixed.
- Issue with disabled HFC switch fixed when creating a new project with air absorption enabled by default.
- Issues caused by exported Dante controller preset files named using an umlaut fixed.
- Issue caused by duplicating a point source group with CUT enabled fixed.
- Issue with the absolute value editing fields fixed when changing the Lock option while multiple planes are selected.

04/2018

V10.0.11

Bug fixes:

- Crash fixed when reducing the number of cabinets of an array containing linked cabinets or when transforming a paired array containing linked cabinets into a single array.
- Crash fixed when enabling/disabling the ArraySight option in a project that does not contain any source group.
- Missing update of amplifier names after renaming a source group fixed.

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- Missing update of input mode when unlinking channels fixed.
- Missing update of input source when unlinking the cabinets of an array fixed.

04/2018

X10.0.10 Beta

Bug fixes:

- Crash when clicking in the name field of a Function group fixed.
- Crash when selecting a DS100 without selecting a DS10 first fixed.
- Crash when reducing the number of cabinets per position in SUB array fixed.
- Crash when changing SUB systems from linked B4-SUB to V-SUB fixed.
- Issue with loss of patch of even Dante channels after saving and reloading fixed.

03/2018

X10.0.9 Beta

Bug fixes:

- Crash when saving project containing duplicated point source groups with linked cabinets fixed.
- Crash when performing "Configure amplifiers" for certain projects fixed.
- Issue caused by loading a project after importing a source group containing linked loudspeakers fixed.
- Issue with case sensitive renaming of DS100 channels fixed.
- Issues with the availability of combined input sources (e.g. 1+2) for point source groups fixed.
- Issue with export to ArrayCalc viewer file fixed.

02/2018

X10.0.6 Beta

Features:

- Air absorption calculation/compensation improved by wider and finer humidity options.

Bug fixes:

- Crash fixed when loading projects containing mixed SUB arrays with linked cabinets and in "hop" mode.
- Crash in a Point source group fixed caused by a J-SUB with INFRA switch enabled which is changed to E-Series.
- Issue with copied or imported SUB arrays fixed.
- Missing keyboard interaction option for buttons on Devices view / Cabinets table added.
- Invalid values in snapshots of Additional amplifier groups fixed.
- Wrong mute values in snapshots of Additional amplifier groups fixed.
- Missing description of simulated signal on Memory slots of 3D plot fixed.
- Issue with linked inputs during the patch validation fixed.
- Issue with levels of linked cabinets in stacked arrays after project reload fixed.

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- Already patched DS10 or DS100 assignment no longer lost when patching an output channel.
- Unexpected behavior of AutoSplay in connection with certain array / Venue settings fixed.
- "Name" column of the Venue objects table widened.Venue: Missing Listener height input field for triangular shapes added.

01/2018

X10.0.4 Beta

Bug fixes:

- Crash when increasing the number of positions of a SUB array with more than one cabinet per position fixed.
- ArrayCalc Help: Wrong screenshot for Point Source signal selection and SPL summation method fixed.
- Delay and level of linked cabinets reset when reading project fixed.
- Tab key navigation inside tables fixed.

12/2017

X10.0.3 Beta

Bug fixes:

- Crash when increasing the number of point sources fixed.
- Crash fixed when saving a project where some sources assigned to audio networking have been deleted.
- Issue with loading input source settings of D6/D12 from project file fixed.
- Issue with reading the rotation of linked point sources from project file fixed.
- Issue with saving a project containing large snapshots/system settings fixed.
- Issue with duplicate Remote IDs fixed.
- Missing confirmation dialog added when deleting snapshots.

12/2017

X10.0.1 Beta

Features:

- ArrayCalc V10 and R1 V3 include support for the new integrated project file format (*.dbpr). This new project file format can be opened and saved in both ArrayCalc and R1.
  Note: Please note ArrayCalc V10 can open .dbac2 project files but not save them. Please check the Software Newsletter 12/2017 for details regarding the recommended workflow.
- Support of d&b Soundscape systems, including DS100 Signal Engine, En-Scene and En-Space software options.
- New triangular Venue element shape, improvements on Arc segment shape which can now also be elliptic.
- New Venue element types. Venue element types can now be changed no matter which shape.
- Join/Split of Venue elements.
- Multiselection and drag&drop of cabinets.
- Linking and amplifier selection already available on Source view.
- Point source groups now support SUBs as well.
- SUB array can be deleted from projects where it is not used.

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- Pan and zoom for Alignment top view diagram.
- Overall dimensions of an array displayed below the Required space diagram on Rigging plot view.
- Support of DS10 and DS100, including export of a Dante Controller preset file.

For a detailed description of the new features, please also refer to the Software Newsletter 12/2017.

12/2017

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