d&b ArrayCalc V9, Release notes

For further details, please also refer to the Software Newsletter.

Changes of V9.4.5 against V9.4.3

Bug fixes:

- Issue caused by changing the z values of a multiselection of planes fixed when at least one asymmetric plane is included.

- Updating of Rigging plot when using drag and copy to add an array corrected.

- Issue with the same color of duplicated source groups fixed.

- Wrong maximum number of point source groups and arrays indicated in the Online Help corrected.

- Issue with AutoSplay overshooting when using superelliptic 360° listening planes fixed.

- Issue with automatic Remote ID incrementation when using CMD+Enter on Mac OS fixed.

02/2018

Changes of V9.4.3 against V9.4.2

- ArrayProcessing available for flown SL-SUBs.

- CPL filter for GSL8 / GSL12 updated.

Bug fixes:

- Movement of front pickpoint beyond the center of gravity without "invalid" warning fixed.

- Proper enabling of ArrayProcessing if the main axis of a loudspeaker hits the junction of two adjacent planes.

- Level over distance diagram scale and grid corrected.

- Missing generation of Load Match controls for a SUB array with B2, B2-CSA, B4, B6, B6-CSA, B6-INF, B22 or B22-CSA fixed.

- Disappearing caption of Profile diagram on Sources view fixed.

- Rounding issue with imperial values fixed.

10/2017

Changes of V9.4.2 against V9.2.6

- Support of GSL8 loudspeaker, GSL12 loudspeaker, SL-SUB, SL-GSUB and ArraySight to enable the Preview phase of the new SL-Series.

- Number of total arrays permitted increased to 20.

Bug fixes:

- Artifacts in the SPL mapping diagram of Point Sources on Sources view fixed.

- Crash when splitting an array fixed.

- Wrong total number of 27A-SUBs on printout fixed.

- Unintended swapping of up/down and left/right direction in 3D plot fixed.

- Missing update of SPL diagram of point source group fixed when changing the number of cabinets.

- Issue with z values of planes after using Move origin option fixed.

- Issue with panning movement being too fast in relation to mouse movement fixed.

- Faulty "All sources to SUB array (rel.)" delay option fixed which did not stop decrementing the delay value of all sources when one of the sources reached its minimum delay value.

10/2017

Changes of V9.2.6 against V9.2.5

- ArrayProcessing Realizer improved for large venues.

- Duplicate source group option added.

Bug fixes:

- Another issue with enabling ArrayProcessing fixed when ArrayCalc does not recognize the symmetry of the venue.

- Problem with selecting several listening planes and changing their colors in one go fixed.

- Wrong color of obstacles on the printout of the Top view diagram fixed.

- User modified channel names of point source loudspeakers correctly restored after loading a project.

- Wrongly available EASE export option for SUB array disabled.

- Wrong AP enabled LED status after using drag&drop to copy an array fixed.

- Wrong AP enabled LED status after splitting an array fixed.

- Incomplete saving of a project file after certain operations fixed.

08/2017

Changes of V9.2.5 against V9.2.3

- Color indicators for venue elements added to All elements list in Venue view.

- Color indicator for current test point plane added in Alignment view.

Bug fixes:

- Issue with enabling ArrayProcessing fixed when ArrayCalc does not recognize the symmetry of the venue.

- Issue with ArrayProcessing and SUBs leading to disarranged AP realizer fixed.

- Wrong Output mode for D12 fixed when swapping SUB array systems from different series (e.g. J-SUB with 2-Way active mode to V-SUB with dual channel mode).

- Wrong entry of 10S-D as 10S in Parts list fixed.

- Saving problems when recent project list is empty fixed.

- Missing auto repeat function of buttons in Alignment view fixed.

- Wrong array selection after splitting a paired array fixed.

- Saving problems when changing D80 amplifiers into 30Ds fixed.

- Wrong selection color fixed for selected source in Top view and 3D plot diagrams in day mode.

- Listening plane with z = 0.0 m can now be correctly selected using the rubber band in Profile view.

Changes of V9.2.3 against V9.2.2

Bug fixes:

- Issue with some antivirus software blocking the installation fixed.

- [Windows] Issue with diagrams on high DPI screens fixed.

- Master mute button on the Sources tab is now updated after making a change in the Sources list.

- Diagrams in the Alignment view are now correctly updated after changing the mute status of point source groups.

- Load limit warning icon is now instantly updated in the Sources table.

Changes of V9.2.2 against V9.0.5

- Order of Sources can be changed using drag&drop.

- Order of AP slots can be changed using drag&drop.

- Multiple selection of Sources enabled to change settings in relative or absolute terms.

- Possibility to move the origin in the Venue view and to display the venue as 3D preview (Iso).

- Export of a dedicated project file (reduced data set for setup) for the ArrayCalc Viewer app.

- Export of Parts list to CSV file.

- File modification date/time is displayed in Recent project list.

Bug fixes:

- Problem with randomly empty AP slots fixed.

- Renaming of planes (upper/lower case) in Venue view fixed.

- Wrong number of subwoofers in Parts list fixed.

- Obstacles in the Top view diagram no longer overlap planes which are actually located above them.

Changes of V9.0.5 against V9.0.4

Bug fixes:

- Issue with URL for application update fixed.

- Wrong link to an empty page corrected when clicking the Home button in the HelpViewer.

- Missing accessories for xA-Series in the Parts list fixed.

- Wrong indication of GR for loudspeakers in a newly pasted point source group fixed.

- Adding additional devices in the Amplifiers view leading to duplication of entries in the System drop-down menu fixed.

- Printout of point source group now displays "Imperial" units when selected.

- In the Print menu, the descriptive text and the keyboard shortcut no longer overlap.

Changes of V9.0.4 against V9.0.2

- Improved SUB array mapping calculation with low and high resolutions.

Bug fixes:

- Empty printout and print preview of 3D plot Live or A, B, C views fixed.

- 3D plot printout optimized for US letter format.

- Missing J-SUB, J-INFRA, V-SUB and Y-SUB cabinets on Parts list printout of a mixed SUB array fixed.

- When printing an SPL mapping of a Point source group with a 3 dB per division setting, the printout now shows the correct results for the actual setting (no longer 6 dB per division and the headline "6dB per division").

- Wrong legend for Point source group printout of SPL mapping diagram with broadband signal fixed.

- Selection of 3dB/6dB per division for Point source groups on Sources view is now correctly saved in the project file.

- Offset of creation time of Snapshots and AP slots after reloading a project fixed.

- Missing layout controls of new cabinets added to Point source groups fixed.

- Missing reset of the GR group indicator in the Sources table fixed when all individual point sources of that particular Point source group no longer have GR indicated.

- Infinite autocalculation fixed when changing frame angle with Autocalculate activated.

- Zooming 3D plot diagram now no longer scrolls the 3D plot view as well.

12/2016

Changes of V9.0.2 against V9.0.1

- T-Series: Improved acoustic data for ArrayProcessing.

- Further example files including ArrayProcessing added.

- Further example files for xA-, xC- and xS-Series added.

- New option to hide diagrams on Sources view to improve workflow on screens with smaller resolutions.

- Size of some elements and diagrams adapted to gain more space on screens with smaller resolutions.

Bug fixes:

- Error fixed where the SUB array does not allow any digital Input mode when more than one cabinet per position is used.

- Wrong scale labeling of the Direct sound level vs. distance and Profile diagrams fixed.

- 3D'ish appearance of circle elements on the Venue view fixed.

- Order when using the TAB key to move from one element to the next corrected.

- Loss of zooming factor in Venue diagrams fixed when switching to another view and back.

- Wrong linking option for 24S / 24S-D fixed.

- Wrong acoustic shadowing for some plane constellations fixed.

- Error when trying to save projects fixed.

- Problem which could result in the loss of ArrayProcessing data fixed.

- Problem with relative delay values not being transferred to R1 fixed.

10/2016

Changes of V9.0.1 against V8.8.5

- ArrayCalc V9 requires Mac OS 10.7 or higher.

- ArrayCalc V9 requires Windows 7 or higher.

- New user interface supporting high resolution screens.

- Support of 24S / 24S-D / 21S-SUB.

- ArrayProcessing for T-Series.

- Mute all button in the header of the sources table.

- Dispersion lines are only displayed for unmuted sources.

- Clear SPL option for point source groups.

- Maximum number of point sources within a point source group increased to 24.

- Improved ArrayProcessing algorithm for arrays containing SUBs.

Bug fixes:

- Crash when changing point source type fixed.

- Missing update of the Amplifiers view of the SUB array fixed after importing a SUB array.

- Wrong loudspeaker type displayed on Amplifiers view fixed after importing a point source group.

- Missing print preview of point source groups fixed.

- Missing update of the right hang fixed when changing HF of TOPs in an xA-Series array.

- Activating the Help function when using the Configure all amplifiers dialog now opens the respective Help content.

- Error with NoizCalc reference point and imperial units fixed.

- Cabinets aiming outside of a diagram fixed.

- Wrong DXF export of the right hang of a paired array fixed.

10/2016

Changes of V8.8.5 against V8.8.4

Bug fixes:

- Missing update of Rigging plot when changing flying frame angles fixed.

- Wrong orientation of low frequency balloon data of Q-Series/T-Series point source loudspeakers fixed.

- Problem on 3D plot page fixed where the calculated highest SPL value shows 0.0 dB when all planes are smaller than the set resolution.

- Problem on 3D plot page fixed where memory printout or PNG export always shows low resolution although the calculation was performed with high or mid resolution.

- Problem on 3D plot page fixed where loading a memory view results in the deletion of all memory views.

- Wrong unique array IDs after splitting a previously paired array fixed.

- Problem with GR indicators fixed where changing the loudspeaker type from TOP to SUB and back causes the respective cabinet to show GR earlier while all other cabinets (of the same type) are not showing GR even if they have the same level settings.

- Problem with frequency response of array-processed arrays containing flown SUBs fixed.
- Missing BGV-C1 load limit warning fixed.
- Wrong DXF export of the cabinet drawings of the right hang of a paired array fixed.

07/2016

Changes of V8.8.4 against V8.8.3

Bug fixes:

- Increased calculation speed when using non-transparent planes.
- Wrongly shown unsymmetric target profiles message for ArrayProcessing fixed.
- Relative master fader not resetting to 0 (zero) on ArrayCalc snapshot recall fixed.
- Problem with measuring units fixed when adding a new point source group.
- Option to change measuring units independently from temperature units fixed.
- Keyboard shortcut for simultaneously moving multiple selected planes in venue editor fixed.
- Undo function wrongly undoing two steps when clicking once fixed.
- Swapped Mixed TOP/SUB configurations after saving fixed.
- Adaptation of the range of relative controls generated for the R1 V2 remote views.

04/2016

Changes of V8.8.3 against V8.8.2

Bug fixes:

- Wrongly shown unsymmetric error message when trying to enable AP or open AP dialog fixed.
- Missing CUT status when copying or exporting arrays fixed.
- Crash when changing array mounting before selecting a system fixed.

04/2016

Changes of V8.8.2 against V8.6.5

- ArrayProcessing: Optional plane types "Reflecting" and "Level avoidance" added.
- Split option for paired arrays added.
- NoizCalc reference point option added.
- Vertical aiming and z value for SUB array added.
- Mixed SUB arrays with Y-SUB.
- Support of B6-INFRA.
- Support of 18S-SUB and 27S-SUB.
- Equally spaced along option for point source groups added.
- Selectable default device added in Configure all amplifiers option on Amplifiers page.
- New keyboard shortcuts for Venue editor and more intuitive labeling of input fields.

Bug fixes:

- V-SUB going into gain reduction too early fixed.

- Direct sound level vs. distance diagram not updating when changing broadband signal weighting fixed.

- Some minor Auto splay issues fixed.

- Missing cabinets of the right hang of a paired array on 3D plot fixed.

- Missing update issues on Rigging plot fixed.

- Incorrect total number of amplifiers on Parts list printout when using overlapping devices fixed.

- 10D and 30D installation amplifiers not listed on total printout of the Parts list fixed.

04/2016

Changes of V8.6.5 against V8.6.3

Bug fixes:

- Freeze status fixed when recalculating ArrayProcessing slots of a project created using V8.4.4.

- Lost loudspeaker links fixed when muting an array, a point source group or a single loudspeaker.

- Lost loudspeaker links fixed when loading a project.

- SPL of SUB array not calculated for non-transparent listening planes fixed.

- Reversed order of channel controls for stacked arrays fixed when saving an ArrayCalc project and opening it in R1.

- Not updated unused channel list on Amplifiers page fixed.

- Vertical frame angle on 3D plot page only updated for left array fixed.

- Wrong Output mode for D12 with 2-way active loudspeaker fixed when saving ArrayCalc project and opening it in R1.

11/2015

Changes of V8.6.3 against V8.4.4

- Support of B22-SUB.

- Loading of projects and responsiveness of UI sped up.

- Improved GR information. Current signal used for GR monitoring is now displayed in the toolbar and as a tool tip on the GR LEDs.

- When changing loudspeaker systems for arrays or groups of point sources, ArrayCalc now keeps the previous settings where possible.

- ArrayProcessing now calculates additional HF Trim data for use in R1 after importing the respective ArrayCalc project.

  Note: This feature only works using the latest version of R1 V2.14.2 in combination with amplifier firmware V2.02.00.

Bug fixes:

- Frequency overlapped by the word 'Live' on 3D plot printout fixed.

- Missing update of Listening plane names on Alignment page fixed.

- Missing update of Profile diagram after copy&pasting an array fixed.

- Missing update of Level vs distance diagram after copy&pasting a point source group fixed.

11/2015

Changes of V8.4.4 against V8.4.1

Bug fixes:

- Problem with corrupted ArrayProcessing data for J-Series systems by opening a project fixed.

- Swapped cabinet order fixed after saving and reloading project with stacked V-SUB array.

- Problem with saving CPL values of Point sources to Snapshots fixed.

- Problem with listening plane absorbing sound even when not in the main axis of the array fixed.

- 100 Hz switch position on generated R1 Remote view of a V-SUB array corrected.

- EASE export of Angle to frame for stacked arrays fixed.

- Correction of low frequency curve for an array-processed slot compared to the Bypass slot.

- Missing Max. freq. for pattern control update corrected when changing number of SUBs in SUB array dialog.

- Level over distance diagram showing two curves for broad band signals fixed.

- Problem with setting the CUT switch for TOPs in a flown array with SUBs and TOPs fixed.

- Missing Load display update corrected when changing number or type of cabinets.

- Missing Frame angle update corrected after using the Auto splay function.

- Missing Setup type update corrected after using the Auto splay function.

- Wrongly issued warning for different target profiles for some array constellations fixed.

- Arena measurement tool generating orthogonal listening planes instead of rising ones fixed.

09/2015

Changes of V8.4.2 against V8.4.1

Bug fixes:

- Missing update of Load limit and mechanical data on Sources page after changing the selected source fixed.

- Problem when entering Remote IDs with just two digits fixed.

09/2015

Changes of V8.4.1 against V8.2.7

- Support of V-Point loudspeakers.

- Added option to keep ArrayProcessing settings when disabling ArrayProcessing to recalculate all AP slots when enabling ArrayProcessing again.

- Target frequency response of ArrayProcessing for J-, V- and Y-Series slightly modified in the range between 800 Hz and 2 kHz in order to provide more vocal presence. Although this change is within 1 dB of the previous response, the bandwidth of this adjustment results in the perception of more vocal presence. This allows the use of large CPL settings for arrays with relatively large vertical splays without compromising this range too much.

- Upcoming EASE GLL 2.x format supported (includes ArrayProcessing data of the selected slot in EASE export).

Bug fixes:

- Error when saving temporary file after 3D plot calculation fixed.

- Wrong shadowing by obstacles when rotated through 90° fixed.

- Differing behavior of ArrayProcessing Realizer meter after closing and reopening the ArrayProcessing dialog fixed.

- Wrong pickpoint calculation for Y-Series flying adapter fixed.

- Problem with considerable SPL changes close to a 10AL/10AL-D array fixed.

09/2015

Changes of V8.2.7 against V8.2.6

Bug fixes:

- Disabled AP slot switch in R1 Remote view for paired arrays imported from ArrayCalc fixed.

07/2015

Changes of V8.2.6 against V8.2.2

- The Air absorption drop-down list now provides 10% steps for humidity settings.

- Improved 'Phase response against' diagram on Alignment page.

- AP algorithm improved above 13 kHz.

Bug fixes:

- Not updated 'Arrival times' diagram on Alignment page fixed when changing Delay or Level of point sources.

- Missing impulses from right side array in the 'Arrival times' diagram fixed.

- Unintended changing of position, frame height front, frame angle and horizontal aiming of a processed array on Rigging plot page fixed.

- Grid-scaling errors when zooming the Top view diagram on the Venue page fixed.

- Missing update of the color of mirrored Listening planes on other pages than the Venue page fixed.

- Wrong consideration of HFC settings with activated Air absorption function fixed.

- Display of incorrect results for already correctly calculated AP slots fixed when changing between slots after calculation.

- Coherency of J-SUB and J-INFRA in mixed subwoofer arrays fixed.

- Crash when changing splay angles using the mouse wheel fixed.

07/2015

Changes of V8.2.2 against V8.0.5

- Support of 10D and 30D amplifiers.

- Support of broadband calculations for array-processed line arrays.

- Changing the venue supported while ArrayProcessing is activated.
  For further details, refer to the ArrayProcessing section of the TI 385.

Bug fixes:

- Crash while resizing an arc segment in the Venue editor fixed.

- Missing curve on printouts of the Level over distance diagram fixed.

- Update of HF angle for symmetrically used xC point sources fixed when switching between 24C and 24C-E.

- HF left or right configuration of xA–Series arrays now adequately considered in SPL calculation.

- Update of the individual inputs of point sources within a point source group fixed when changing the overall input.

- Vertically shrunk SPL mapping of the SUB array after printing fixed.

- CSA switch now cleared when changing from a CSA SUB array to a non-CSA SUB array.

- Wrong part numbers of Y-Series rigging components fixed.

06/2015

Changes of V8.0.5 against V8.0.3

- SPL calculations sped up.

Bug fixes:

- Different frame angles for a paired array after using Auto splay fixed.

- Several issues with point sources and broad band signal fixed.

- New project starts now with measuring units defined in program options.

- Missing listening planes in Plane offset option of ArrayProcessing dialog fixed.

- HFC now excluded in Level over distance diagram when Air absorption is deactivated.

- Different results for highest SPL with broad band signal between Level over distance diagram and 3D plot fixed.

- Wrong color in mapping diagram for point sources SPL calculation fixed.

- Missing settings for point sources after reloading project fixed.

- Wrong layout of EQs in R1 project file for a flown array including TOPs and SUBs fixed.

- Printout and PNG export of 3D plot corrected.

- Wrongly assigned Output mode and Remote IDs for R1 project fixed.

- Parts list corrected.

05/2015

Changes of V8.0.3 against V7.8.4

- ArrayProcessing added. For details, please refer to TI 385 and the tutorial videos available at
www.dbaudio.com/en/education/tutorial-videos.html

- New file format (*.dbac2) supporting ArrayProcessing. Existing (*.dbac) files can still be opened.

- The (*.dbac2) format can be read by R1 V2, therefore it replaces the R1 export function.

- Snapshot dialog added. Manages multiple snapshots for R1 V2.
- Support of D20 amplifier.

Bug fixes:

- Wrongly suggested directory when opening or saving a project fixed.
- Parts list: Y-SUB for SUB array now displayed in the correct place.
- Duplicated sources in the Amplifiers page (former R1 export page) after venue import fixed.
- Bug with Show interferences option after saving and loading a project fixed.
- Disorder of channel controls on generated R1 Remote view for stacked arrays fixed.

04/2015

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