

Software Newsletter

December 2019

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CPL for SL-Series

Apart from other major acoustic improvements, the SL-Series provides significant low frequency headroom. We have found that it would be desirable if the midrange contour could be adjusted without influencing the low frequency output to make full use of the capabilities of the system.

Therefore, the way CPL works in the SL-Series has been changed from acting like a low-shelf filter with a single adjustment parameter (gain, figure 1) to a dual-stage adjustment option that allows independent shaping of the low and mid frequency responses (figure 2).

This feature has only been introduced for the SL-Series. It does not change the way CPL works in all other loudspeaker series.

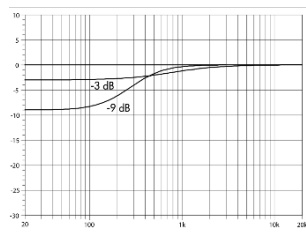


Figure 1: Schematic drawing of the standard d&b CPL function, only one adjustment parameter (shown as relative adjustment)

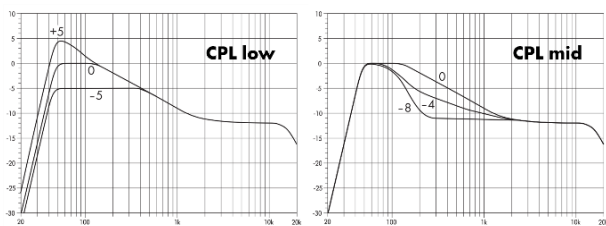


Figure 2: Schematic drawing of the SL-Series CPL function, with independent controls for low and mid frequency shapes (shown as adjustments to the target array response)

Temperature & Humidity Control (THC) for ArrayProcessing

The most frequent adjustment of ArrayProcessing parameters during a performance is an adaptation to changing temperature and relative humidity. Up to now, this required recalculating one or more slots in ArrayCalc and import them into the running R1 instance.

The introduction of THC (Temperature & Humidity Control) significantly improves and speeds up this workflow, which is particularly handy for applications with multiple array-processed arrays.

The amplifiers calculate the required changes in real time, which means the temperature and relative humidity settings for the selected slot can be adjusted using the THC control directly online in R1.

The default setting shown when an AP slot is recalled always corresponds to the temperature and relative humidity setting the slot was initially calculated for. The settings can then be changed to any combination of values within the colored area of the THC control in R1 (figure 3). Within the green area, the THC correction is just as accurate as a recalculated AP slot, within the yellow area the accuracy might be slightly reduced.

This control can also be assigned to groups of arrays to facilitate a simultaneous adjustment for a complete system if the original temperature and humidity settings on which the initial calculation of the slot was based are the same.

THC is available for all d&b systems that support ArrayProcessing.

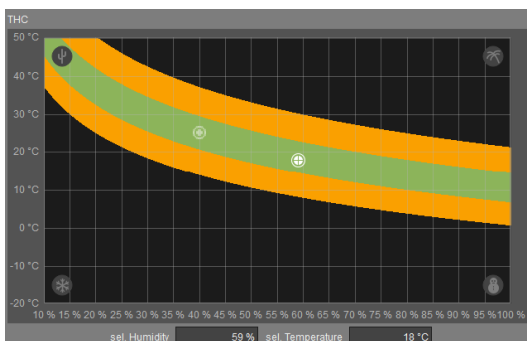


Figure 3: The new THC control in R1

CPL for SL-Series / Temperature & Humidity Control (THC) - Software requirements

Both the CPL for the SL-Series and the Temperature & Humidity control (THC) function require a complete system update. This includes the use of the latest version of R1 V3.10.1 (or higher), ArrayCalc V10.10.0 (or higher) in combination with the latest amplifier firmware V2.20.00 (or higher).

	R1	ArrayCalc	Amplifier firmware	NoizCalc
CPL for SL / THC release package	V3.10.1	V10.10.1	V2.20.00	V2.6 update 10.12.2019
Before CPL for SL / THC	V3.8.1	V10.8.3	V2.18.00	V2.6 update 15.10.2019

See link:

<https://www.dbaudio.com/global/en/products/software/software-archive/>

R1 & ArrayCalc macOS upgrade information

Starting from R1 V3.8.1 and ArrayCalc V10.8.2, macOS 10.12 or higher is required.

If you are running macOS versions prior to 10.12, you can use R1 v3.6.11 and ArrayCalc v10.6.13 from our heritage software section.

See link:

<https://www.dbaudio.com/global/en/products/software/software-archive/>

DS100 as a matrix

R1 V3.6.x provides a new GUI for the DS100 matrix functionality. This is not only a redesign of the matrix remote views but also includes extensive new control functions:

New GUI:

The level and delay values of the matrix nodes are now displayed in a circle, with the upper part of the circle representing the level and the lower part the delay values. In the middle of this graphic display, there is the Matrix node label and an Edit button.

This significantly improves clarity, even in large matrix windows.

Overview of functionality and user interface:



New control:

Values are now entered via a control window after selecting a node. If multiple nodes are selected, multiple values can be edited, either absolutely or relatively.

A copy / paste functionality was added to copy the settings from one node to another.

The clear functionality resets all settings of the node to default values.

New Multiselect:

Multiple nodes can be selected simultaneously: entire columns or rows, freely selectable blocks or an individual selection of individual nodes from the entire matrix.

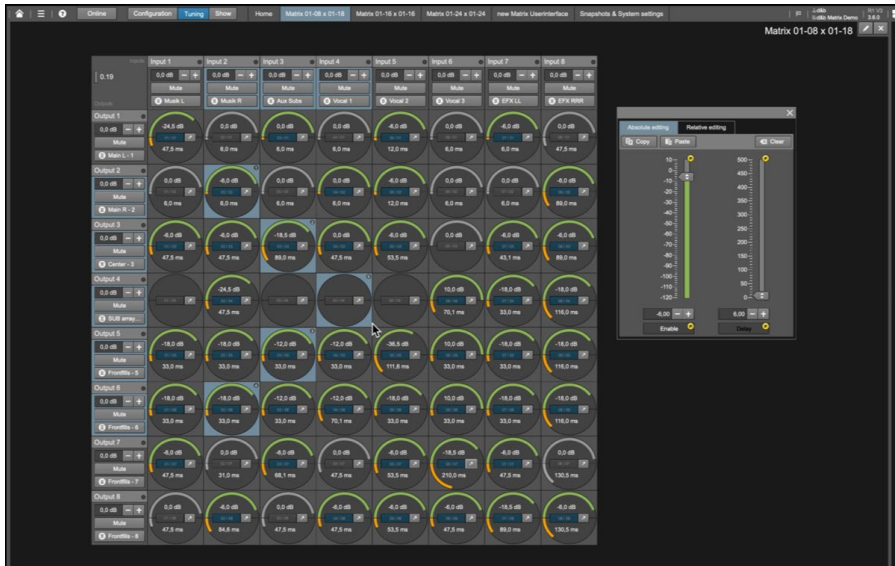
All control functions described above are also available for multiple selection.

An advanced copy / paste function for multiselect allows the flexible transfer of settings between different selections.

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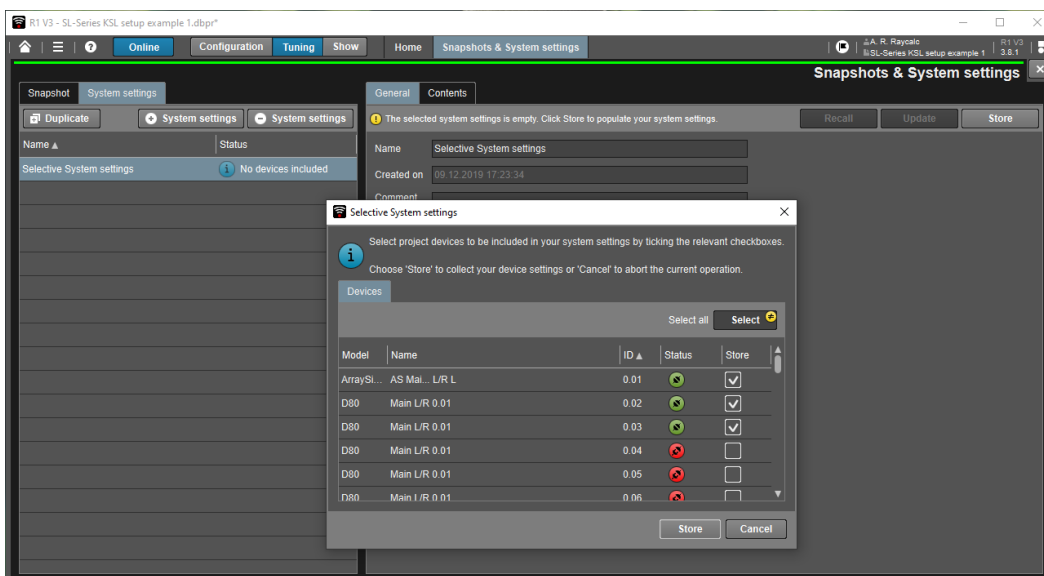
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Screenshot of the new matrix remote view:



R1 Selective System settings

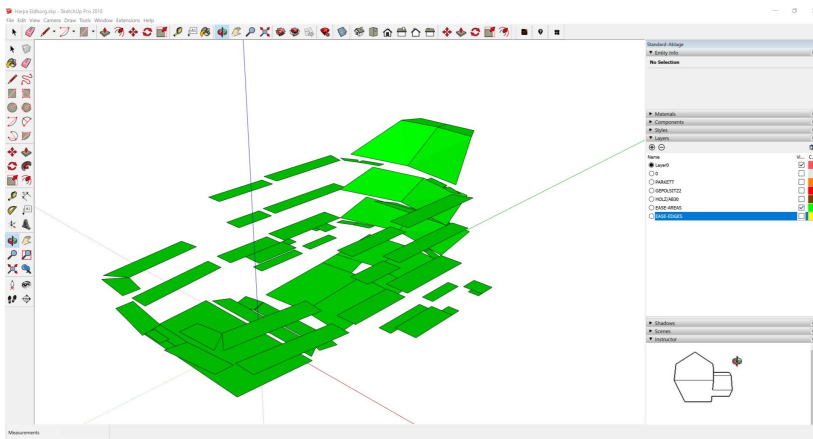
As an additional feature, System settings now allow saving only parts of the system. Users have the possibility to manually choose the devices which should be included when saving. This enables you to backup all settings although you might not yet be finished with the complete commissioning of the system.



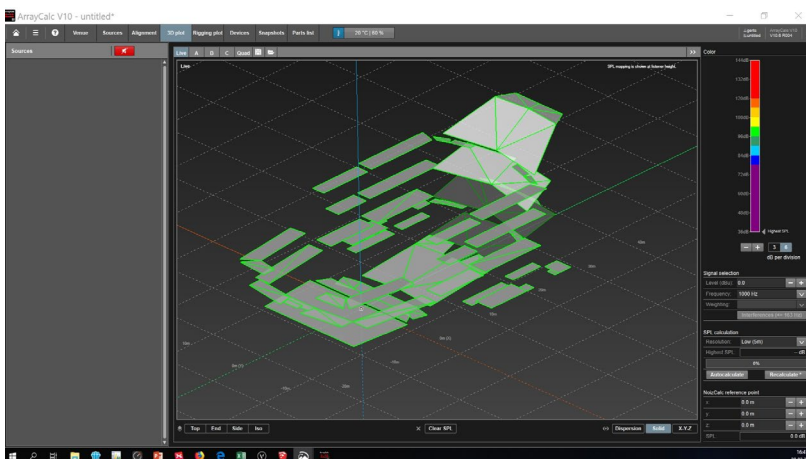
ArrayCalc Exchange

d&b ArrayCalc Exchange is a SketchUp extension that allows users to convert CAD and EASE files into an ArrayCalc venue file (*.dbacv) that can be imported directly into ArrayCalc.

ArrayCalc Exchange supports system designers in mobile and fixed applications by simplifying the creation of complex venues in ArrayCalc. Selected layers are divided into triangles and converted into triangular planes. Different layer name extensions are available, which will determine the input type of the single components from SketchUp in ArrayCalc.



3D model in SketchUP



Imported venue file (*.dbacv) in ArrayCalc

NoizCalc 2.6 compatibility update

In order to support the new system features, an update for NoizCalc 2.6 is available via the integrated update function or by download from www.dbaudio.com.

Technical updates and bug fixes

- Support of ArrayCalc v10.10.1 (or higher) files with new system features:
 - Temperature & Humidity Control (THC).
 - CPL for SL-Series.
- Bug fix regarding orientation of A-Series.
- Improved objects import (at individual locations regarding variations in mapping).
- Various minor bug fixes and improvements.

R90 feature update

The R90 Touchscreen remote control receives a new feature with the current update. The new feature is a load/save option on the R90 and allows you to store and recall all your projects settings directly from R90 to a USB storage device and vice versa.

The new firmware is available and can be loaded and installed via the USB ports of the device.

