

AN 161 (1.2 en)

ArrayProcessing on tour

1. Background

We have been getting some feedback and requests regarding the best practices for using ArrayProcessing whilst touring, which we wanted to share with you.

As you know, R1 offers the possibility of importing all data from an ArrayCalc file. For this, you simply open the ArrayCalc (*.dbac2) file in R1, which already contains remote views for the complete system.

These “d&b Default views” may not always suit your needs for the tour, so you may want to customize them. This modified R1 file can then be used for the whole tour, and, if some basic conditions are fulfilled, specific ArrayProcessing data for each venue can be used together with this file.

However, this may lead to difficulties or confusion due to a validation function that was implemented into ArrayCalc and R1 with the launch of ArrayProcessing. The intention was to prevent ArrayProcessing settings that do not match the array from being imported into the R1 Remote control software. R1 tries to recognize whether the ArrayProcessing slot data that is being imported from ArrayCalc is compatible with the R1 file. This automatic validation function is sensitive to certain changes within the ArrayCalc file. If such changes have been made, it will not be possible to import new AP slots into the customized R1 file.

Here are a few DOs and DON'Ts to observe if you want to keep using the same customized R1 file throughout your tour.

2. DOs and DON'Ts

What you can do:

- Add new slots to existing arrays.
- Recalculate existing AP Slots with new settings (Power/Glory, level drop characteristics).
- Change Venue Data.
- Change positioning, aiming, and splay angles of the arrays to adapt the system to a different venue.

What you can't do:

- Change “basic” array properties:
 - Series type (J, V, Y).
 - Mounting (Flown, Stacked).
 - Number of cabinets.
 - Loudspeaker Type (e.g. J8 vs. J12).
 - Pair switch.
- Delete an Array and then create it again, even if it has the same settings.
- Disable ArrayProcessing on an array without clicking on “Keep current AP settings” in the pop-up dialog.
- Enable ArrayProcessing on new arrays.
- Copy/Paste or Export/Import arrays.

3. General recommendations

If you intend to run a tour with ArrayProcessing using customized R1 project files, here are some general recommendations. The following approaches all work, but may or may not be useful for all applications:

Approach A: Use the same number of cabinets at all venues. Only change venue data and splay angles.

In this case, it should be no problem to import ArrayProcessing settings into the existing R1 file.

Approach B: Plan with a small number of different system setups, and prepare customized R1 files up front.

1. If enough information is available in advance (sightlines/riggings loads in particular), it should be possible to determine a small number of system variants with regard to different array sizes.
2. For each of these system setups:
 - Create an ArrayCalc project (with the data from the first/reference venue of the tour). This project should have ArrayProcessing enabled for all arrays that will be optimized in any of the venues on the tour.
 - If you foresee the need for unpaired arrays at some venues, create these arrays as unpaired, and apply ArrayProcessing to both hangs.
 - Open the ArrayCalc Project in R1.
 - Do the desired modifications to create your customized R1 file.
 - For the next show using this system, open the ArrayCalc project and modify the Venue data, splay angles, array positions, etc.
 - Recalculate the AP Slots.
 - Open your customized R1 project.
 - Import AP slots for the new venue and send the data to the amplifiers.
 - Be happy.

Approach C: In some cases, the R1 project can be easily customized by creating templates which include the additional elements that you typically need. This way you can just work with the default views from the ArrayCalc project, plus use the desired additional elements that can be added via your own templates.