

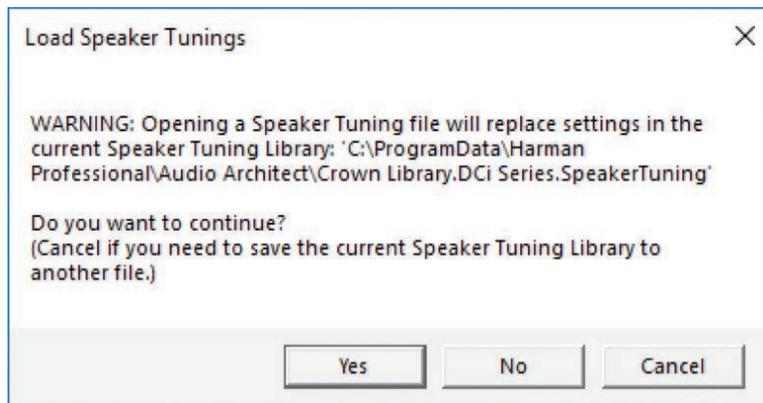


Instructions for Installing and Using FIR Tunings for VLA Compact Line Array with Crown DCI Amplifiers

FIR filters and limiters for the VLA-C loudspeakers have been developed specifically for the Crown DCI-N and DCI-DA amplifiers. The link to the VLA-C Speaker Tunings can be found at www.jblpro.com on the webpage for any of the VLA-C models. This process requires Harman Audio Architect software.

HOW TO LOAD THE VLA-C TUNING

1. Download the 'VLA-C' Speaker tuning file.
2. Move the downloaded file to: C:\ProgramData\Harman Professional\Audio Architect (this is the default location that Audio Architect looks at for speaker tuning files)
3. In Audio Architect, double click the Amplifier Panel.
4. On the Device panel, click File > Open > Speaker Tuning.
5. Click yes when prompted with the following message.

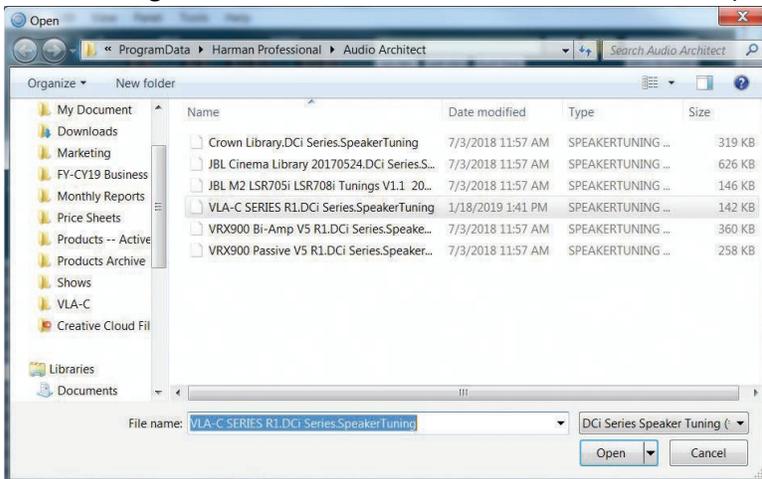


6. The preset will populate the limiter, crossover, and EQ settings.



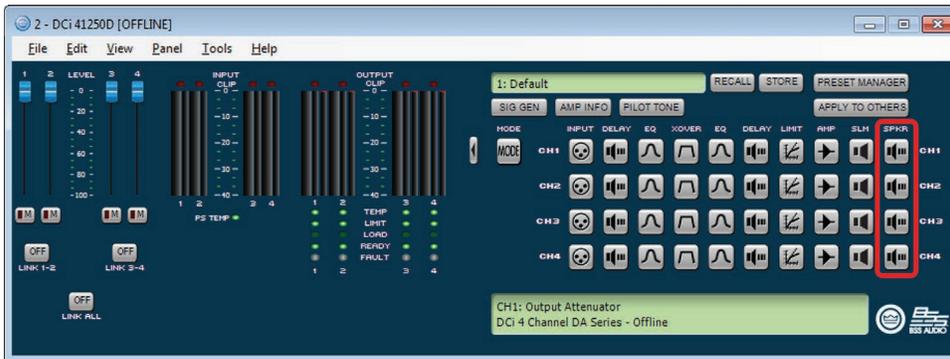
Important: Note that since it is an FIR filter you will not see filters above 300Hz as they don't manifest themselves the same way an IIR filter would in that setting. However, they will be engaged. In addition, you will have plenty of filters and delays to make suitable on-site adjustments.

7. Select the 'VLA-C' speaker tuning File and click 'Open'. (Note: if you did not follow step 2, you may have to navigate to the location where the file is downloaded)



(Note that version number may differ from what is shown above.)

Double click on the 'SPKR' Processing Object on the Amplifier panel.



- 8. Click the 'Recall' button and choose the matching preset for the Loudspeaker connected to that particular Amplifier channel and the mode. Click OK. Repeat this step for all channels connected to the VLA-C Loudspeakers.

FILTER EQs – 5 Adjustable EQs

The frequency response of a line array is determined by many factors including the array size (number of boxes), array curvature, and the listening distance. JBL factory presets were designed to create an appropriate tonal balance starting point for the array conditions described above. Since the number of presets that can be created by a manufacturer is not infinite, user adjustment of certain DSP parameters is necessary to create the desired tonal balance for a given array and application. This EQ was designed to help system engineers quickly and easily manipulate the tonal balance of an array.



This EQ consists of 5 adjustable DSP filters, each with a specific intended purpose. Some of these filters are grouped across the entire array (global adjustments), some filters are circuit group specific, and some filters have frequency centers and Q values that are linked but have adjustable circuit gain. Below is a description of how these filters work:

Array Size Compensation: Filter 1 is intended for correcting LF/MF build up created by an array that is longer than the intended preset. LF adjustments should be applied to all cabinets within the array, therefore filter 1 is a global filter (affecting all enclosures in the array).

Atmospheric Absorption Compensation: Filter 2 is intended to compensate for atmospheric conditions due to large variations in temperature and humidity that can have an impact on the overall HF energy. This filter is applied globally (to all the enclosures in the array) and can be used to quickly brighten or darken an array. It can also be used for artistic preference reasons to adjust overall system tonal balance.

HF Throw Distance Compensation: Filter 3 along with Gain shading is intended to correct for distance offsets between different sections of an array. The Type, Frequency and Q are linked across the entire array but the gain is adjustable per circuit (ie, per enclosure individual or set of enclosures that are on the same amplifier channel). This filter can be used to reduce HF energy close to an array and increase HF energy to areas further away where air absorption has a bigger impact.

User PEQ 1 & 2: Filters 4 and 5 are User PEQs that can be applied to individual circuit groups (ie, per enclosure individual or set of enclosures that are on the same amplifier channel). Frequency centers and Q are not linked across circuits and, for this reason, it is recommended that User PEQ 1 & 2 be used for frequencies above 1 kHz with moderate gain changes only.