





VLA-C SERIES | USER'S GUIDE



Note: While this guide refers to the VLA-C models without including a color designation, the color suffix is part of the full model number of the product. When ordering a product, the color must be specified via a suffix. Models with a -BK suffix (VLA-C125S-BK, VLA-C265-BK, and VLA-C2100-BK) are black; models with a -GR suffix (VLA-C125S-GR, VLA-C265-GR, and VLA-C2100-GR) are gray.

GENERAL INFORMATION

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1 - DECLARATION OF CONFORMITY

BRAND: JBL Professional

FAMILY NAME: VLA Compact Loudspeakers and Accessories

MODEL NAMES:

- VLA-C265-BK
- VLA-C265-GR
- VLA-C2100-BK

- VLA-C2100-GR
- VLA-C125S-BK
- VLA-C125S-GR

We, HARMAN International, declare under our sole responsibility that the product, to which this declaration relates, is in conformity with the following standards:

STANDARD	DESCRIPTION	TEST AGENCY
2006/42/EC MACHINE DIRECTIVE	Applies to machinery and lays down essential health and safety requirements. ISO12100	Tested at JBL Professional
2014/35/EC Low Voltage Directive	Applies to loudspeaker and lays down essential health and safety requirements. EN60065	Tested at JBL Professional
ROHS Removal of Hazardous Substances Directive	Directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment.	Self-Declared by JBL Professional
IP-55 per IEC529, IEC 60529, EN60529	International Protection Marking	Intertek

pro 1.

Frank Lacelle Compliance Manager - Harman International

2-SAFETY

2.1 - SAFETY INSTRUCTIONS

- 1. Read these instructions
- 2. Keep these instructions
- 3. Heed all warnings
- 4. Follow all instructions
- 5. Do not expose the product to sea spray or caustic environmental factors. VLA-C loudspeakers are not outfitted for use on the deck of cruise ships
- 6. Clean only with a dry cloth
- 7. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat
- 8. Only use attachments / accessories specified by the manufacturer
- 9. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way
- 10. Contact JBL Professional for advanced servicing issues
- 11. CAUTION DO NOT PERFORM ANY SERVICING UNLESS YOU ARE QUALIFIED TO DO SO
- 12. Prolonged exposure to excessive SPL can cause hearing damage: the loudspeaker is easily capable of generating sound pressure levels (SPL) sufficient to cause permanent hearing damage to performers, production crew and audience members. Caution should be taken to avoid prolonged exposure to SPL in excess of 90 dB
- 13. Read the System Rigging Manual before installation and use of the product

2.2 - GENERAL HARDWARE INFORMATION

Any hardware used in an overhead suspension application must be load rated for the intended use. Generally, this type of hardware is available from rigging supply houses, industrial supply catalogs and specialized rigging distributors. Local hardware stores do not usually stock these products. Hardware that is intended for overhead suspension will comply with ASME B30.20 and will be manufactured under product traceability controls. Compliant hardware will be referenced with a working load limit (WLL) and a traceability code.

2.3 - ATTACHMENT TO STRUCTURES

A licensed Professional Engineer must approve the placement and method of attachment to the structure prior to the installation of any overhead object. The installation of the hardware and method of attachment must be carried out in the manner specified by the Professional Engineer. Improper installation may result in damage, injury or death.

CAUTION: Installation must be done by qualified persons using safe rigging standards.

The installer is responsible for proper selection and use of mounting hardware to properly and safely suspend the speakers.

2.4 - IMPORTANT SAFETY WARNING

The information in this section has been assembled from recognized engineering data and is intended for informational purposes only. None of the information in this section should be used without first obtaining competent advice with respect to applicability to a given circumstance. None of the information presented herein is intended as a representation or warranty on the part of JBL. Anyone making use of this information assumes all liability arising from such use.

All information presented herein is based upon materials and practices common to North America and may not directly apply to other countries because of differing material dimensions, specifications and/or local regulations. Users in other countries should consult with appropriate engineering and regulatory authorities for specific guidelines.

Correct use of all included hardware is required for secure system suspension. Careful calculations should always be performed to ensure that all components are used within their working load limits before the array is suspended. Never exceed the maximum recommended load ratings.

2.5 - INSPECTION AND MAINTENANCE

Suspension systems are comprised of mechanical devices and, as such, they require regular inspection and routine maintenance to ensure proper functionality. Before suspending any speaker system, always inspect all components (enclosure, suspension frames or brackets, eyebolts, etc.) for cracks, deformations, corrosion or missing/loose/damaged parts that could reduce strength and safety of the array. Do not suspend the speaker until the proper corrective action has been taken.

Installed systems should be inspected at least annually. The inspection shall include a visual survey of all corners and load-bearing surfaces for signs of cracking, water damage, delamination or any other condition that may decrease the strength of the loudspeaker enclosure.

Accessory suspension hardware provided with or for VLA-C systems must be inspected for fatigue at least annually or as required by local ordinance. The inspection shall include a visual survey of the material for signs of corrosion, bending or any other condition that may decrease the strength of the fastener. Additionally, any eyebolts shall be checked for possible spin-out of the enclosure.

For all other hardware and fittings, refer to the hardware manufacturer's inspection and maintenance guidelines for process .

JBL is not responsible for the application of its products for any purpose or the misuse of this information for any purpose. Fur thermore, JBL is not responsible for the abuse of its products caused by avoiding compliance with inspection and maintenance procedures or any other abuse.

Prior to suspending the system, an expert, trained and experienced in suspending speaker systems, should inspect all parts and components.

2.6 - SYMBOLS

The following set of symbols are used in this document:



CAUTION: This symbol gives notice of a potential risk of harm to the individual or the equipment. Instruction marked with this symbol must be strictly followed.



TIP: This symbol gives notice of helpful, relevant information about the topic.



INSTRUCTIONS: This symbol gives notice of instructions that must be followed for proper installation and use of the product.



TOOLS REQUIRED: This symbol gives notice of tools that must be used for proper installation and use of the product.

3-MECHANICAL INFORMATION

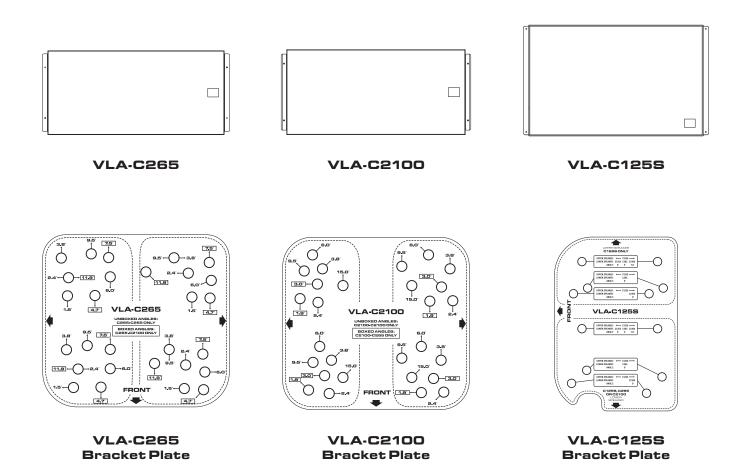
VLA Compact suspension system and accessories are also in compliance with the ANSIE1.8 - 2012 Section 5.3.4 standard for a minimum safety factor of 5:1. Minimum safety factor requirements are often set by local regulations and the VLA-C Calculator should be used to verify the safety factor for each array configuration.



TIPS:

- While the VLA-C265 and VLA-C2100 have similar dimensions and weights, they are not identical. Therefore, there may be small gaps between boxes in an array.
- Because of their similar sizes, VLA-C2100 & VLA-C265 are sometimes used interchangeably throughout this document.

4 - SYSTEM COMPONENTS



See later sections for additional information.

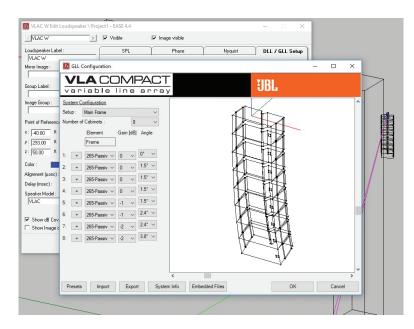


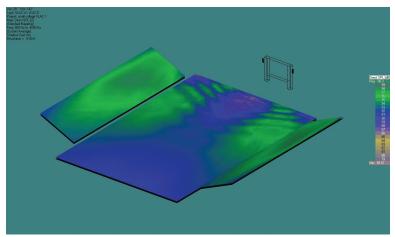
CAUTION: Always use components and accessories specified and approved by JBL Professional.

5-SOFTWARE

EASE GLL FILES

EASE GLL files are available for VLA-C Series loudspeakers at the JBL Professional website www. jblpro.com on the VLA Compact Series webpage and on each of the individual model webpages.





Example of small stadium with two flanking scoreboard arrays of 8 x VLA-C265 each (ave. 500 Hz – 4 kHz).

CLF FILES

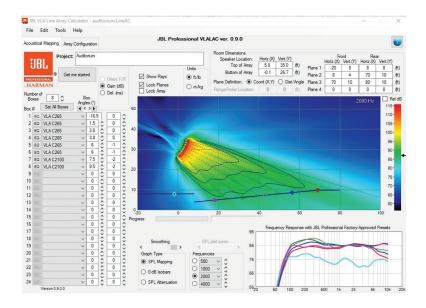
CLF Common Loudspeaker Format files are available for VLA-C Series loudspeakers at the JBL Professional website.

VLA-C CALCULATOR

The free VLA-C Calculator is simulation software for designing and predicting JBL VLA-C Series systems.

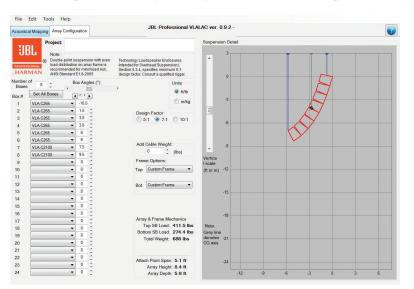
Acoustical Mapping

The Acoustical Mapping tab allows for 2D sectional-view modeling of VLA-C arrays on up to four seating planes. Included are both patterns of the VLA-C full-range boxes (VLA-C265 and VLA-C2100) and the subwoofer (VLA-C1255). Mixed arrays may be modeled.



Array Configuration

The Array Configuration tab describes the array and provides information about weight factors and center of gravity (CG), along with mechanical validation of the array. The array weight design factor is selectable between 5:1, 7:1, and 10:1. Frame options are selectable. If the array configuration falls outside the load limits of either the speaker cabinets, the speaker interconnect system, or the suspension system, this will be indicated via an error indication. Array statistics like total weight, attach point span, and array height and depth are also calculated.



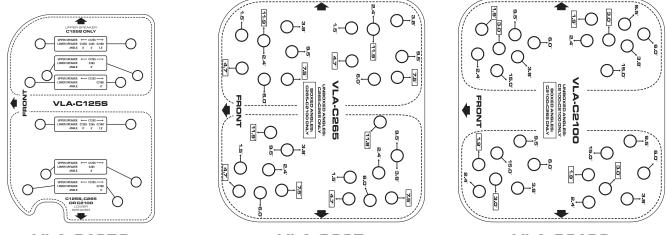
There are two types of warning messages, which show in red lettering at the top of the Suspension Detail and Mapping graphics: One is "Invalid CG Location" which is when the center of gravity (CG) is outside of the two suspension points. This indicates that the array aiming angle is not physically achievable. A second warning is "Array exceeds load limit conditions" (may also include additional information about which load limit factor is exceeded). This indicates that one or more of the components of the array exceeds the selected Design Factor

6 - ARRAY SIZE CABINET SUSPENSION LIMIT GUIDELINES

Refer to the free VLA-C Calculator software for the array size cabinet suspension limits for your particular configuration.

7 - BRACKET PLATES (ie, Angle Brackets)

Each loudspeaker model ships with a corresponding pair of bracket plates which can be seen here:



VLA-C125S

VLA-C265

VLA-C2100

Orientation: Note that the FRONT arrow must always point toward the front of the loudspeaker cabinets. This places one dot-outlined section on the top, which connects via two bolt points to the top loudspeaker cabinet, and it places the other dot-outlined section on the bottom, which connects via two bolt points to the lower loudspeaker cabinet.

Attach the Appropriate Plate -- See charts below for which plate and which holes to use, based on the cabinet models and the desired inter-cabinet splay angle.

Bolt Installation — Select the bolt holes in the bracket plate that correspond to the two cabinet models that are being connected by that plate and the desired inter-box angle setting. Use the supplied stainless steel M10 x 35 mm bolts and lock washers to secure the angle plates to the cabinet. Remove the neoprene washer from the locations used to attach rigging components. Insert two of the M10 bolts (with lock washers) through the holes in the top section of the bracket and thread them into the two bottom threaded insert points in the top cabinet. Insert two of the M10 bolts (with lock washers) through the bottom section of the bracket plate and thread them into the two top threaded insert points in the bottom cabinet. (See diagrams)



INSTRUCTIONS: Bolt Torque Settings -- Use non-permanent thread locker such as Loctite brand Blue 242 on the threads of all fasteners. Torque bolts to 29.5 ft·lbf(\pm 3 ft·lbf); 40 N·m (\pm 4 N·m)



NOTE: The composite enclosure will make noises as bolts are tightened — this is normal.

Once all the plates and bolts have been checked, install the side covers using the supplied 8x32 Philips screws. Torque screws to 2.0ft lbf(\pm 0.2ft lbf); 2.6N m(\pm 0.3N m).

7.1 WHICH BRACKET PLATE TO USE

- When attaching a VLA-C265 to a VLA-C265, use the included VLA-C265 bracket. The possible splay angles are: 1.5°, 2.4°, 3.8°, 6.0°, and 9.5°.
- When attaching a VLA-C2100 to a VLA-C2100, use the included VLA-C2100 bracket. The possible splay angles are: 2.4°, 3.8°, 6.0°, 9.5°, and 15.0°.
- When attaching a VLA-C265 and VLA-C2100 together (with either model at the top or bottom), you may be using a VLA-C265 or VLA-C2100 plate. Which one to use depends on the desired splay angle.

	ARRAY RIGGING COMBINATIONS			
	VLA-C265 to VLA-C265 VLA-C265 to VLA-C2100		VLA-C2100 to VLA-C2100	
VLA-C265 Bracket Plates (x2)	1.5°, 2.4°, 3.8°, 6.0°, and 9.5°	4.7°, 7.5°, 11.9°	NO	
VLA-C2100 Bracket Plates (x2)	NO	1.9°, 3.0°	2.4°, 3.8°, 6.0°, 9.5°, 15°	

(Note: The opposite plate to cabinet combination is not allowed — in other words, a VLA-C265 plate cannot be used to join two VLA-C2100s.)

- When attaching a VLA-C125S subwoofer to another VLA-C125S subwoofer or to either a VLA-C265 or VLA-C2100 full-range model, use the included VLA-C125S bracket.
 - For attaching to another VLA-C125S, the only angle possible is 0°.
 - For attaching to VLA-C265, the possible splay angles are: 0° and 5.0°.
 - For attaching to VLA-C2100, the possible splay angle are: 0° and 7.5°.

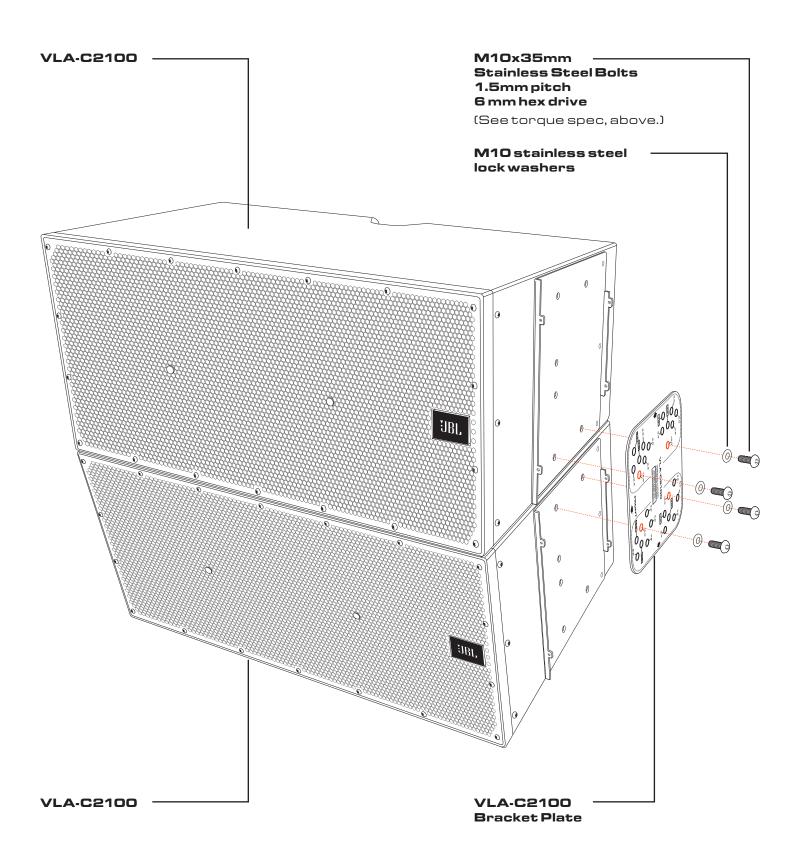
	ARRAY RIGGING COMBINATIONS			
	VLA-C125S to VLA-C125S	VLA-C125S to VLA-C265	VLA-C125S to VLA-C2100	
VLA-C125S Bracket Plates (x2)	D°	0°, 5.0°	0°, 7.5°	

Here is the same information as the tables above but from the point-of-view of the angles:

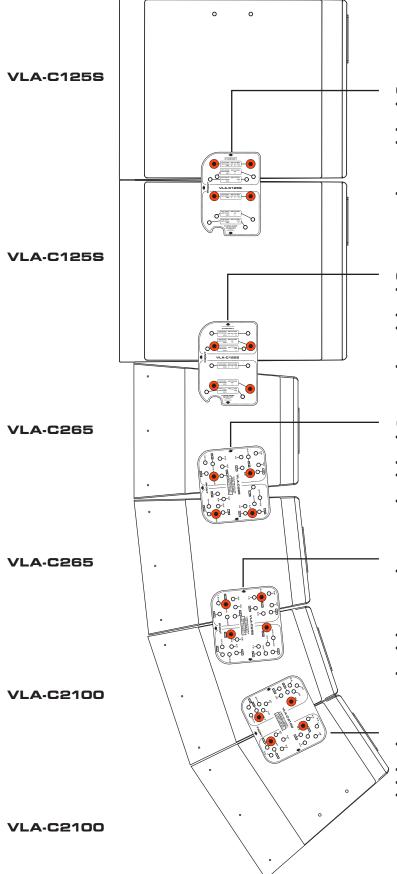
VLA-C Splay Angle Settings from POV of Angles — Which Brackets to Use

							ANGLE					
		1.5°	1.9°	2.4°	3.0°	3.8°	4.7°	6.0°	7.5°	9.5°	11.9°	15.0°
NOI	VLA-C2100 to VLA-C2100			VLA-C2100 Bracket Plate		VLA-C2100 Bracket Plate		VLA-C2100 Bracket Plate		VLA-C2100 Bracket Plate		VLA-C2100 Bracket Plate
BINATIC	VLA-C265 to VLA-C265	VLA-C265 Bracket Plate		VLA-C265 Bracket Plate		VLA-C265 Bracket Plate		VLA-C265 Bracket Plate		VLA-C265 Bracket Plate		
COM	VLA-C265 to VLA-C2100 [either model can be on top or bottom]		VLA-C2100 Bracket Plate		VLA-C2100 Bracket Plate		VLA-C265 Bracket Plate		VLA-C265 Bracket Plate		VLA-C265 Bracket Plate	

7.2 ASSEMBLY DRAWING



7.3 EXAMPLE OF 6-CABINET ARRAY



O° INTER-CABINET SPLAY ANGLE

- VLA-C125S UPPER SPEAKER to VLA-C125S LOWER SPEAKER uses VLA-C125S bracket plate.
- Orient "FRONT" arrow toward fronts of speaker cabinets.
- On top half of bracket plate, use the 2 holes marked for when connecting C125S (ie, VLA-C125S) UPPER SPEAKER and C125S (ie, VLA-C125S) LOWER SPEAKER and for O°ANGLE. Screw the bolts into the two spaced holes in the lower part of the UPPER SPEAKER.
- On bottom half of bracket plate, use the 2 holes marked for C125S (ie, VLA-C125S) UPPER SPEAKER and C125S (ie, VLA-C125S) LOWER SPEAKER and for O°ANGLE. Screw the bolts into the two spaced holes in the upper part of the LOWER SPEAKER.

O° INTER-CABINET SPLAY ANGLE

- VLA-C125S UPPER SPEAKER to VLA-C265 LOWER SPEAKER uses VLA-C125S bracket plate.
- Orient "FRONT" arrow toward fronts of speaker cabinets.
- On top half of bracket plate, use the 2 holes marked for when connecting C125S (ie, VLA-C125S) UPPER SPEAKER and C265 (ie, VLA-C265) LOWER SPEAKER and for O°ANGLE.
- On bottom half of bracket plate, use the 2 holes marked for C125S UPPER SPEAKER to C265 LOWR SPEAKER and for 0° ANGLE.

6° INTER-CABINET SPLAY ANGLE

- VLA-C265 UPPER SPEAKER to VLA-C265 LOWER SPEAKER uses VLA-C265 bracket plate.
- Orient "FRONT" arrow toward fronts of speaker cabinets.
 On top half of bracket plate, use the 2 holes marked for 6° (unboxed).
- On bottom half of bracket plate, use the 2 holes marked for 6° (unboxed).

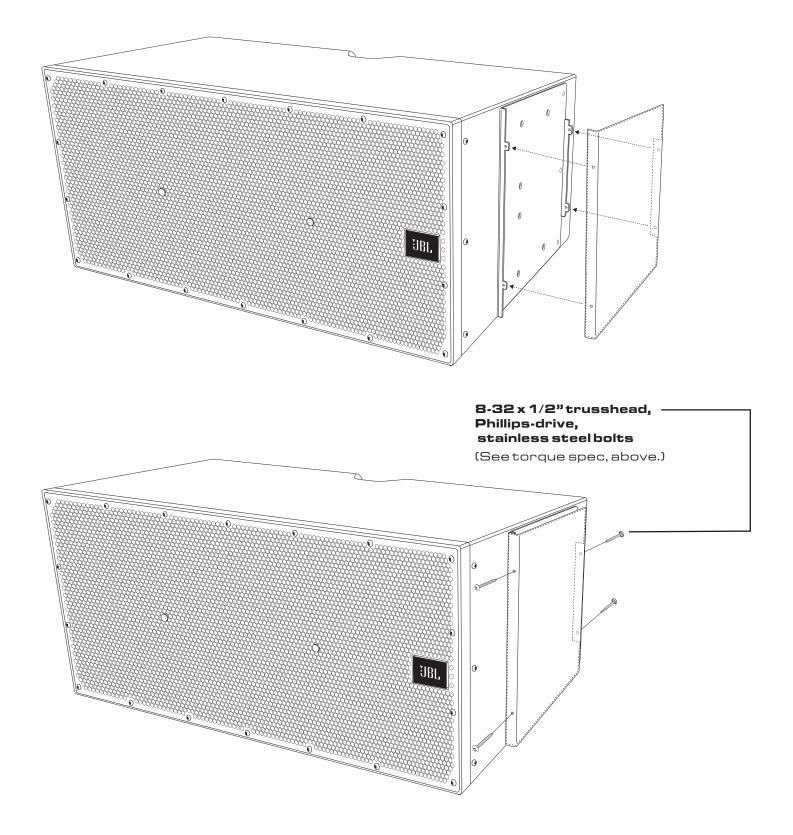
11.9° INTER-CABINET SPLAY ANGLE

- VLA-C265 UPPER SPEAKER to VLA-C2100 LOWER SPEAKER uses VLA-C265 bracket plate for this 11.9° inter-cabinet splay angle. (The VLA-C2100 bracket plate would instead be used for this VLA-C265 to VLA-C2100 junction in situations where a much smaller (1.9° or 3.0°) inter-cabinet splay angle is desired.)
- Orient "FRONT" arrow toward fronts of speaker cabinets.
- On top half of bracket plate, use the 2 holes marked for 11.9° (boxed).
- On bottom half of bracket plate, use the 2 holes marked for 11.9° (boxed).

15° INTER-CABINET SPLAY ANGLE

- VLA-C2100 UPPER SPEAKER to VLA-C2100 LOWER SPEAKER uses VLA-C2100 bracket plate.
- Orient "FRONT" arrow toward fronts of speaker cabinets.
- On top half of bracket plate, use the 2 holes marked for 15° (boxed).
- On bottom half of bracket plate, use the 2 holes marked for 15° (boxed).

7.4 SIDE-PANEL EXTERNAL TRIM COVER PANELS



8 - AMPLIFICATION

The VLA-C full-range models may be driven passively or actively, and the full-range models can be driven individually or in pairs. Below is the listing of the current amplifier models that contain the proper FIR presets for the VLA-C loudspeaker models. The Harman amplifier model line-up may change over time. These speakers should not be driven from amps that only provide IIR filters. (See DSP Preset section, below.)

VLA-C265 OR VLA-C2100 FULL-RANGE SPEAKERS

Driving a single cabinet per amp channel:

CABINET 1	IMPEDANCE	POWER HANDLING (W)	AMPLIFIER(S)	POWER INTO IMPEDANCE
LF (Low Frequency)	8	800	1 channel of either: DCi1250N or DCi1250DA	1250W into 8Ω
HF (High Frequency)	16	150	1 channel of either: DCi600N or DCi600DA *	300W into 16 Ω
Passive Full-Range	8	800	1 channel of either: DCi1250N or DCi1250DA	1250W into 8Ω

VLA-C265 OR VLA-C2100 FULL-RANGE SPEAKERS

Driving two cabinets in parallel per amp channel:

CABINET 1 AND CABINET 2 IN PARALLEL	IMPEDANCE	POWER HANDLING (W)	AMPLIFIER(S)	POWER INTO IMPEDANCE
LF (Low Frequency)	4	1600	1 channel of DCi2400N	2400W into 4Ω
HF (High Frequency)	8	300	1 channel of either: DCi600N or DCi600DA*	600W into 8Ω
Passive Full-Range	4	1600	1 channel of DCi2400N	2400W into 4Ω

VLA-C125S SUBWOOFER

Driving a single cabinet:

CABINET 1	IMPEDANCE	POWER HANDLING (W)	AMPLIFIER(S)	POWER INTO IMPEDANCE
LF (Low Frequency)	4	1600	1 channel of: DCi2400N	2400W into 4Ω

* Because of the high transient signal capability of these HF drivers, using an even larger amp than listed may allow through some additional output on momentary transients.



NOTE: DCI-N model amplifiers contain networking capability. DCI-DA models include Dante input for applications that require Dante or AES67 networked audio.

DRIVING CABINETS INDIVIDUALLY

The user may wish to drive the cabinets individually if they need the ability to gain shade the array to the resolution as indicated by the EASE (or other modeling system) model or the VLA-Compact Line Array Calculator. Driving cabinets individually may also be useful in order to utilize the smaller amplifier sizes, if desired.

PASSIVE VERSUS ACTIVE SETTING ON LOUDSPEAKERS

Note that the VLA-C models ship in passive mode. For diagrams showing how to wire the speaker systems in either full-range passive mode or bi-amp mode, see the WIRING section of this guide.

USING AMPLIFIERS WITH EXTERNAL DANTE

If a different size amplifier is needed such that a Dante model is not offered, a BSS BLU-DA or any of the BSS Dante BLU units can be added into the system.

9 - DSP PRESETS

FIR filters and limiters for the VLA-C products have been developed specifically for the Crown DCI-N and DCI-DA amplifiers. The list of available presets are shown below and can be found on the VLA-C home page at www.jblpro.com.

To load a preset:

- 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.

Load Speaker Tunings	×
WARNING: Opening a Speaker Tuning file will replace settings in the current Speaker Tuning Library: 'C:\ProgramData\Harman Professional\Audio Architect\Crown Library.DCi Series.SpeakerTuning' Do you want to continue? (Cancel if you need to save the current Speaker Tuning Library to another file.)	
Yes No Cancel	

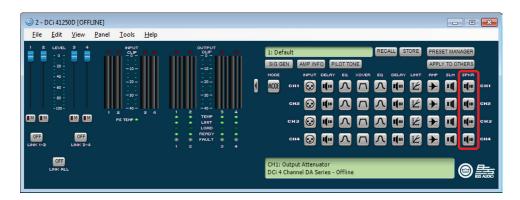
6. The preset will populate the limiter, crossover, and EQ settings.



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.

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📕 My Document 🔺	Name	Date modified	Туре	Size
Downloads Marketing	Crown Library.DCi Series.SpeakerTuning	7/3/2018 11:57 AM	SPEAKERTUNING	319
FY-CY19 Business	JBL Cinema Library 20170524.DCi Series.S JBL M2 LSR705i LSR708i Tunings V1.1 20	7/3/2018 11:57 AM 7/3/2018 11:57 AM	SPEAKERTUNING	626 I 146 I
Monthly Reports	VLA-C SERIES R1.DCi Series.SpeakerTuning	1/18/2019 1:41 PM	SPEAKERTUNING	142
Price Sheets Products Active	VRX900 Bi-Amp V5 R1.DCi Series.Speake	7/3/2018 11:57 AM	SPEAKERTUNING	360
Products Archive	VRX900 Passive V5 R1.DCi Series.Speaker	7/3/2018 11:57 AM	SPEAKERTUNING	258
Shows				
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- 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)
- 8. Double click on the 'SPKR' Processing Object on the Amplifier panel.



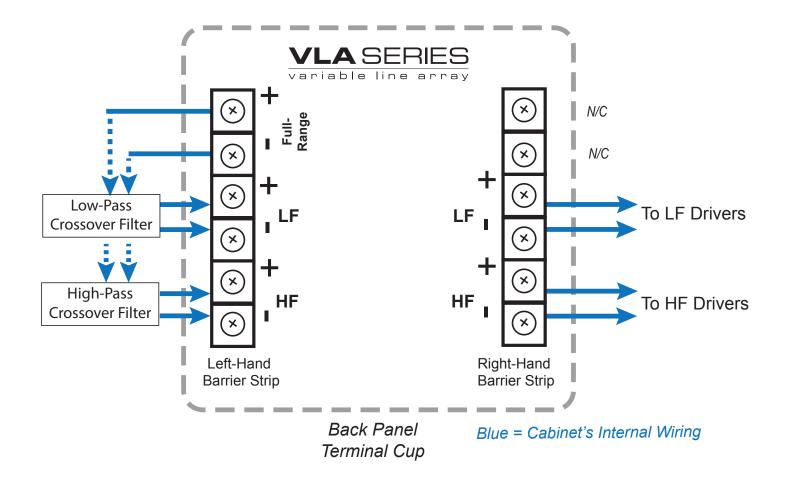
9. Click the 'Recall' button and choose the matching preset for the Loudspeaker connected to that particular Amplifier channel. Click OK.

 $10. Follow \, {\tt step} \, 10 \, {\tt for} \, {\tt all} \, {\tt channels} \, {\tt connected} \, {\tt to} \, {\tt the} \, {\tt VLA-CL} oud {\tt speakers}.$

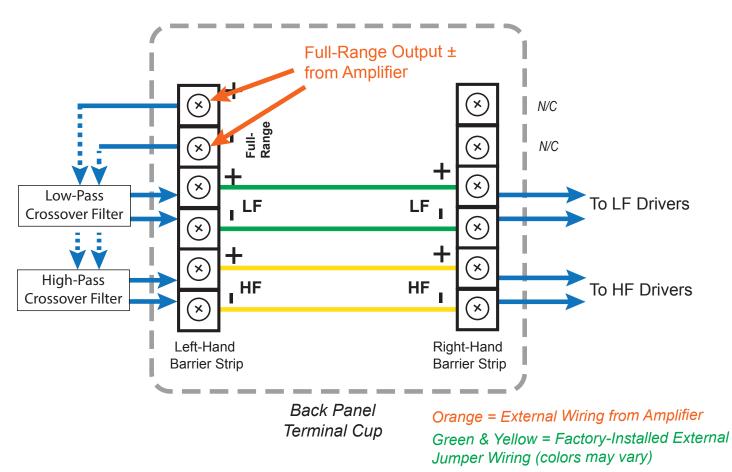
10-WIRING

WIRING FOR VLA-C265 & VLA-C2100 FULL-RANGE LOUDSPEAKERS

Internal Connections -- The cabinet's internal wiring connections are shown below. The left-hand barrier strip terminals are for the input to -- and output from -- the built-in high-slope passive crossover network. The right-hand barrier strip terminals connect directly to the Low Frequency (LF) and High Frequency (HF) drivers.

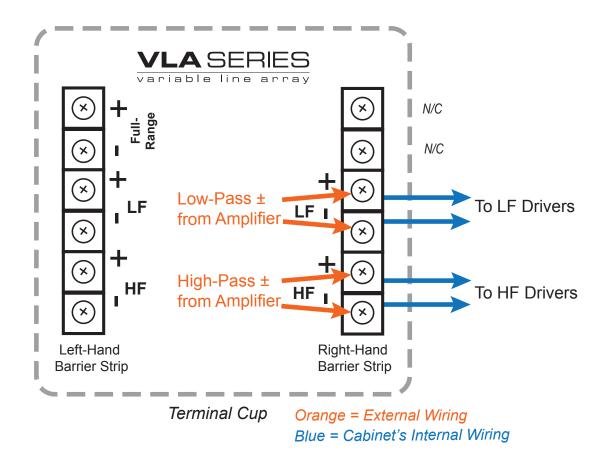


Wiring for Use of the Internal Crossover Network -- The cabinet's internal wiring connections are shown below.



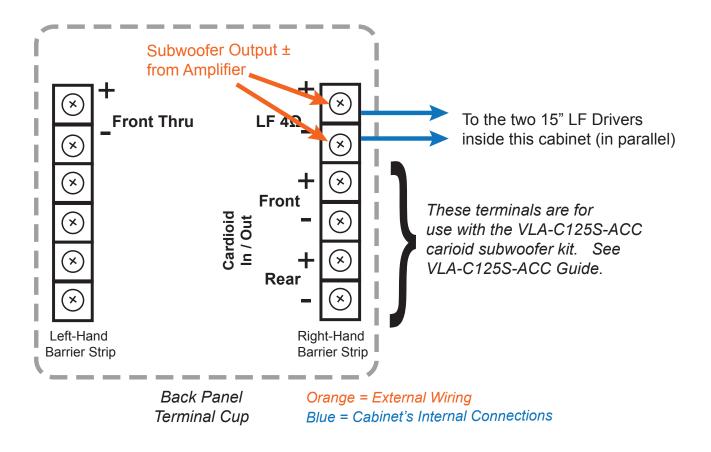
Blue = Cabinet's Internal Wiring

Wiring for Bi-amplification -- Connect the low-pass output from the amplifier to the right-hand barrier strip terminals labelled LF+ and LF-. Connect the high-pass output from the amplifier to the right-hand barrier strip terminals labelled HF+ and HF-. These connections are shown in the diagram below in orange, although the wire color you use may be different.



WIRING FOR VLA-C125S SUBWOOFER

Connect the subwoofer output from the amplifier to the right-hand barrier strip terminals labelled LF $4\Omega+$ and LF 4Ω -.



WIRING THREE VLA-C-125S CABINETS IN A CARDIOID SUBWOOFER CONFIGURATION

A cardioid subwoofer system is a configuration that utilizes three subwoofer cabinets — two facing forward and one facing rear -- and three amplifier channels -- to cancel out a large percentage of the bass's rear-projection from the array. Reduction of bass rear-projection is often desirable for decreasing the build-up of bass frequency roll-around on stage, reducing the amount of bass that enters stage microphones, cutting down bass reflections and the resulting interference from behind-the-array acoustical boundaries, and making the subwoofer energy go mostly forward just like the full-range speakers do.

JBL's VLA-C125S-ACC kit allows for neat inter-cabinet wiring of three VLA-C125S subwoofer cabinets into a cardioid configuration — with two cabinets forward-facing and one cabinet rearfacing. The kit prevents having wiring exposed on the outsides of the cabinets and prevents having the wiring extend to the front side of the array (for connecting the rear-facing cabinet). See JBL's VLA-C125S-ACC Cardioid Kit Guide.

11 - ADDITIONAL VLA-C GUIDES

- Suspension Bar Kit Accessory
- VLA-C125S-ACC Cardioid Kit Guide

12-SPECIFICATIONS

VLA-C265

Two-Way Full Range Dual 10" Array Module

System:			
Frequency Range (-10 dB) ¹ :	85 Hz - 19 kHz		
Frequency Response (±3 dB) ¹ :	108 Hz – 16.5 kHz		
System Power Rating ² :	Full Range:	800 W Continuous Pink Noise (3200 W peak), 2 hrs	
		400 W Continuous Pink Noise (1600W peak), 100 hrs	
	Bi-amp LF:	800 W Continuous Pink Noise (3200 W peak), 2 hrs	
		400 W Continuous Pink Noise (1600W peak), 100 hrs	
	Bi-amp HF:	150 W Continuous Pink Noise (600 W peak), 2 hrs	
		50 W Continuous Pink Noise (200 W peak), 100 hrs	
Maximum Input Voltage:	Full-Range:	80 V Rms (2 hrs), 160 V peak	
	Bi-Amp LF:	80 V Rms (2 hrs), 160 V peak	
	Bi-Amp HF:	50 V Rms (2 hrs), 135 V peak	
Maximum SPL (1m) ³ :	131 dB Cont. Ave (2		
Sensitivity ⁴ :	Full-Range:	102 dB (85 Hz – 19 kHz)	
	Bi-Amp LF:	100 dB (85 Hz – 950 Hz)	
	Bi-Amp HF:	108 dB (950 Hz – 19.2 kHz)	
Coverage Pattern (-6 dB):	Horizontal:	65° (+15°/-10°, 1.5 kHz to 15 kHz)	
	Vertical:	Varies with array size and configuration	
Impedance:	Full-Range:	8Ω, 6.6Ω min @ 162 Hz	
	Bi-Amp LF:	8Ω, 6.8 Ω min @ 162 Hz	
	Bi-Amp HF:	16 Ω, 16.2 Ω min @ 11 kHz	
Amplifiers:	Crown DCi Family wi		
	Recommended	Crown DCi 2 1250N	
		Crown DCi 4 1250N/ND/DA	
		Crown DCi 2 2400N	
Transducers:		Crown DCi 4 2400N	
Low Frequency Driver:	2 v 2261EE 25/1 mm	n (10 in) diameter, each with two 76 mm (3 in) diameter voice coils, Neodymium Differential	
Low Frequency Driver.	Drive [®] . Direct Coole		
High Frequency Driver:			
	mm (0.8 in) exit	,,,,,,,	
Physical:	. ,		
Enclosure Material:	Fiberglass shell, gelo	coat finish, with 18 mm Birch plywood internal bracing.	
Grille:		auge hex-perforated steel with zinc under-coating, backed with acoustically transparent cloth	
	and hydrophobic scr		
Inter-Enclosure Angles:	VLA-C265 to VLA-C2	265: 1.5°, 2.4° 3.8°, 6.0°, 9.5° using VLA-C265 Bracket Plate (included with VLA-C265)	
	VLA-C265 to VLA-C2	2100 (either model on top/bottom): 1.9°, 3.0° using VLA-C2100 Bracket Plate (included with	
	VLA-C2100) and 4.7	°, 7.5°, 11.9° using VLA-C265 Bracket Plate (included with VLA-C265)	
		A-C125S Subwoofer (VLA-C265 cannot be connected above C125S): 0°, 5° using VLA-C125S	
	Bracket Plate (includ		
Environmental:		529 (dust protected and protected against jets of water).	
Terminals:		d barrier strip terminals. Barrier terminals accept up to 5.2 sq mm (10 AWG) wire or max width	
		de lugs. Touch-proof covers.	
Colors:		Pantone 428C), -BK: Black	
Dimensions (H x W x D):		n (15.0 x 33.4 x 18.1 in)	
Net Weight (ea):	37.7 kg (83 lbs)		
Shipping Weight (ea):	44.0 kg (97 lbs)		
Included Accessories:	2 pcs. VLA-C265 Bra		
	•	n stainless steel bolts (1.5mm pitch, 6 mm hex-drive) for attaching Bracket Plates	
	•	Cover Panels for Bracket Plates, each attaches via	
		x ½" trusshead, phillips-drive, stainless steel bolts.	
Optional Accessories:		n Bar Kit for the array, includes 2 identical Suspension Bars (for top/bottom), 4 pcs ¾-inch Class	
	2 Screw Pin Shackle	s (must use 2 Shackles for each Suspension Bar, located at end channels, not in the center).	

1. Using recommended DSP tuning, full-space (4π)

2. Continuous Pink Noise rating is IEC-shaped pink noise with 6 dB crest factor. Peak defined as 6 dB above Continuous Pink Noise Rating.

3. Continuous Average calculated from sensitivity and power handling, exclusive of power compression. Peak measured, unweighted SPL, bi-amp mode,

measured under full-space conditions at 1 meter using broadband pink noise with a 12 dB crest factor and specified preset.

4. 2.83 V RMS, full-space (4π)

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VLA-C2100

Two-Way Full Range Dual 10" Array Module

System: Frequency Range (-10 dB) ¹ :	96 Hz 19 kHz			
Frequency Range (-10 dB) ¹ : Frequency Response (±3 dB) ¹ :	86 Hz - 18 kHz 109 Hz - 15.3 kHz			
System Power Rating ² :	Full Range:	800 W Continuous Pink Noise (3200 W peak), 2 hrs		
System Fower Rating .	ruli haliye.	400 W Continuous Pink Noise (1600W peak), 100 hrs		
	Bi-amp LF:	800 W Continuous Pink Noise (3200 W peak), 2 hrs		
	DI-arrip LF.	400 W Continuous Pink Noise (1600W peak), 100 hrs		
	Bi-amp HF:	150 W Continuous Pink Noise (600 W peak), 20 hrs		
		50 W Continuous Pink Noise (200 W peak), 100 hrs		
Maximum Input Voltage:	Full-Range:	80 V Rms (2 hrs), 160 V peak		
Maximum input voltage.	Bi-Amp LF:	80 V Rms (2 hrs), 160 V peak		
	Bi-Amp HF:	50 V Rms (2 hrs), 135 V peak		
Maximum SPL (1m) ³ :	131 dB Cont. Ave (2			
Sensitivity ⁴ :	Full-Range:	102 dB (85 Hz – 19 kHz)		
Conclusion by .	Bi-Amp LF:	100 dB (85 Hz - 950 Hz)		
	Bi-Amp HF:	107 dB (950 Hz - 19.2 kHz)		
Coverage Pattern (-6 dB):	Horizontal:	100° (+5°/-15°, 1.5 kHz to 15 kHz)		
eererager attern (e abj.	Vertical:	Varies with array size and configuration		
Impedance:	Full-Range:	8Ω, 6.7Ω min @ 200 Hz		
	Bi-Amp LF:	8Ω, 6.9 Ω min @ 230 Hz		
	Bi-Amp HF:	16 Ω, 15.9 Ω min @ 1.1 kHz		
Amplifiers:	Crown DCi Family wi			
	Recommended:	Crown DCi 2 1250N		
		Crown DCi 4 1250N/ND/DA		
		Crown DCi 2 2400N		
		Crown DCi 4 2400N		
Transducers:				
Low Frequency Driver:	2 x 2261FF, 254 mm	n (10 in) diameter, each with two 76 mm (3 in) diameter voice coils, Neodymium Differential		
		Drive [®] , Direct Cooled [™]		
High Frequency Driver:	3 x 2415K, D2 Dual Diaphragm Dual Voice Coil Compression Drivers, each with two 38 mm (1.5 in) dia. Voice Coils			
	mm (0.8 in) exit			
Physical:				
Enclosure Material:	Fiberglass shell, gelo	coat finish, with 18 mm Birch plywood internal bracing.		
Grille:	Powder coated 14 g	auge hex-perforated steel with zinc under-coating, backed with acoustically transparent cloth		
	and hydrophobic scr			
Inter-Enclosure Angles:	VLA-C2100 to VLA-C	C2100: 2.4°, 3.8°, 6.0°, 9.5°, 15° using VLA-C2100 Bracket Plate (included with VLA-C2100)		
		265 (either model on top/bottom): 1.9°, 3.0° using VLA-C2100 Bracket Plate (included with		
	VLA-C2100) and 4.7	°, 7.5°, 11.9° using VLA-C265 Bracket Plate (included with VLA-C265)		
		LA-C125S Subwoofer (VLA-C2100 cannot be connected above C125S): 0°, 7.5° using VLA-C125S		
		ded with VLA-C125S)		
Environmental:		529 (dust protected and protected against jets of water).		
Terminals:		d barrier strip terminals. Barrier terminals accept up to 5.2 sq mm (10 AWG) wire or max width		
		de lugs. Touch-proof covers.		
Colors:		Pantone 428C), -BK: Black		
Dimensions (H x W x D):		n (15.0 x 33.4 x 18.1 in)		
Net Weight (ea):	37.7 kg (83 lbs)			
Shipping Weight (ea):	44.0 kg (97 lbs)			
Included Accessories:	2 x VLA-C2100 Brac			
		n stainless steel bolts (1.5mm pitch, 6 mm hex-drive) for attaching Bracket Plates		
		Cover Panels for Bracket Plates, each attaches via		
	,	x ½" trusshead, phillips-drive, stainless steel bolts.		
Optional Accessories:	VLA-C-SB Suspensio	n Bar Kit for the array, includes 2 identical Suspension Bars (for top/bottom), 4 pcs ¾-inch Clas		
optional / looodool looi		es (must use 2 Shackles for each Suspension Bar, located at end channels, not in the center).		

1. Using recommended DSP tuning, full-space (4π)

2. Continuous Pink Noise rating is IEC-shaped pink noise with 6 dB crest factor. Peak defined as 6 dB above Continuous Pink Noise Rating.

3. Continuous Average calculated from sensitivity and power handling, exclusive of power compression. Peak measured, unweighted SPL, bi-amp mode,

measured under full-space conditions at 1 meter using broadband pink noise with a 12 dB crest factor and specified preset.

4. 2.83 V RMS, full-space (4π)

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VLA-C125S

Dual 15" Subwoofer Array Module

System:	
Frequency Range (-10 dB) ¹ :	52 Hz - 210 Hz
Frequency Response (±3 dB) ¹ :	62 Hz - 123 Hz
System Power Rating ² :	1600 W Continuous Pink Noise (6400 W peak), 2 hrs
_,	800 W Continuous Pink Noise (3200W peak), 100 hrs
Maximum Input Voltage:	80 V Rms (2 hrs), 160 V peak
Maximum SPL (1m) ³ :	127 dB Cont. Ave (2 hrs), 133 dB Peak
Sensitivity ⁴ :	98 dB (52 Hz – 210 Hz, 2.83V)
Impedance:	4Ω, 3.0Ω min @ 195 Hz
Amplifiers:	
Recommended:	
	Crown DCi 4 2400N
Transducers:	
Low Frequency Driver:	2 x 2275H, 304 mm (15 in) diameter , each with two 76 mm (3 in) diameter voice coils, Neodymium Differential
1 ,	Drive®, Direct Cooled™
Physical:	
Enclosure Material:	Fiberglass shell, gelcoat finish, with 18 mm Birch plywood internal bracing.
Grille:	Powder coated 14 gauge hex-perforated steel with zinc under-coating, backed with acoustically transparent cloth
	and hydrophobic screen.
Inter-Enclosure Angles:	VLA-C125S to VLA-C125S: O° using VLA-C125S Bracket Plate (included with VLA-C125S)
	VLA-C265 below VLA-C125S Subwoofer (VLA-C265 cannot be connected above C125S): 0°, 5° using VLA-C125S
	Bracket Plate (included with VLA-C125S)
	VLA-C2100 below VLA-C125S Subwoofer (VLA-C2100 cannot be connected above C125S): 0°, 7.5° using VLA-C125S
	Bracket Plate (included with VLA-C125S)
Environmental:	IP-55 rating per IEC529 (dust protected and protected against jets of water).
Terminals:	CE-compliant covered barrier strip terminals. Barrier terminals accept up to 5.2 sq mm (10 AWG) wire or max width
	9mm (0.375 in) spade lugs. Touch-proof covers. Full set of terminals on back panel, plus optional-use inter-cabinet
	connection terminals located on top and bottom panels of cabinet.
Colors:	-GR: Gray (similar to Pantone 428C), -BK: Black
Dimensions (H x W x D):	508 x 848 x 634 mm (20.0 x 33.4 x 24.9 in)
Net Weight (ea):	56.7 kg (125 lbs)
Shipping Weight (ea):	62.6 kg (138 lbs)
Included Accessories:	2 x VLA-C125S Bracket Plates
	8 pcs. M10 x 35 mm stainless steel bolts (1.5mm pitch, 6 mm hex-drive) for attaching Bracket Plates
	2 pcs. Plastic Trim Cover Panels for Bracket Plates, each attaches via
	4 pcs (8 total) 3-32 x ½" trusshead, phillips-drive, stainless steel bolts.
Optional Accessories:	VLA-C-SB Suspension Bar Kit For top & bottom of the array, includes 2 identical Suspension Bars (for top/bottom),
	4 pcs ¾-inch Class 2 Screw Pin Shackles (must use 2 Shackles for each Suspension Bar, located at end channels, not
	in the center).
	VLA-C125S-ACC kit – For adding terminal cup to front to allow easy and neat cardioid subwoofer wiring.
	VLA-C-ACC kit – For adding front baffle terminals for cardioid subwoofer configuration.

1. Using recommended DSP tuning, full-space (4π)

2. Continuous Pink Noise rating is IEC-shaped pink noise with 6 dB crest factor. Peak defined as 6 dB above Continuous Pink Noise Rating.

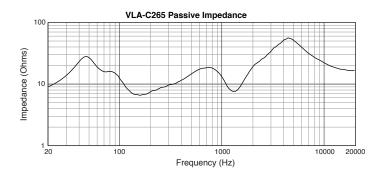
3. Continuous Average calculated from sensitivity and power handling, exclusive of power compression. Peak measured, unweighted SPL, bi-amp mode,

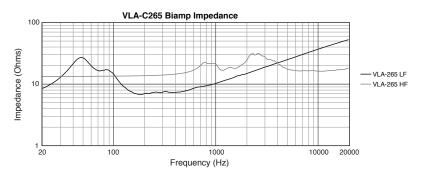
measured under full-space conditions at 1 meter using broadband pink noise with a 12 dB crest factor and specified preset.

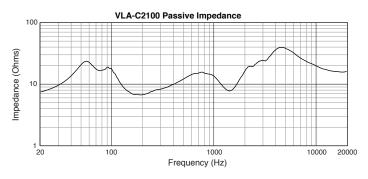
4. 2.83 V RMS, full-space (4π)

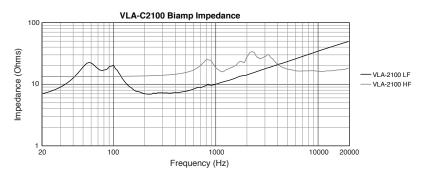
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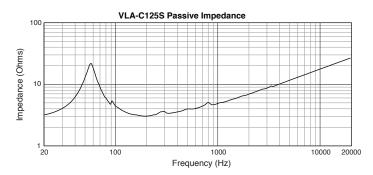
12.1 IMPEDANCE CURVES











13 - CONTACT INFORMATION

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