JBL PROFESSIONAL

SRX900

POWERED SOLUTIONS

SRX900

- New range of entry-level portable speakers
- Includes line array and subwoofer products
- Composite and wooden enclosures
- Three-point rigging
- Built-in amplification and DSP
- Next-gen software support
- Complete solution with a full-range of accessories
- Engineered for best-in-class performance

SRX900

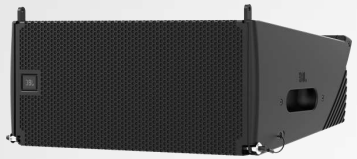
Why use the SRX name?

- SRX is one of the strongest JBL ‘brands’
- It has always been the entry into the PRO product range
- Requires no explanation for market and category positioning
- Eliminates any positioning confusion with VTX products
- Makes it clear that this is not a VRX replacement

All SRX products developed on the same principles:

- Excellent value for money
- Best in class performance

SRX900



SRX906LA

- Dual 6.5-inch line array
- 2-way active
- Powered
- Coverage: 120° x 12°
- LF: (2) 6.5 in woofers
- HF: (1) 3 in compression driver
- 63 Hz – 17 kHz
- 134 dB SPLmax
- 880W
- 16.8 kg (37 lbs)

SRX910LA

- Dual 10-inch line array
- 2-way active
- Powered
- Coverage: 105° x 12°
- LF: (2) 10 in woofers
- HF: (1) 3 in compression driver
- 53 Hz – 19 kHz
- 135 dB SPLmax
- 880W
- 26.7 kg (59 lbs)

SRX918S

- Single 18-inch
- Subwoofer
- Powered
- Coverage: omni or cardioid
- SUB: (1) 18 in woofers
- 35 Hz – 90 Hz
- 134 dB SPLmax
- 2500W
- 44.5 kg (98 lbs)

SRX928S

- Dual 18-inch
- Subwoofer
- Powered
- Coverage: omni or cardioid
- SUB: (2) 18 in woofers
- 31 Hz – 100 Hz
- 140 dB SPLmax
- 2500W
- 70.3 kg (155 lbs)

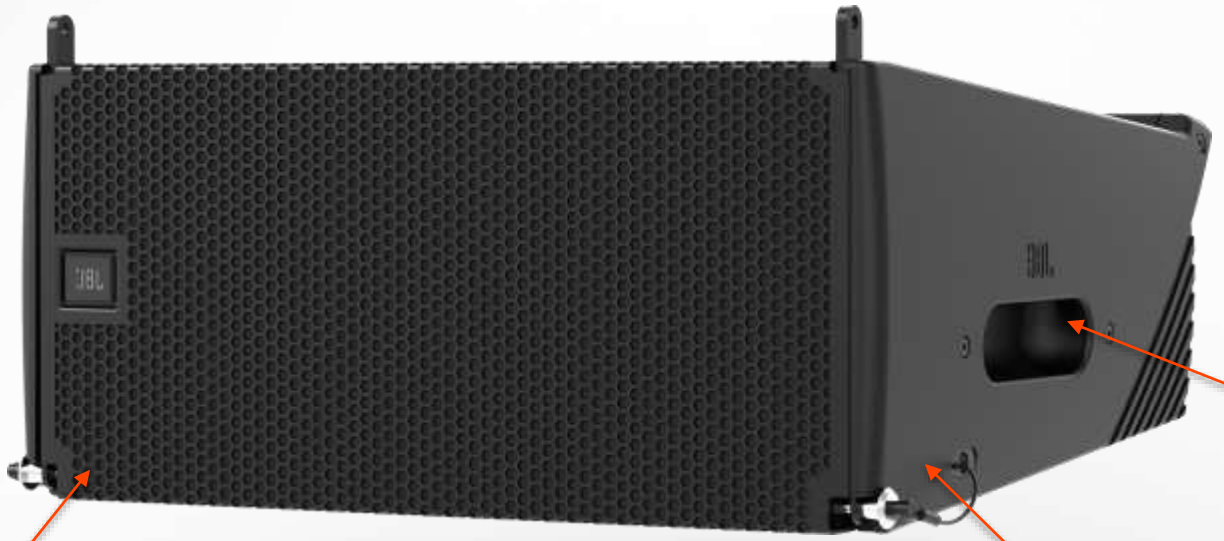
SRX900

- Scalable configurations
- Pole mounted, ground stacked, suspended

PRODUCT OVERVIEW

SRX900

Product Overview



SRX900

Product Overview

SRX900

Product Overview

AMPLIFIER

- Class-D design
- Convection cooling
- Real-time transducer monitoring
- Low power modes
- Auto standby functionality
- IP54 rated (with optional Rain Cover)
- Extremely power efficient

SRX900

Product Overview

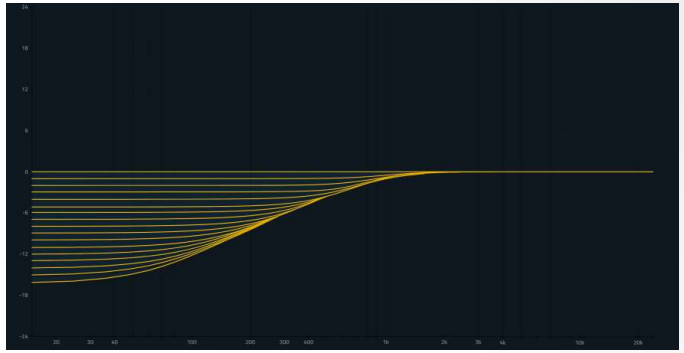
LCD Functionality

- Gain / delay
- Speaker presets
- Network settings
- Basic DSP options
- Factory reset

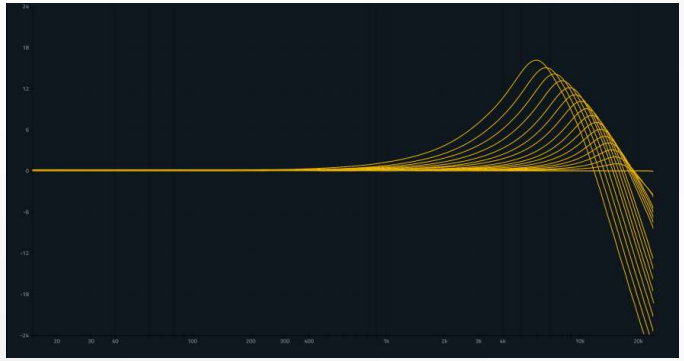
Digital Signal Processing

- High-end AD/DA converters
- High dynamic range (very low noise floor)
- 2000 ms of delay
- (30) User adjustable IIR filters
- LevelMAX limiters for system protection
- Array Size Compensation filter
- FIR Based distance compensation filters

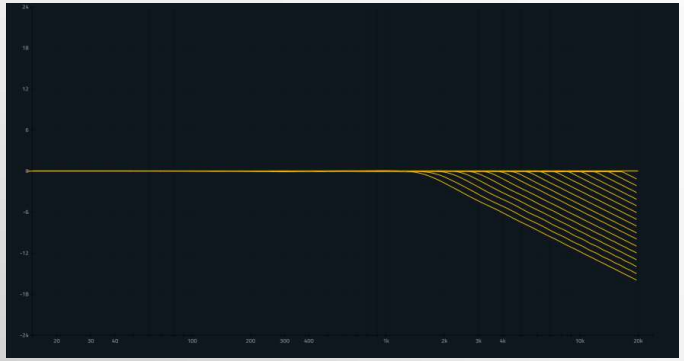
Array Size Compensation Filter



Throw Distance Compensation (FIR)



Proximity Correction (FIR)

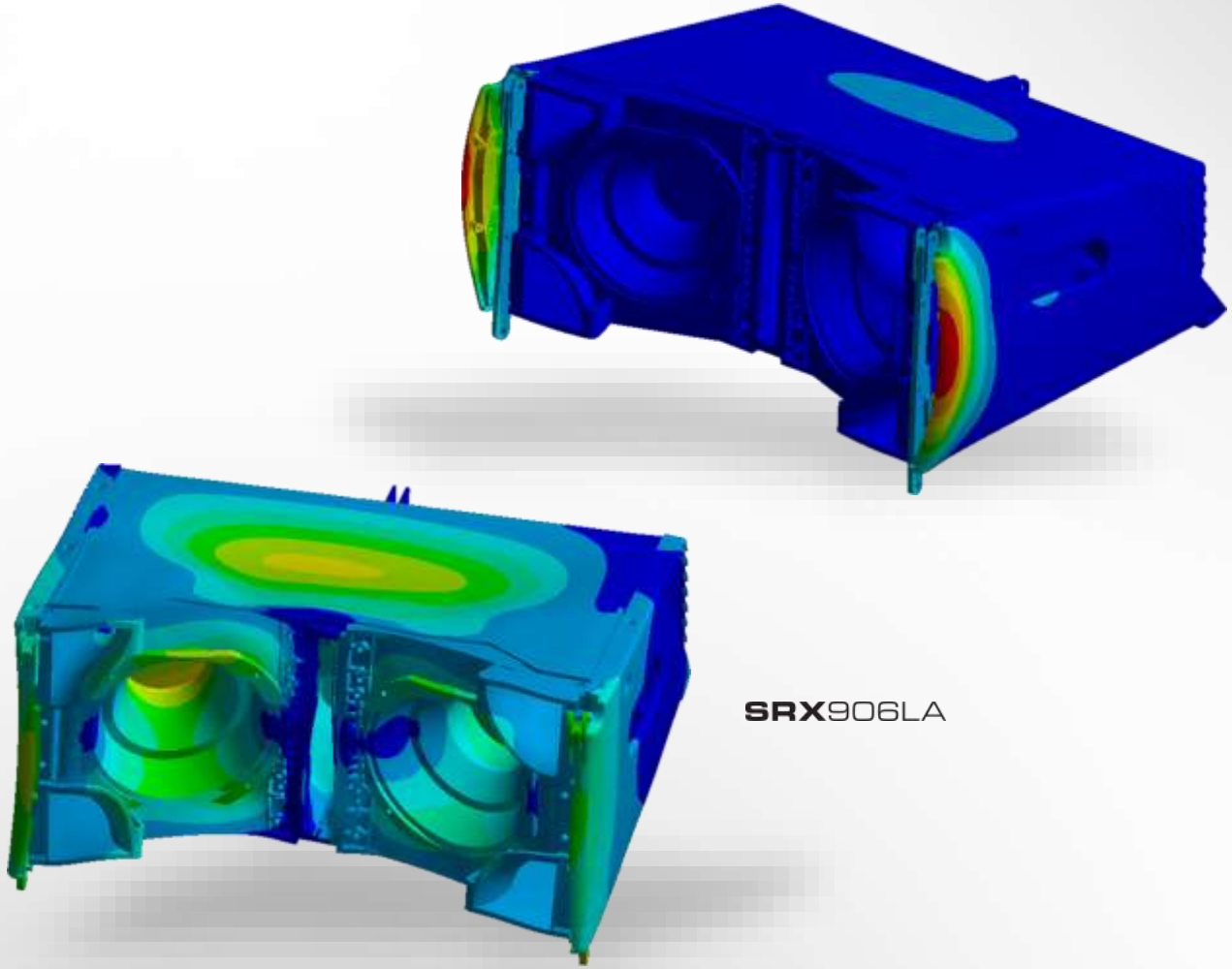



INSIDE THE INNOVATION

SRX900

Composite Enclosures

- Light-weight
- Durable
- Cost-effective
- FEA optimized
- Designed for performance

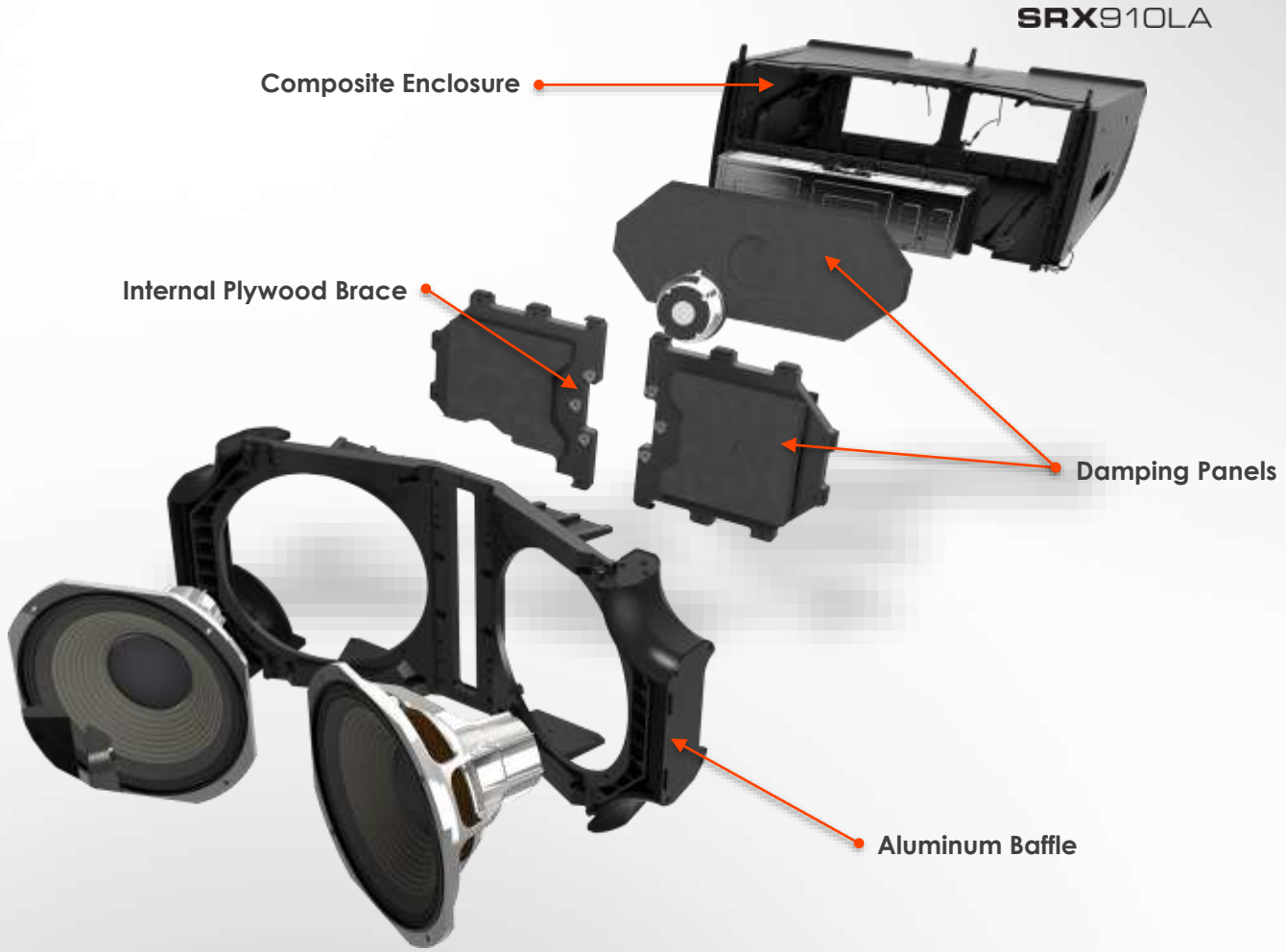


SRX906LA

SRX900

Enclosure Composition

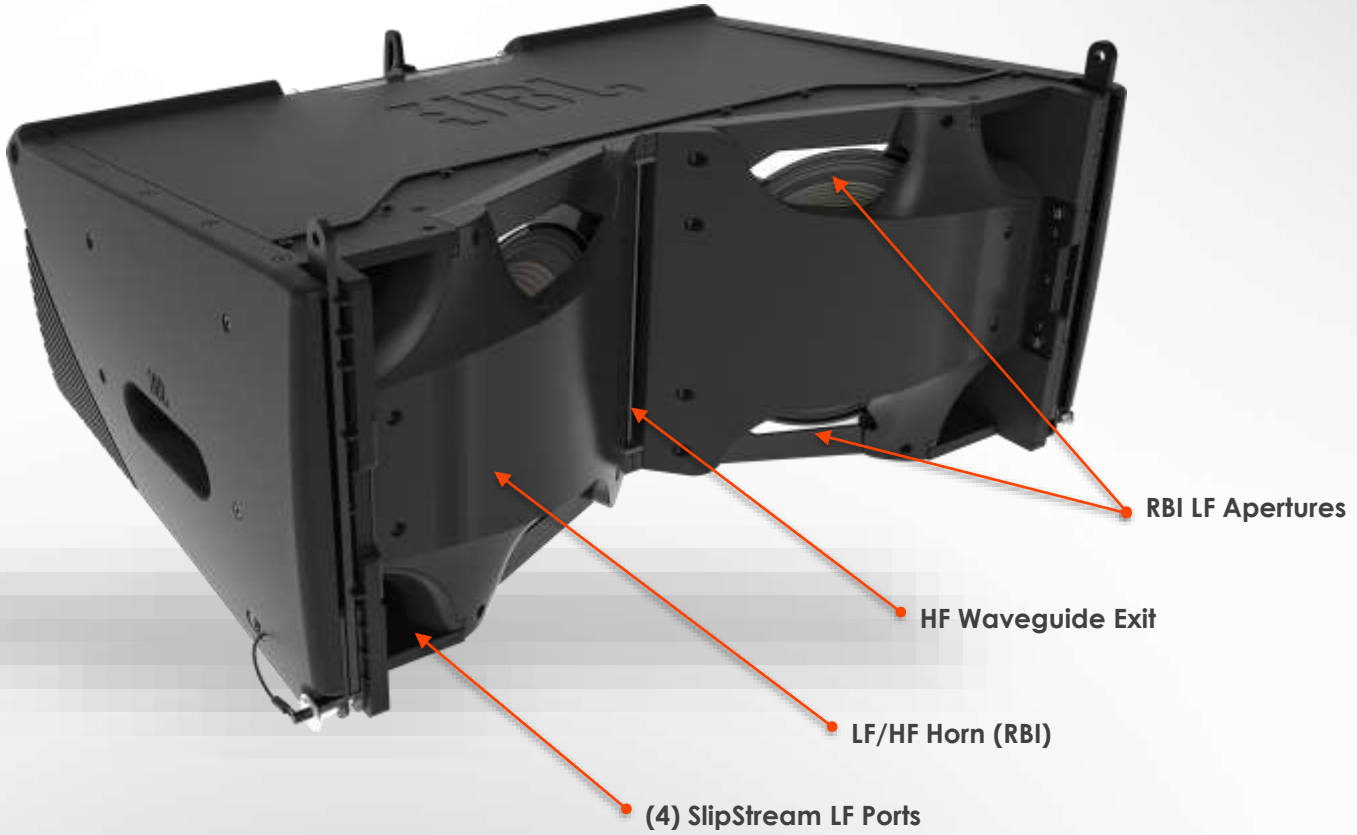
- Internal stiffeners control enclosure flex (SRX906LA)
- Internal plywood braces add rigidity (SRX910LA)
- Front aluminum baffle adds strength (SRX910LA)
- Multiple acoustic sound damping panels



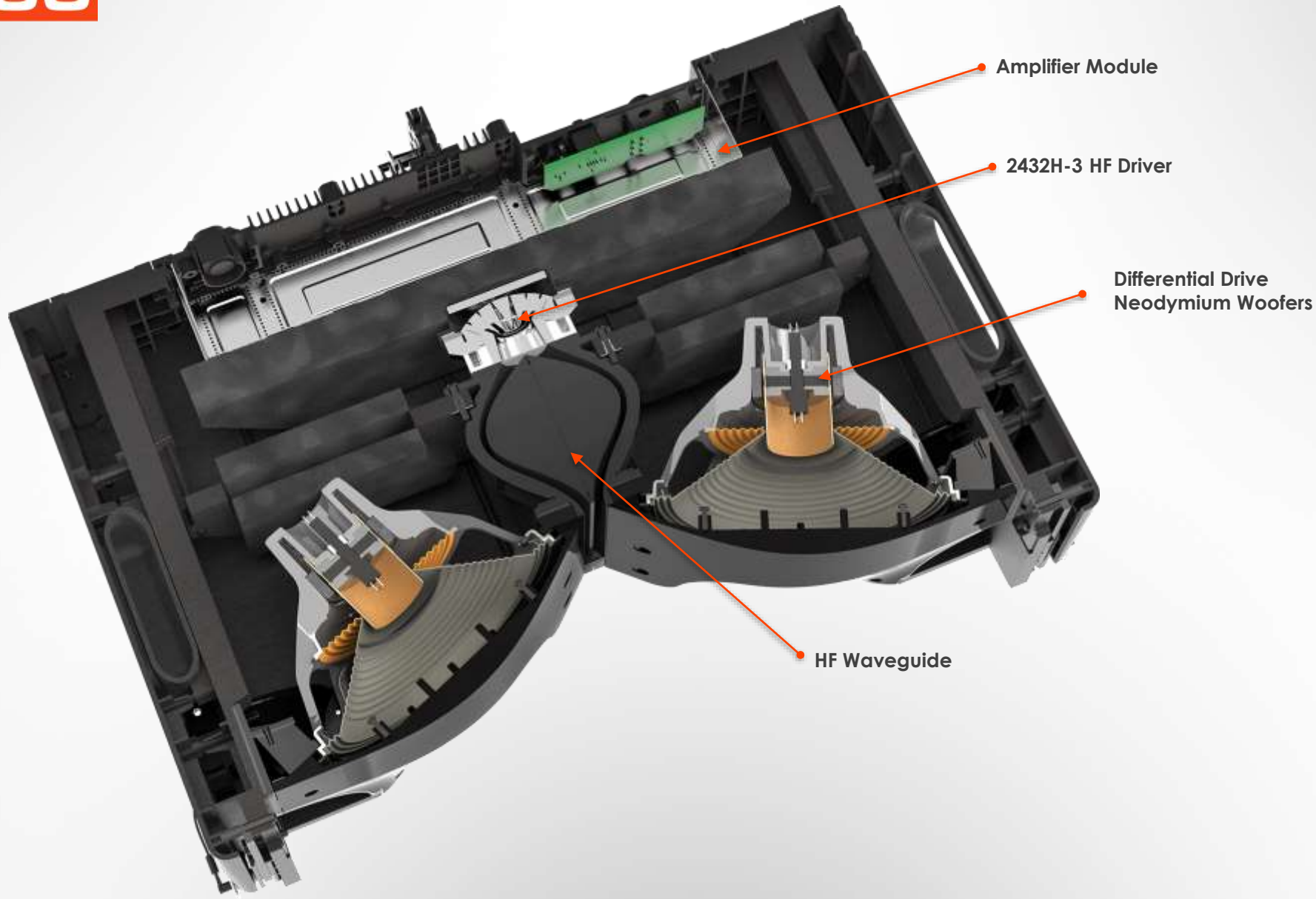
SRX900

Acoustic Design

- 2-way, active
- Symmetric transducer layout
- (2) LF woofers + (1) HF driver
- (4) Large SlipStream LF ports
- Radiation Boundary Integrator (RBI)



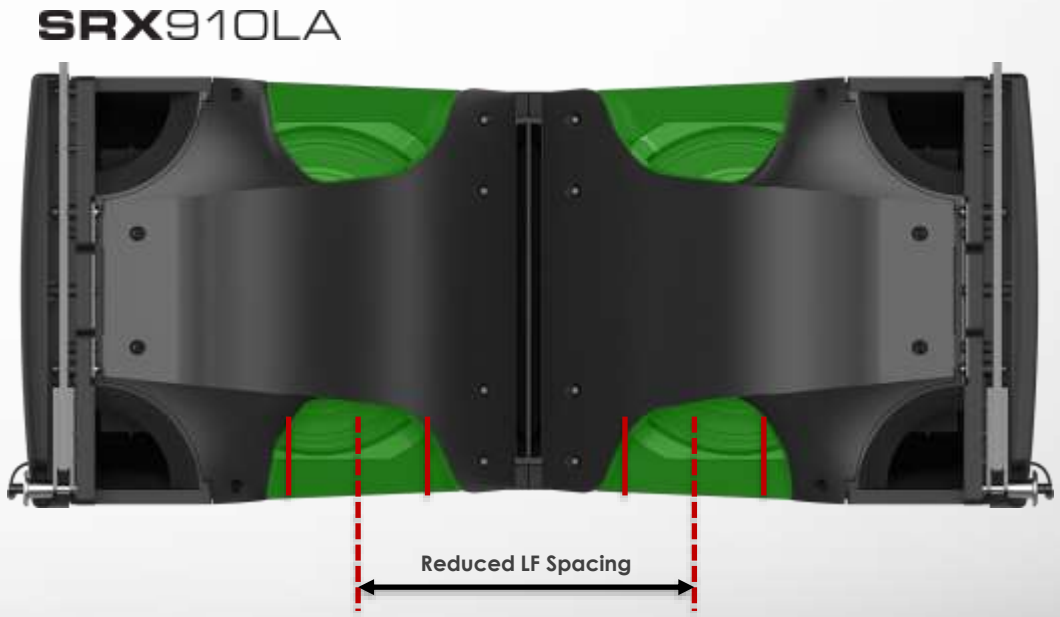
SRX900

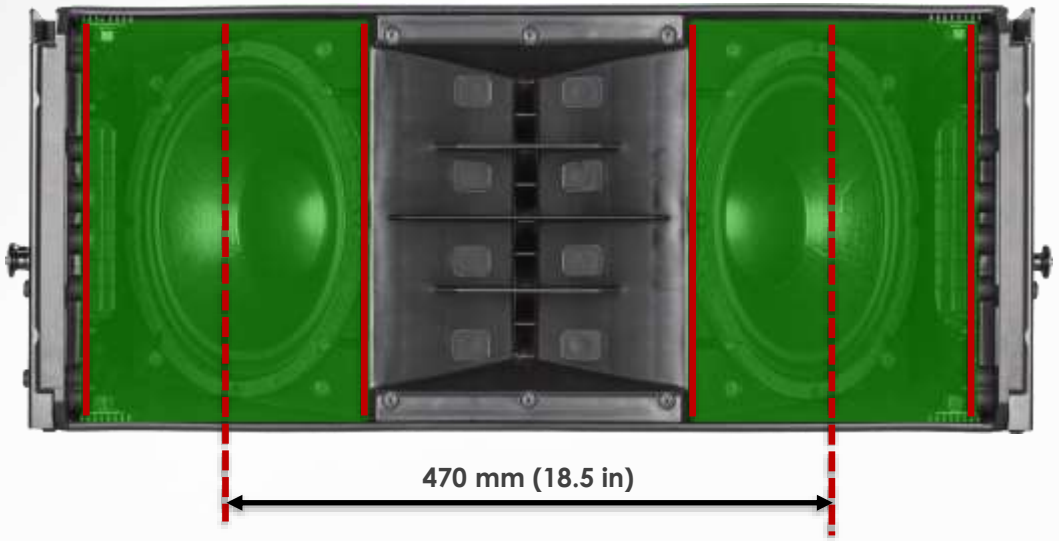

Amplifier Module
2432H-3 HF Driver
Differential Drive
Neodymium Woofers
HF Waveguide

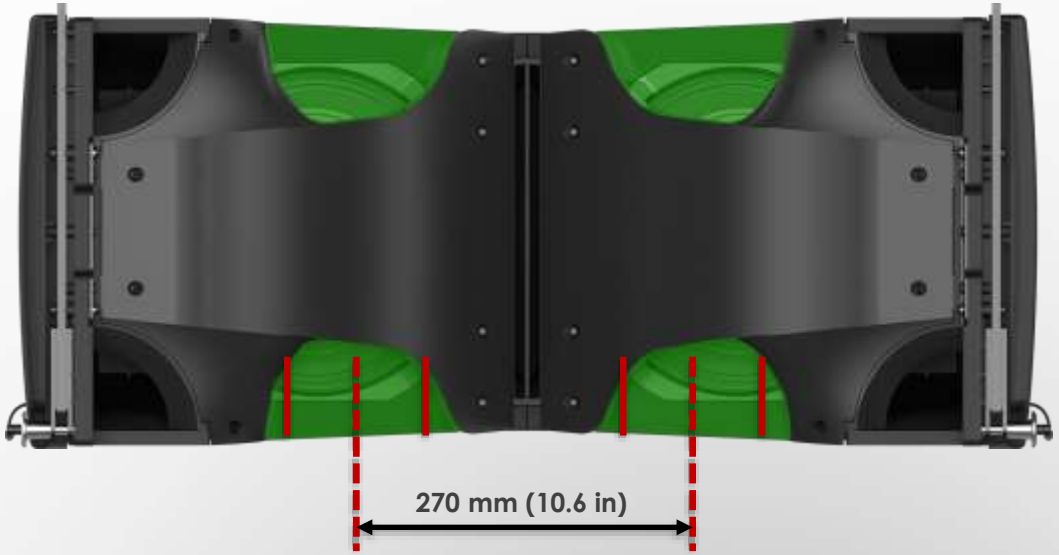
SRX900

RBI Technology

- Combines LF and HF drivers onto a single horn
- Improves directivity by controlling woofer spacing
- Reduces overall cabinet size
- Allows for a larger HF horn







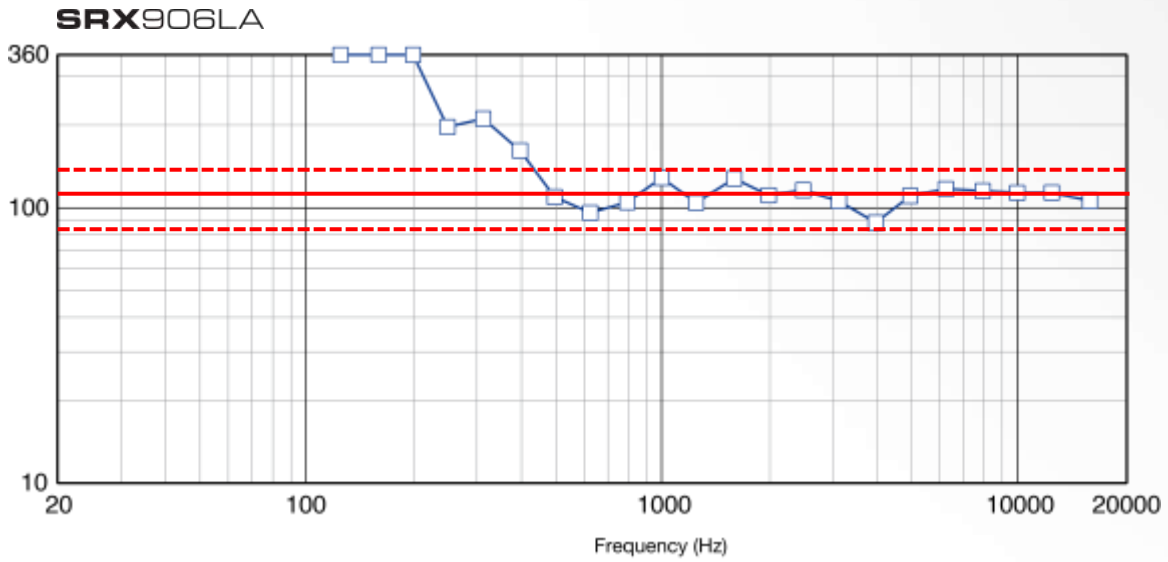
SRX910LA

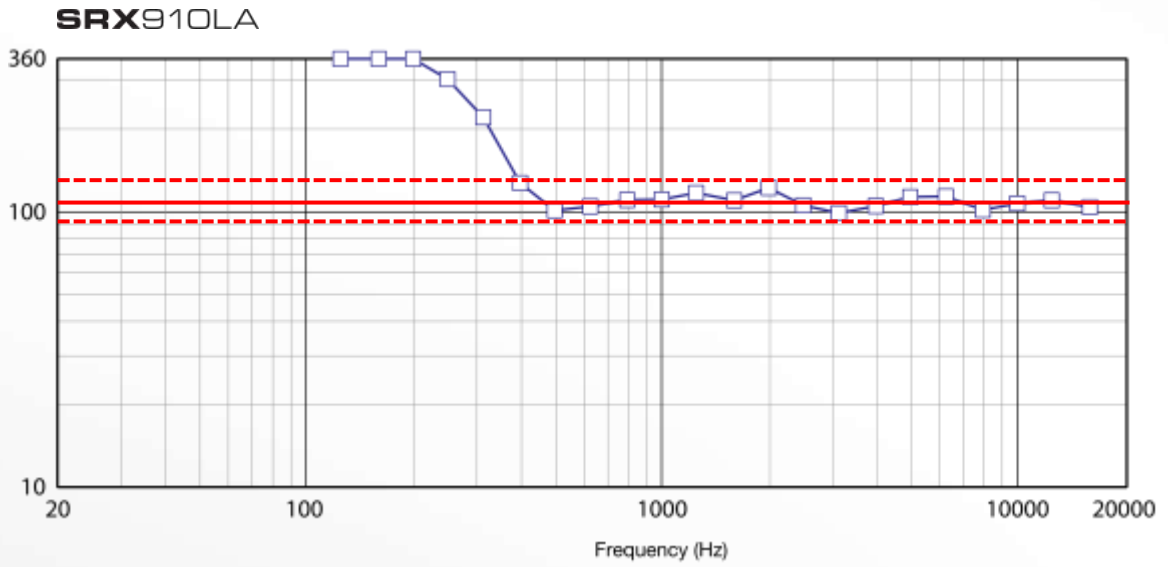
SRX900

Acoustic Performance

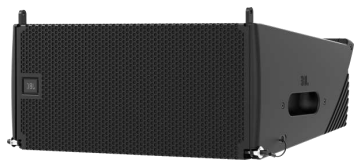
- Excellent horizontal directivity
- Control down to 450 Hz
- Best-in-class SPL
- Superior dynamic range
- Extended frequency response

Beamwidth

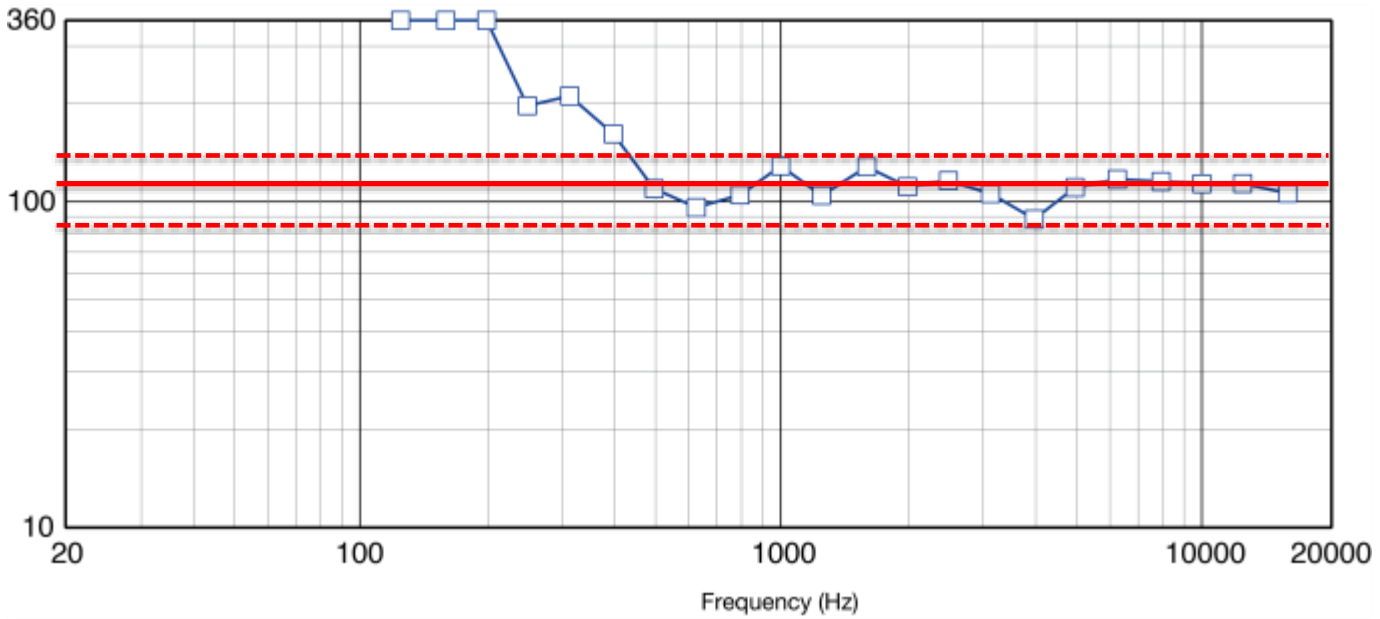


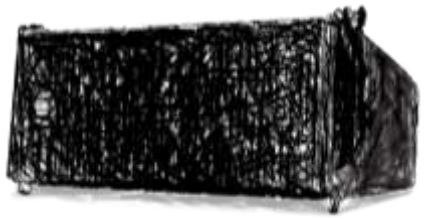


SRX906LA

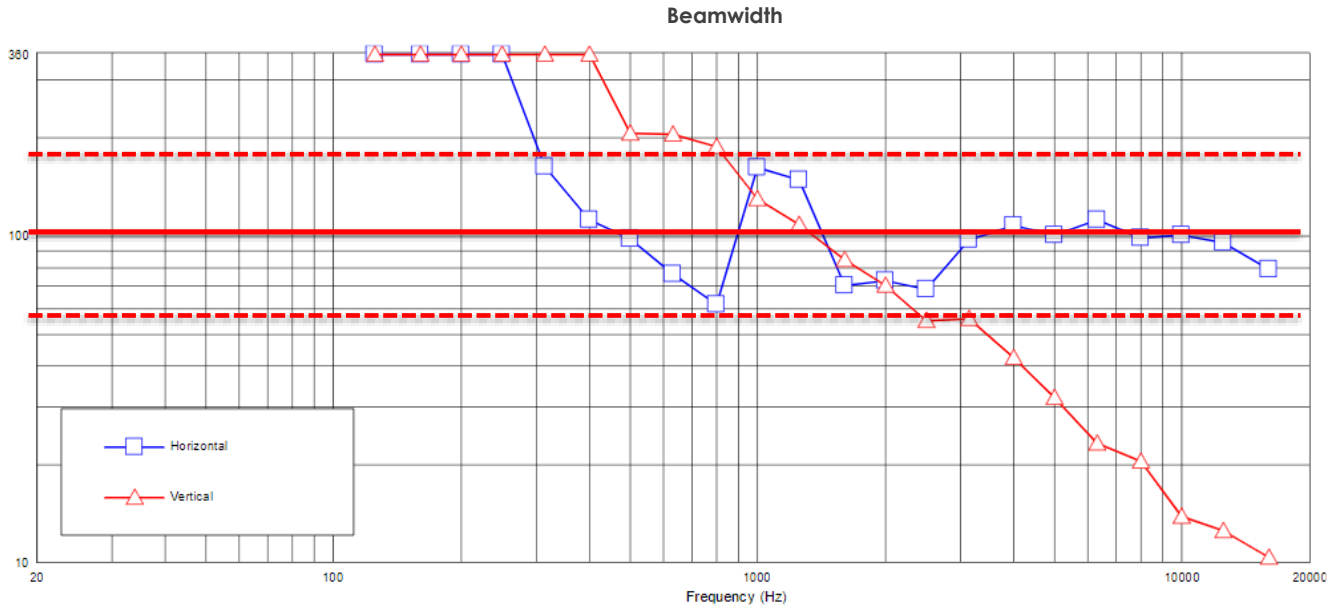


Dual 6.5-inch Line Array | Powered | 2-way



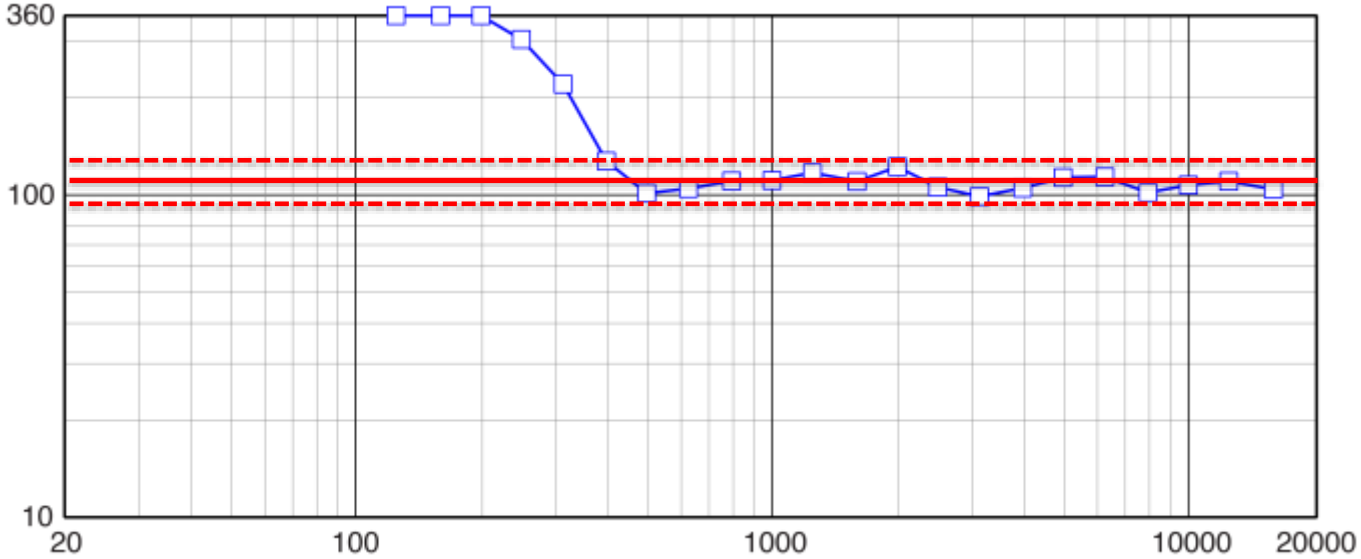


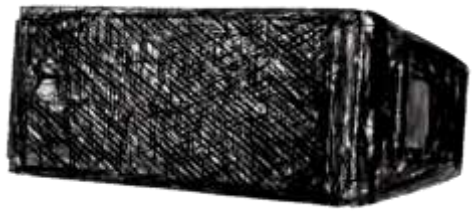
Dual 6.5-inch Line Array | Powered | 2-way



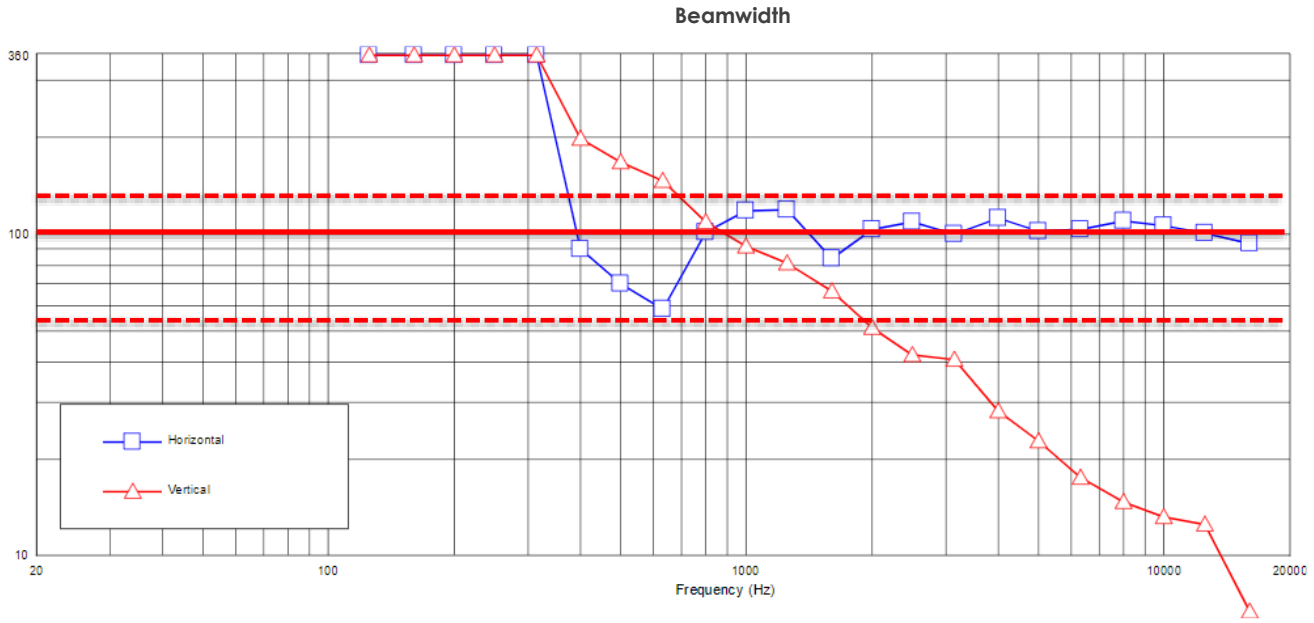
SRX910LA

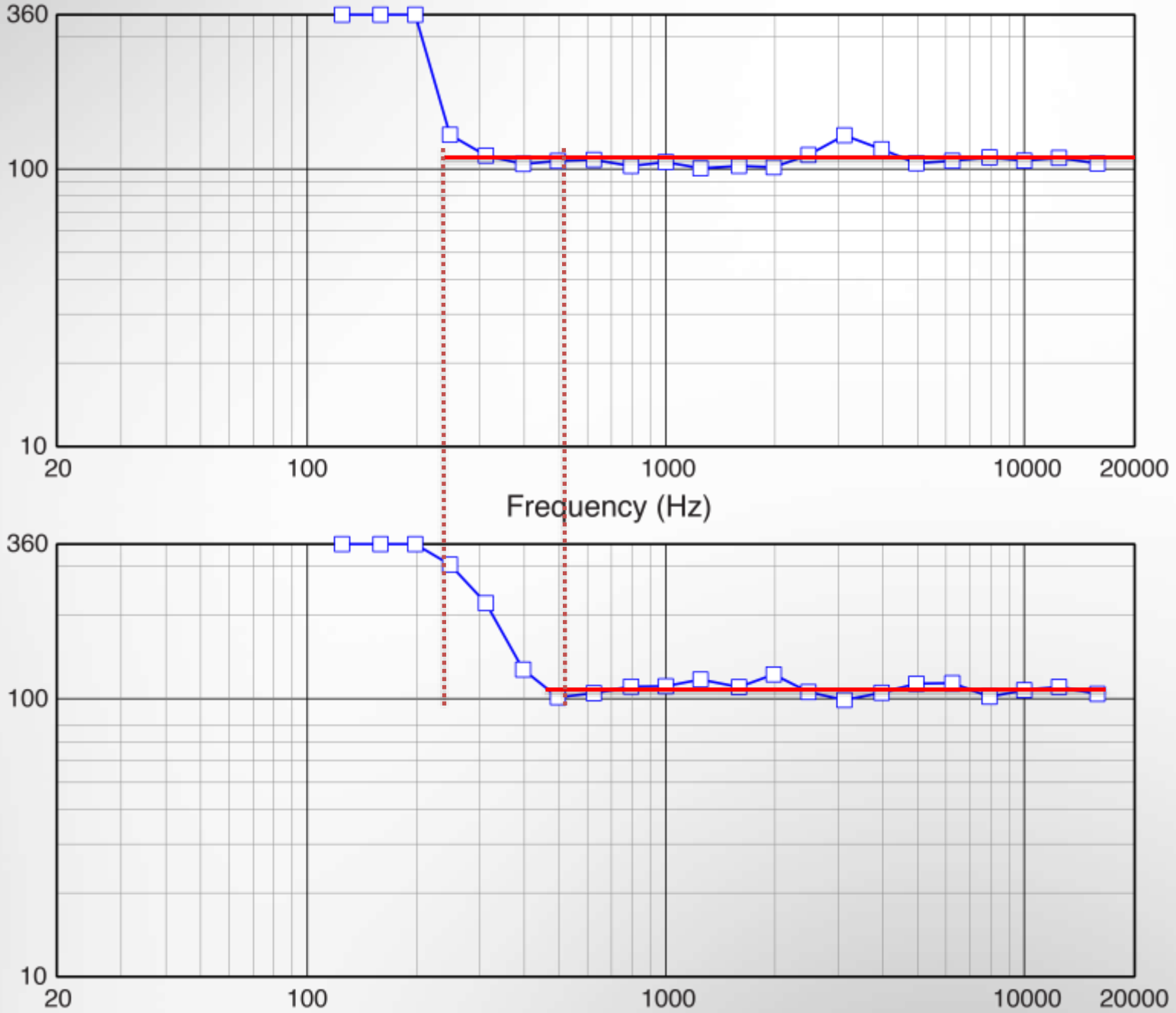
Dual 10-inch Line Array | Powered | 2-way





Dual 10-inch Line Array | Powered | 2-way





VTX A8

Dual 8-inch 3-way

140dB max SPL

Control down to 230 Hz

Ultra-low distortion

SRX910LA

Dual 10-inch Line Array | Powered | 2-way

135dB max SPL

Control down to 500 Hz

Class-leading low distortion

SRX900

JBL PROFESSIONAL

Subwoofers

- Two available sizes, same acoustic design
- 18 mm plywood
- Differential Drive 18-inch woofers
- Support for cardioid configurations
- M20 plate for Ground Stacked arrays
- IP54 rated (with optional Rain Cover)

SRX900

Subwoofer Amplifier

- Similar amplifier design as 900LA
- Same connectivity
- Same DSP
- Higher power than 900LA
- Larger heat-sink design for additional cooling

SRX900

Subwoofers

- Large curved edge port designs
- Internally reinforced M20 bracket

Woofer

- New 18-inch woofer 2279-1
- Differential Drive design
- Dual 3-inch voice-coils
- Ferrite magnet

SRX800

- Active cooling with “open” amplifier design
- Single Ethernet port
- Single IEC connector for power
- Indoor use only

SRX900

- Passive cooling with sealed electronics
- Dual etherCON ports for networking
- Dual Neutrik TRUE1 TOP powerCON connectors
- Design for outdoor use with SRX900 RC Rain Cover
- M20 mount with Internal steel plate for ground stacking
- Side feet for on-end configurations
- Hcontrol connectivity / Full DHCP support
- Double the DSP power over SRX800
- Improved port design
- NEW 2279-1 18 in woofers for improved performance
- Improved industrial design
- Improved packaging and accessories
- Performance and LAC software support
- Acoustically compatible with SRX900 and VTX products

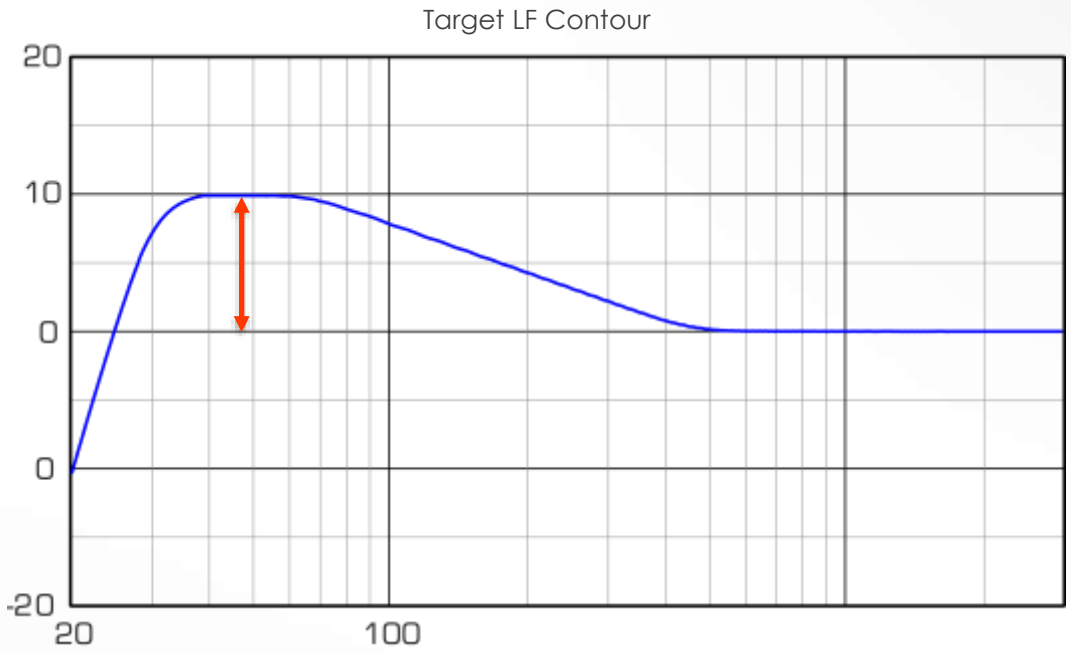
SRX900

Subwoofer Ratios (how many subs do I need?)

- Depends on the application
- Different styles of music require different ratios
- Budget, space, power

Target:

- Create 6-10 dB LF contour
- Subwoofers and tops limit at the same time
- Practical system usage



SRX900

SRX906LA

2

SRX918S

1

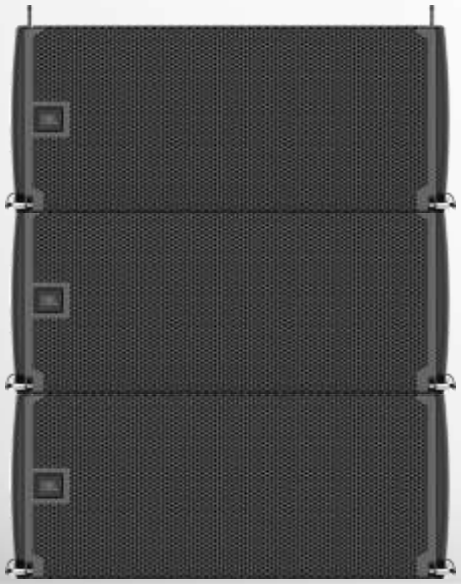
SRX906LA

4

SRX928S

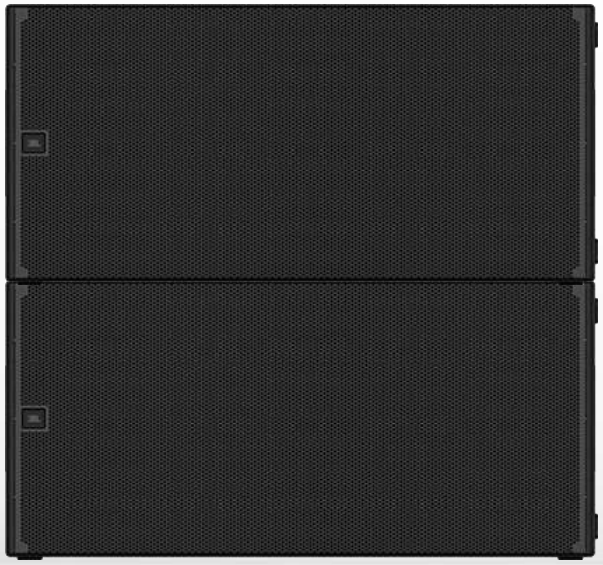
1

SRX900



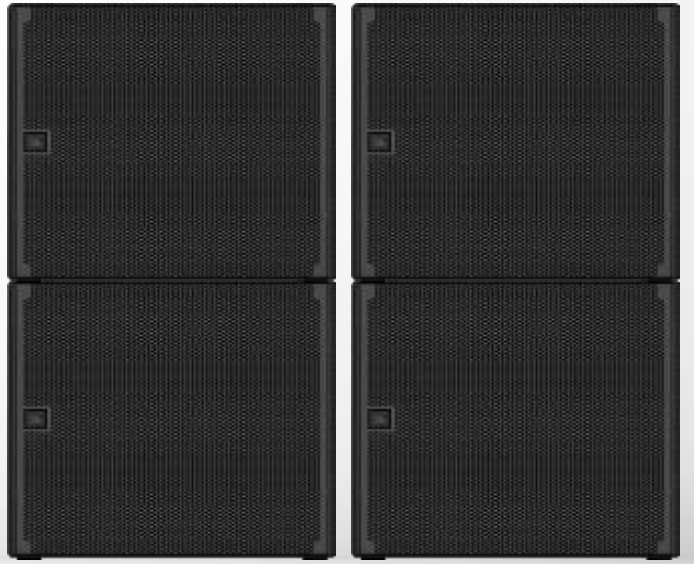
SRX910LA

3



SRX928S

2



SRX918S

4

RIGGING & ACCESSORIES

SRX900

Rigging System

Rigging System

- Unique three-point rigging system
- Support for up to 16 cabinets*
- Full resolution with 0.5 and 1-degree steps
- Same setup steps as VTX Series
- Angles can be set on the ground

Angle Options: 0.5, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

SRX900

Accessories Overview

Array Frames

Base Plates

Pull Back

Rain Cover

Transport Carts/Cases

Covers

Caster Kits

Pole Mount

SRX900

Array Frames

- Light-weight T-Style frame
- Two-part design
- Support for up to 16 cabinets
- Laser brackets included

Spreader Bar

Extension Bar

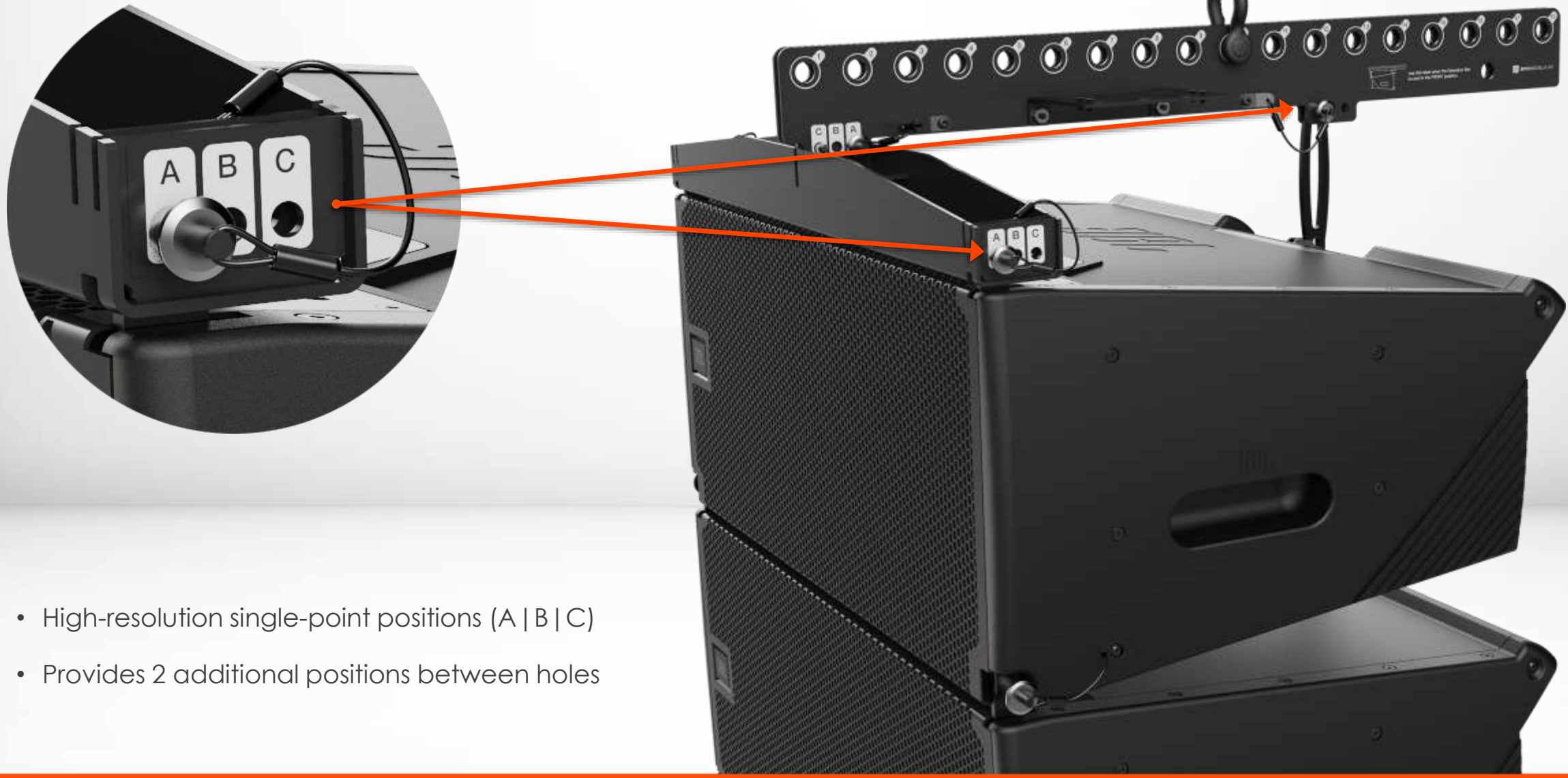
SRX900

SINGLE-POINT

REVERSED

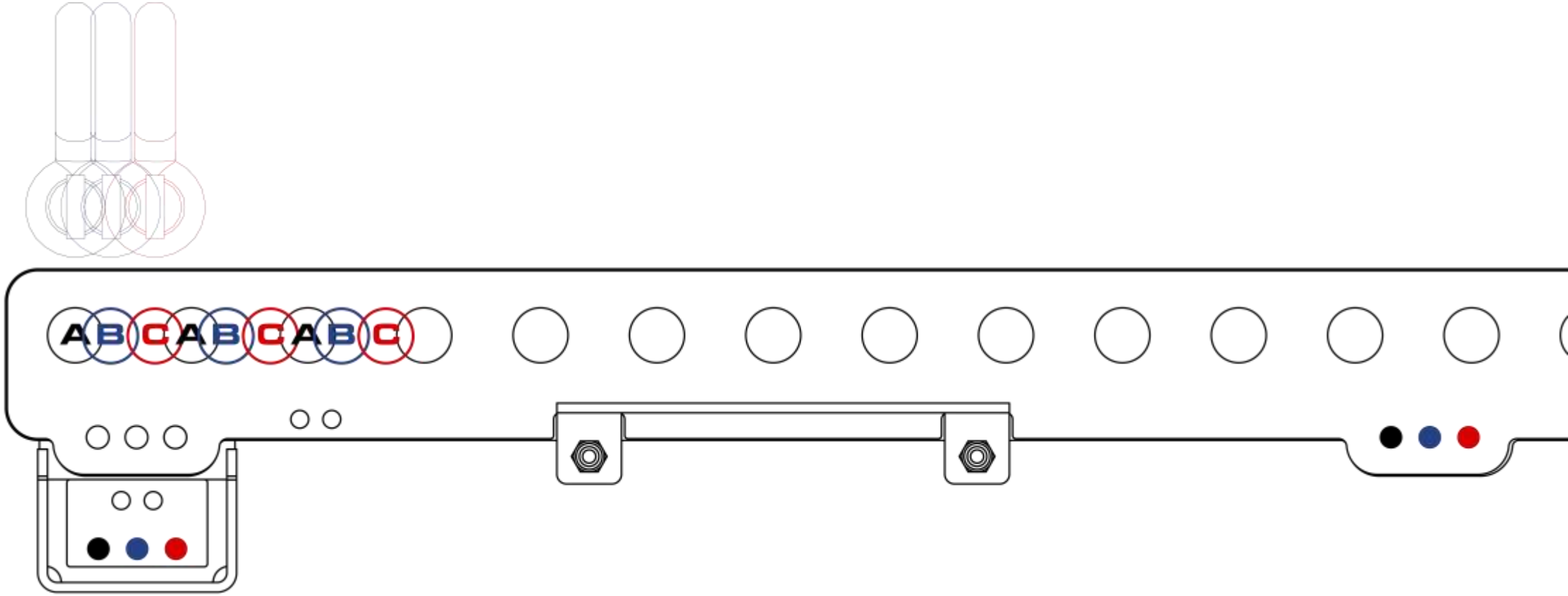
FRONT-BACK

SRX900



- High-resolution single-point positions (A | B | C)
- Provides 2 additional positions between holes

SRX900



2 - MECHANICAL LIMITS

The SRX900 Series products and accessories comply with the 2006/42/EC Machinery Directive and have been designed following the guidelines of DGUV regulation 17 (BGV-C1) for a minimum safety factor of 4:1. Minimum safety factor requirements for suspended arrays are often set by local regulations. Use JBL Line Array Calculator 3 software to check mechanical limits and ensure compliance with local regulations. ANSI Standard E1.8 (Entertainment Technology Loudspeaker Enclosures Intended for Overhead Suspension), Section 5.3.4, specifies a minimum safety factor of 5:1. If compliance with the ANSI standard is needed, make sure that the array design produces a minimum safety factor of 5:1.

2.1 SUSPENDED ARRAY

ACCESSORY	NOTES	SAFE LIMIT	MAXIMUM LIMIT
SRX906LA AF	SRX906LA Array with Array Frame	(14)	(16)
SRX900LA PB	SRX900LA Pull Back accessory used with SRX906LA	(9)	(16)
SRX910LA AF	SRX910LA Array with Array Frame	(13)	(16)
SRX900LA PB	SRX900LA Pull Back accessory used with SRX910LA	(9)	(16)

2.2 GROUND-STACKED ARRAYS

ACCESSORY	NOTES	SAFE LIMIT	MAXIMUM LIMIT
SRX906LA BP	Base Plate for ground stacking SRX906LA systems	(2)	(6)
SRX910LA BP	Base Plate for ground stacking SRX910LA systems	(2)	(4)

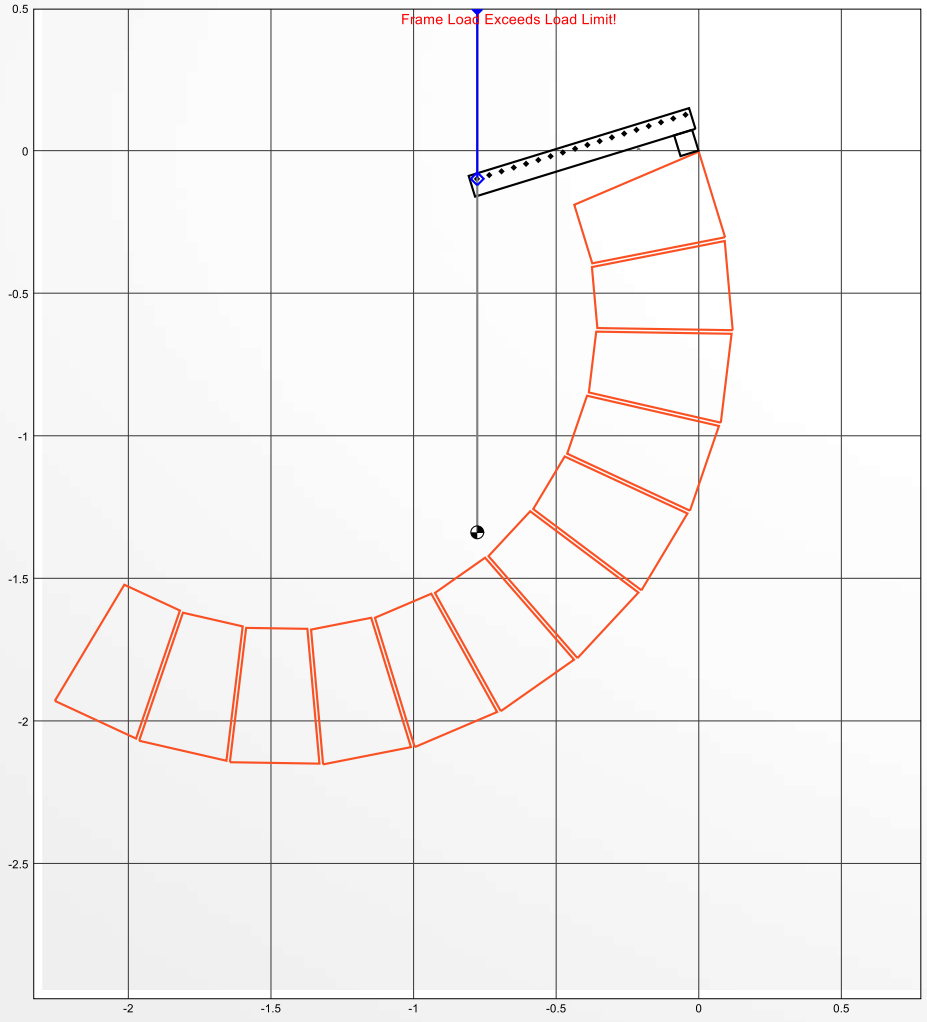
Safe Limit: The safe limit provides the number of cabinets that can be used in an array while maintaining a safety factor of 4:1 or higher. The safety factor of an array is determined by the number of cabinets, the array shape, and the overall array angle. An array constructed within the safe limit will always yield a safety factor greater than 4:1 regardless of array parameters and conditions. Ground-stacked arrays within the safe limit are stable under normal conditions. Designs exceeding the safe limit and up to the maximum limit, are possible, but the Line Array Calculator 3™ software should be used to check mechanical safety for the given configuration.

Maximum Limit: Arrays larger than the maximum limit are not allowable under any conditions.

SRX900

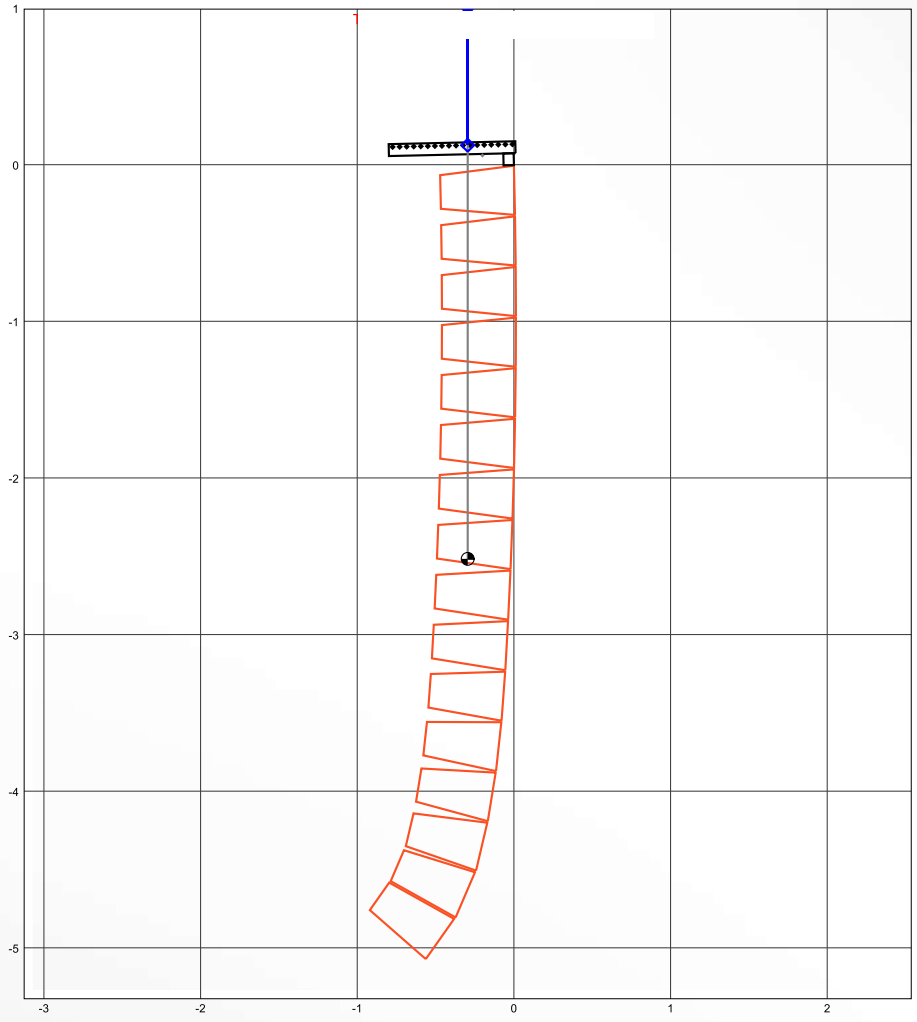
Safe Limit

(12) SRX906LA

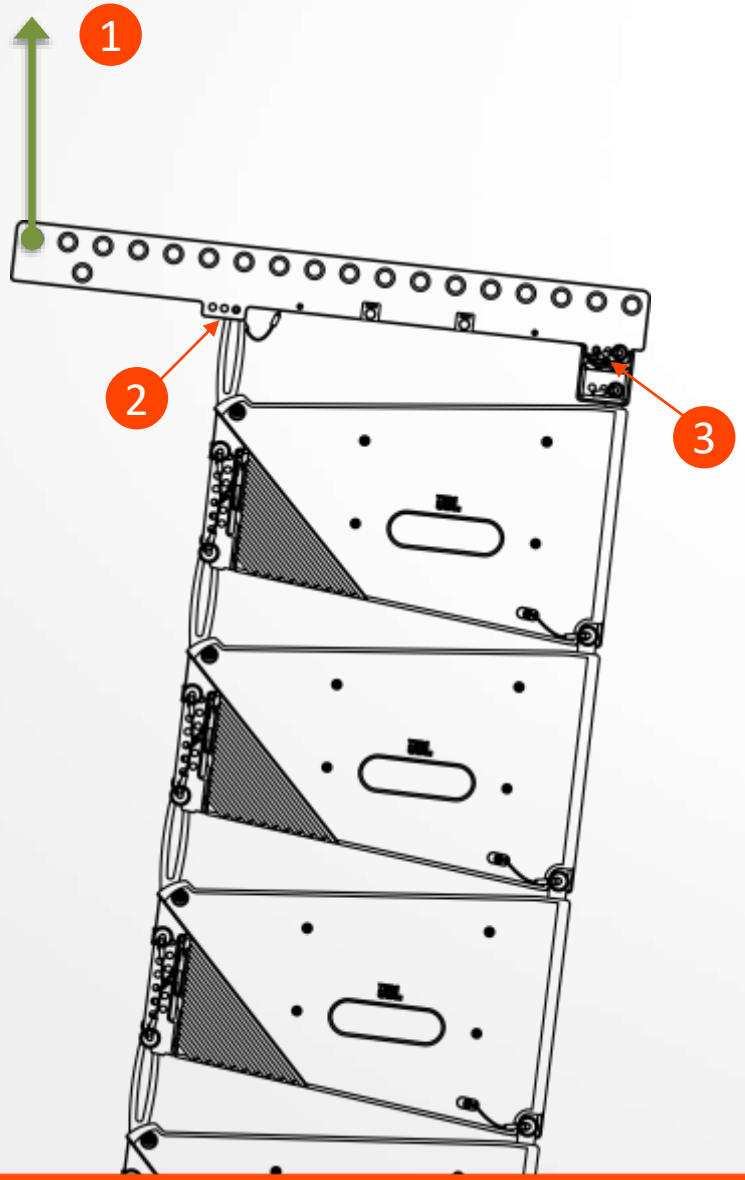


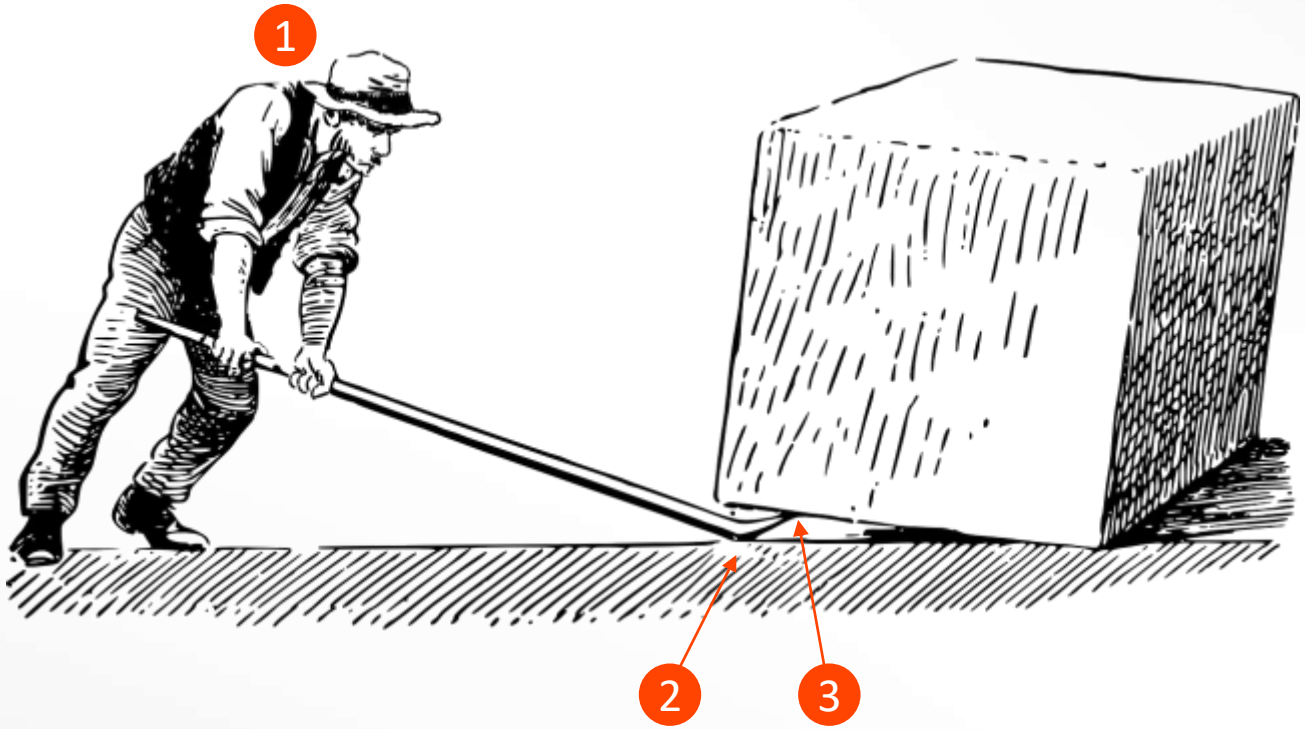
Maximum Limit

(16) SRX906LA



SRX900





SRX900LA PB

- Pull-back accessory
- Achieves down-angles not otherwise possible with AF alone
- Connects to the last speaker of an array
- Compatible with SRX906LA and SRX910LA
- Lightweight, inexpensive design

SRX900

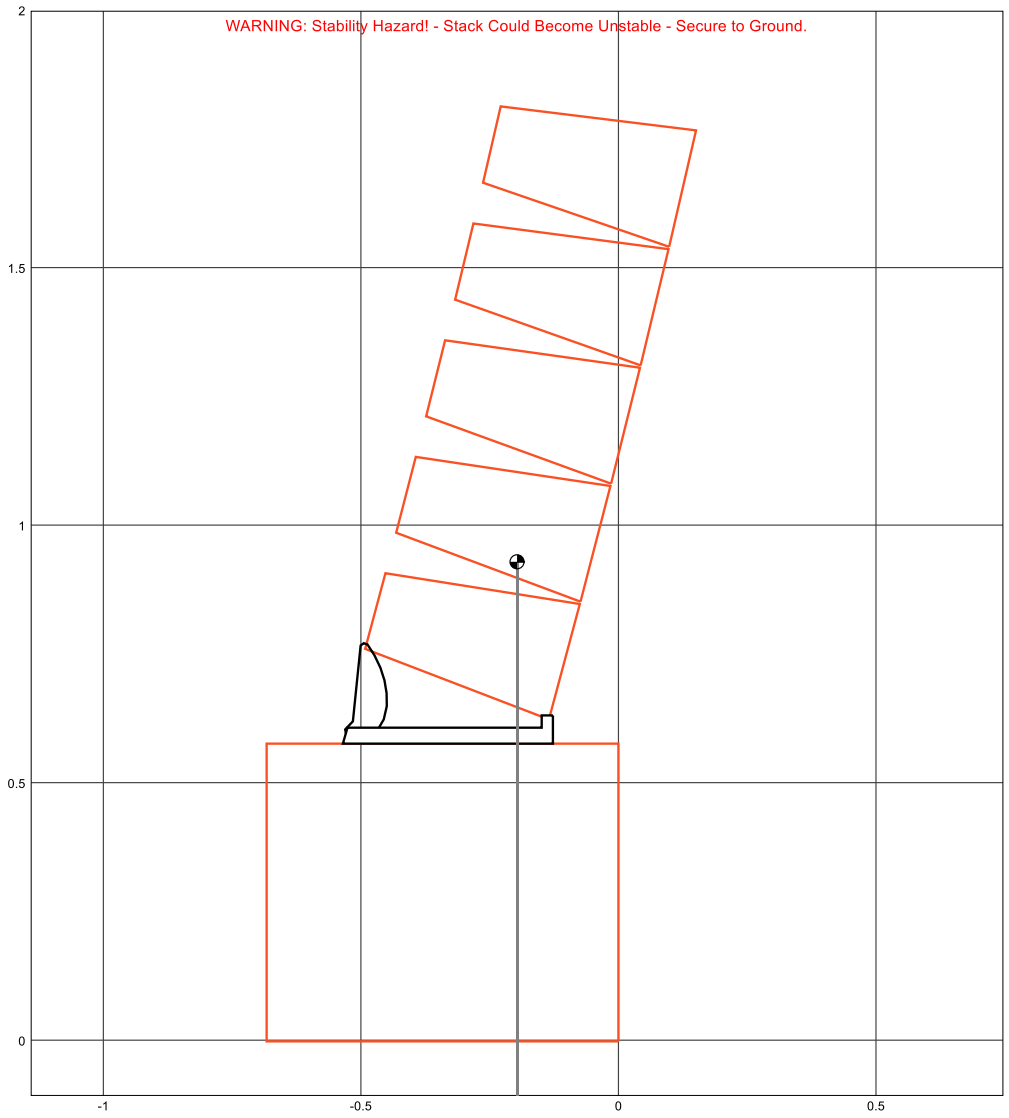
- Universal ground stack adapters for SRX900LA
- Connect to the subwoofer's M20 pole brackets
- Support for 4 – 6 cabinets depending on model
- Range: -15° to +5°
- Compatible with the VTX PM (SRX906LA BP)

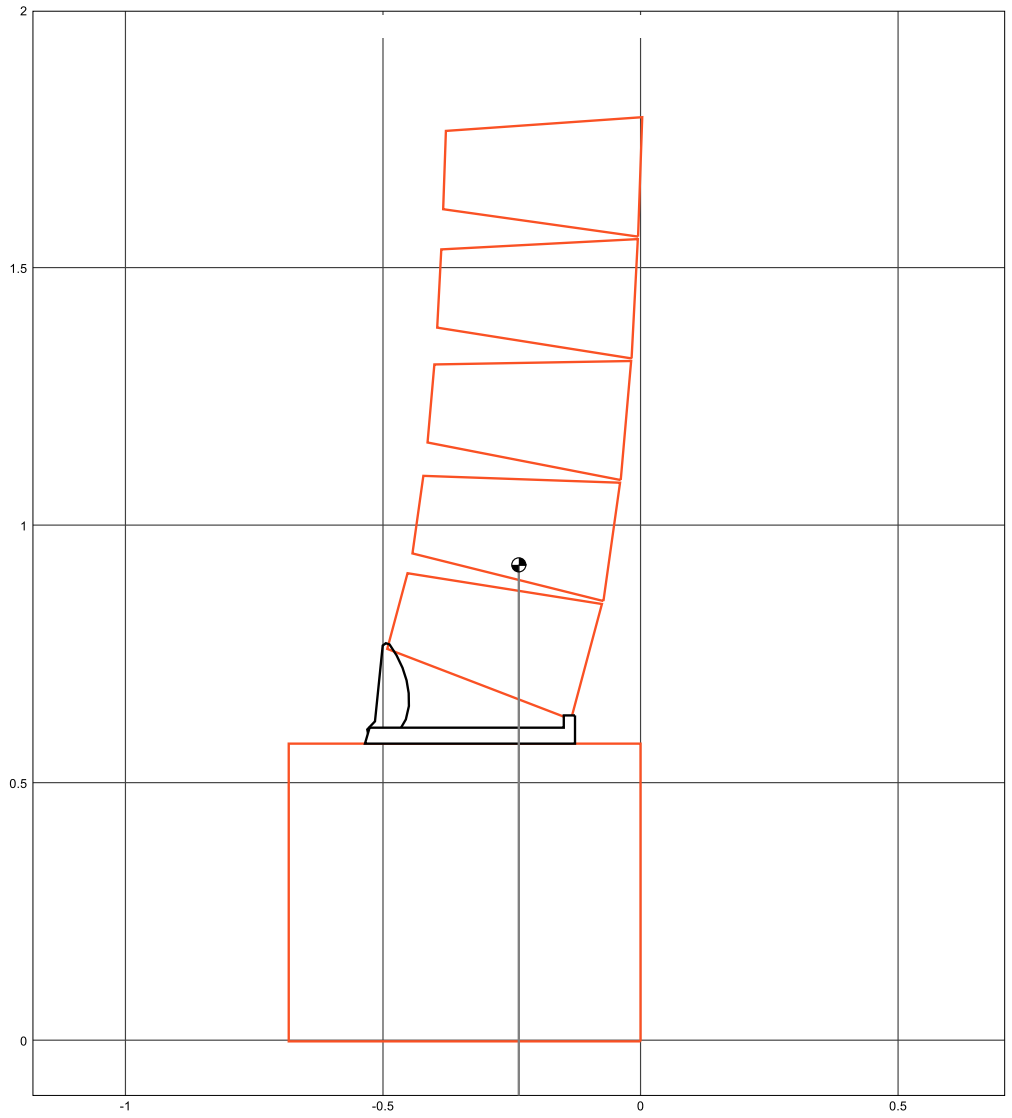
SRX900

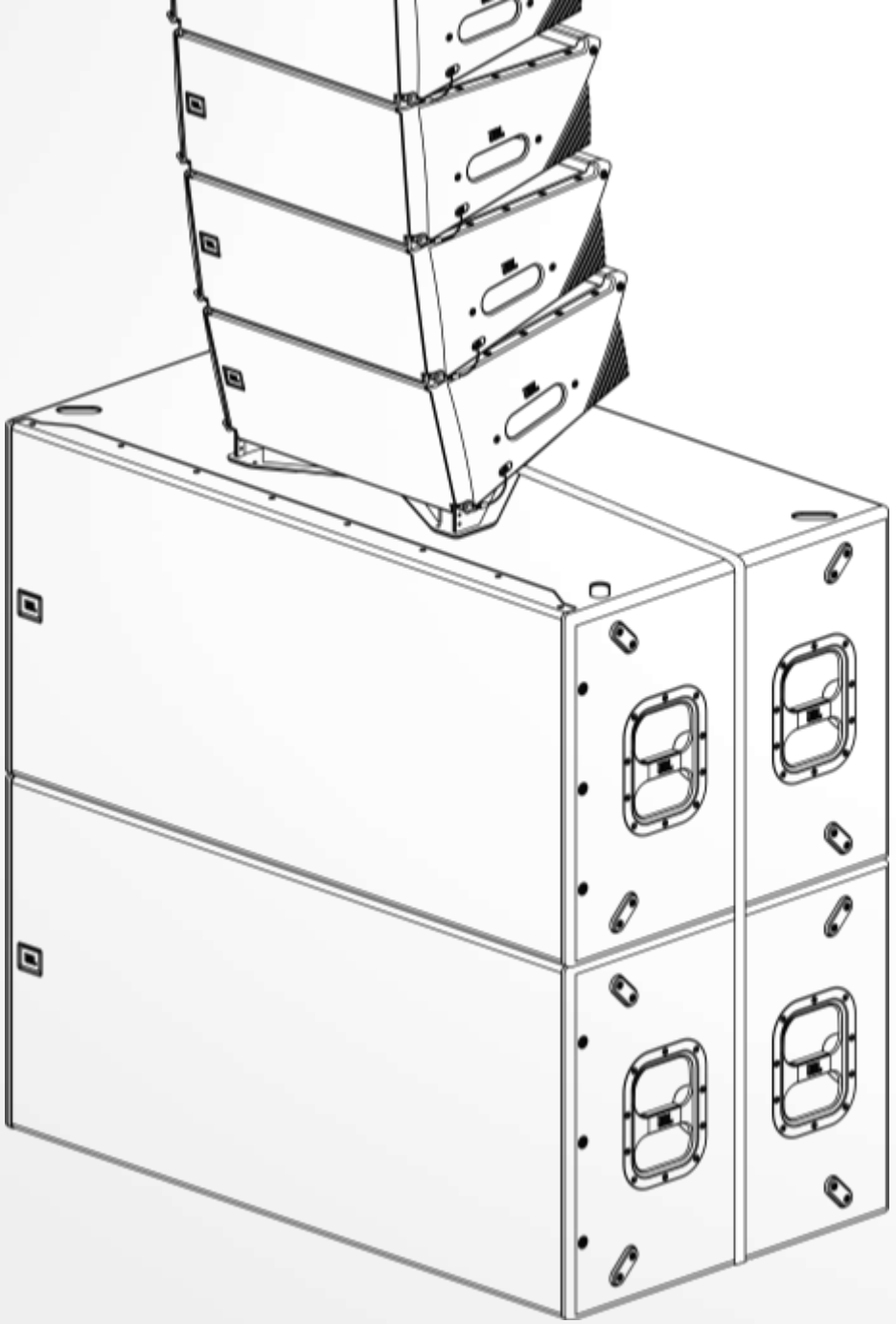
SRX906LA

SRX906LA

SRX910LA


WARNING: Stability Hazard! - Stack Could Become Unstable - Secure to Ground.
2
1.5
1
0.5
0
-1
-0.5
0
0.5


2
1.5
1
0.5
0
-1
-0.5
0
0.5



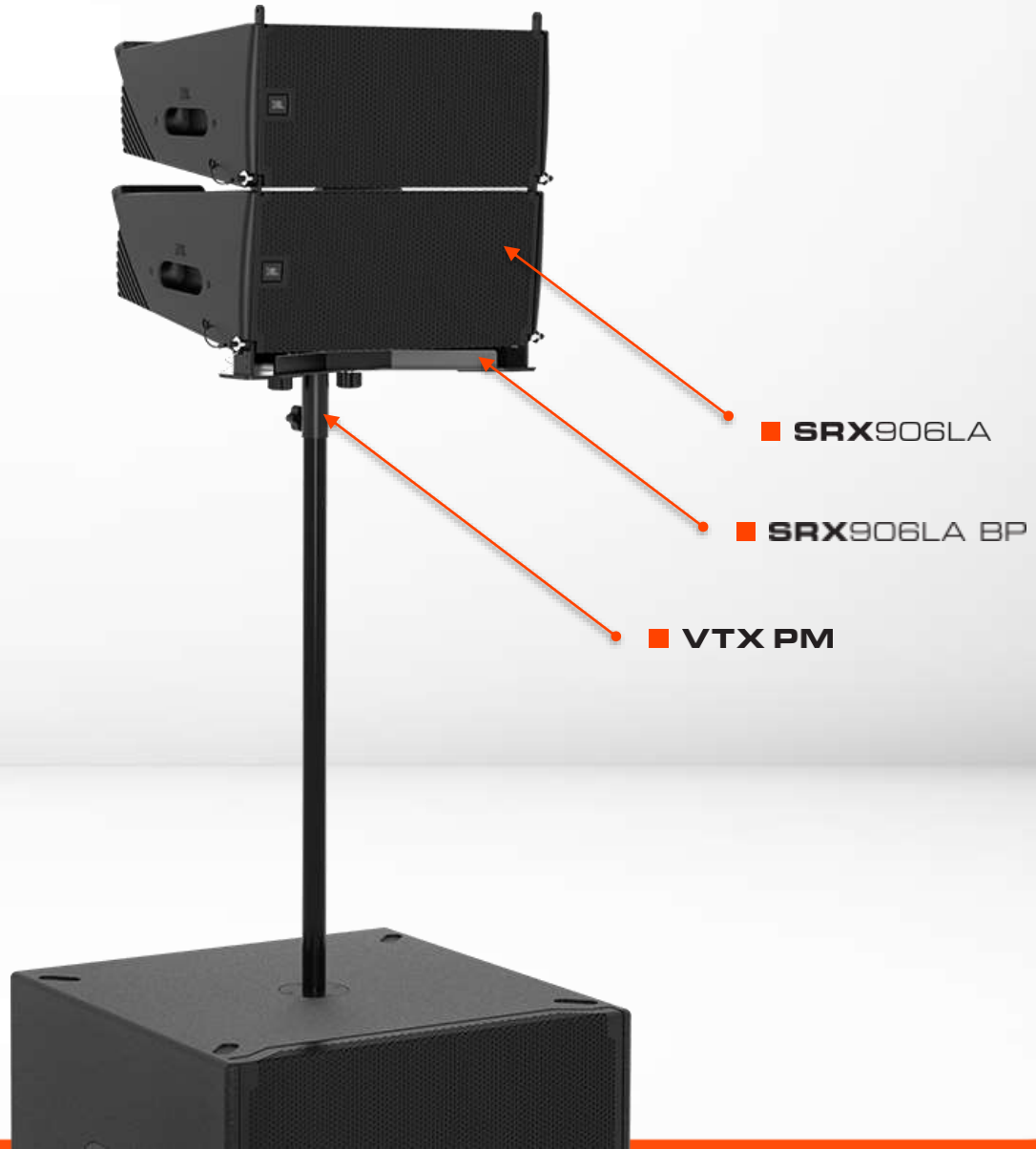

JBL
PROFESSIONAL
SRX910LA
BASE PLAT

VTX PM

- Universal pole-mount adapter
- Connects to any standard 35 mm pole
- Compatible with VTX A6 BP and **SRX906LA BP**
- Support for up to (2) SRX906LA
- (2) M10 Knobs included

VTX PM

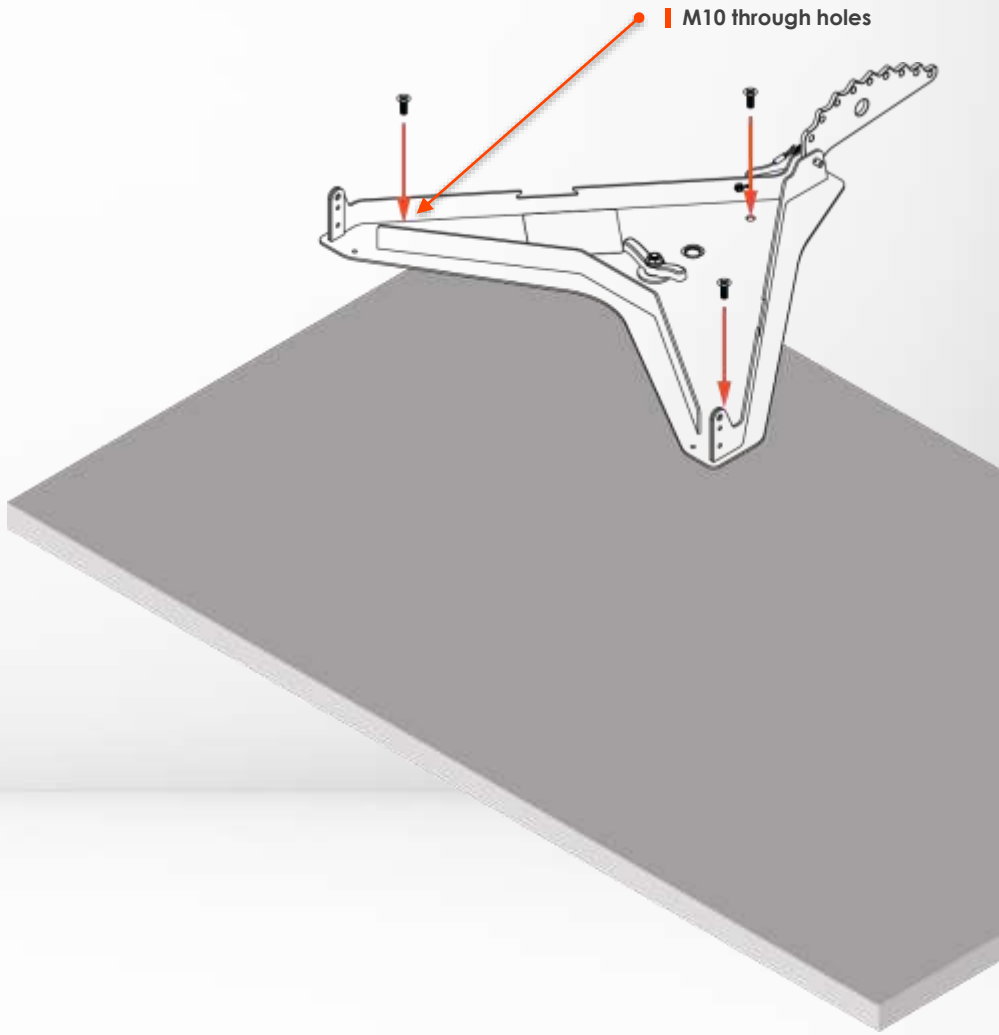
- Universal pole-mount adapter
- Connects to any standard 35 mm pole
- Compatible with VTX A6 BP and **SRX906LA BP**
- Support for up to (2) SRX906LA
- (2) M10 Knobs included



SRX900

Applications / Use-cases

- Attachment to structures such as:
  - carts
  - Stages
  - Scaffoldings



SRX906LA CASE

- Road case for SRX906LA cabinets
- Support for up to (4) cabinets
- Heavy-duty casters
- Stackable design
- Sized for US and international truck sizes
- JBL DuraFlex finish
- Designed and manufactured by JBL

SRX906LA CASE

SRX910LA VT

- Vertical Transport cart for (4) SRX910LA
- Truck friendly dimensions
- Includes VT-TOP for efficient packing and stacking
- Heavy-duty casters
- Stackable design
- Optional soft cover available

SRX910LA VT CVR

ACK1

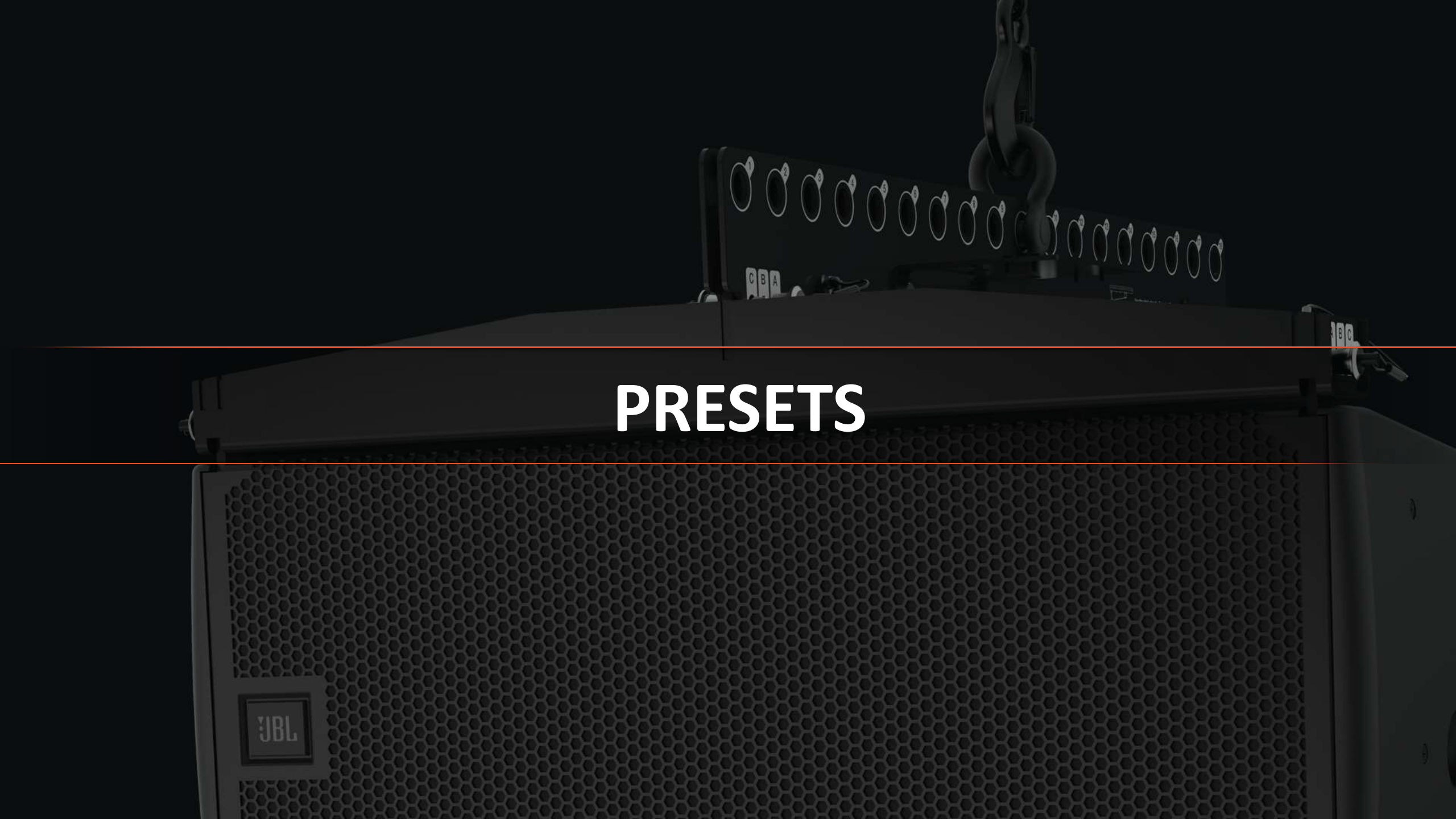
- Universal **A**ccessory **C**aster **K**it
- Compatible with SRX918S and SRX928S
- Black housing for discreet look
- Black polyurethane wheel
- Anti-rattle features for vibration free operation

SRX918S CVR | SRX928S CVR

- Heavy duty soft covers
- Handle cutouts for easy transportation
- Includes folding feature for storage
- Internally reinforced for grille protection

SRX900 RC1

- Rain cover to protect the electronics
- Simple inexpensive solution
- Compatible with all SRX900 products
- Extends the ingress rating to IP54



PRESETS

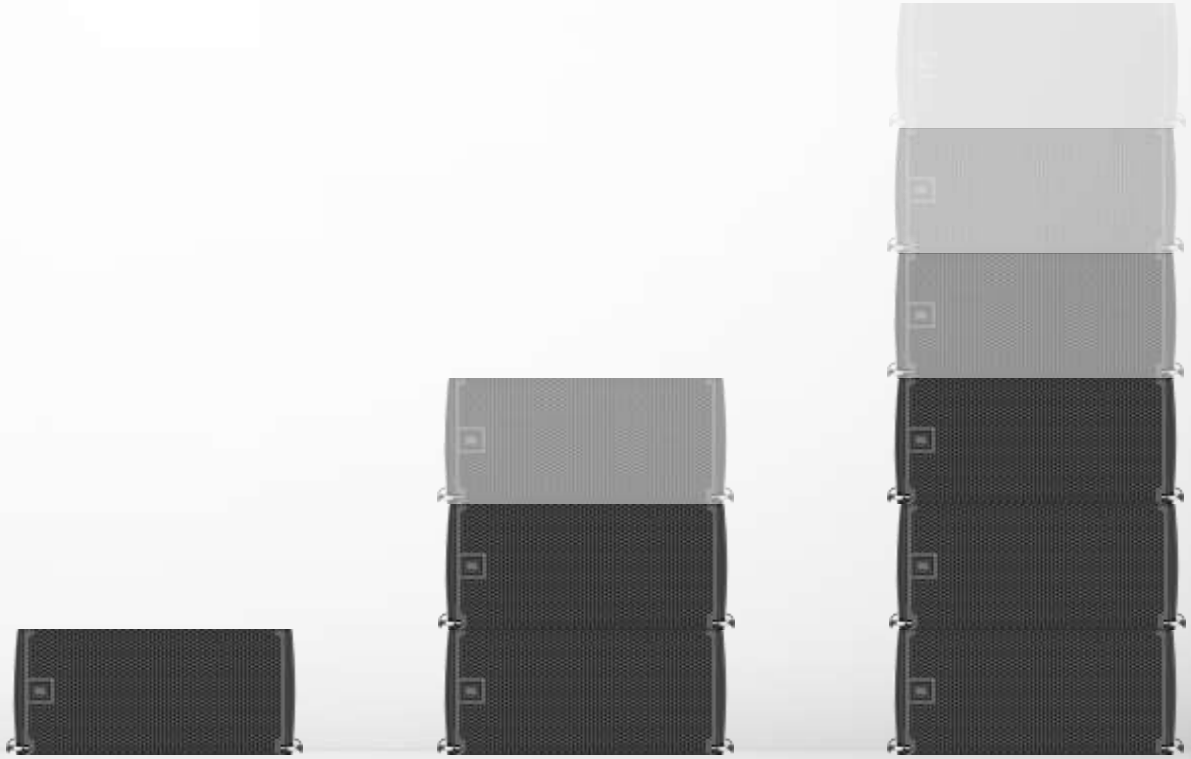
SRX900

Line Array Preset Options

- Preset selection depends on the number of speakers
- Presets shape the response to match the application
- Accessible from the LCD or software
- Presets are part of the firmware, not software

LF Modes:

- Full Range or 80 Hz



Fill Preset (FL)
Single Cabinet
Front Fills

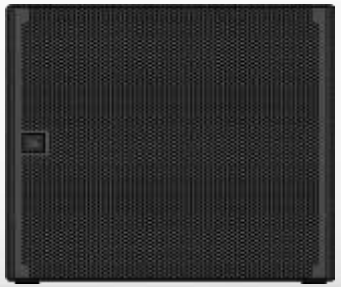
Small Array (SA)*
2 - 3 Cabinets
Pole Mount Preset

Array Preset
4 - 16 Cabinets
+ ASC Filter

SRX900

Subwoofer Preset Options

- Presets adjust crossover points and phase response
- Select REAR for cardioid configurations
- Accessible from the LCD or software
- Presets are part of the firmware, not software



LF Modes:

- 60 Hz
- 60 Hz REAR
- 80 Hz
- 80 Hz REAR

LF Modes:

- 60 Hz
- 60 Hz REAR
- 80 Hz
- 80 Hz REAR

SRX900

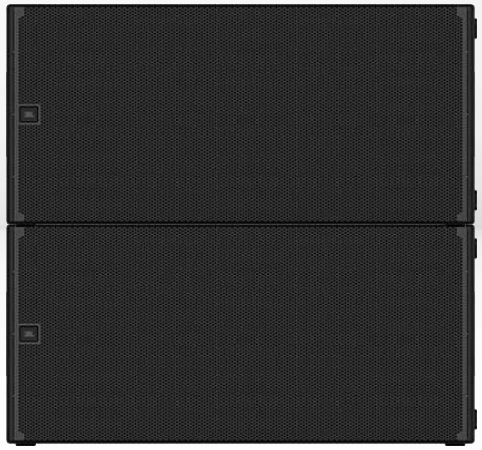
80 Hz

80 Hz REAR

80 Hz

80 Hz

Full Range



80 Hz

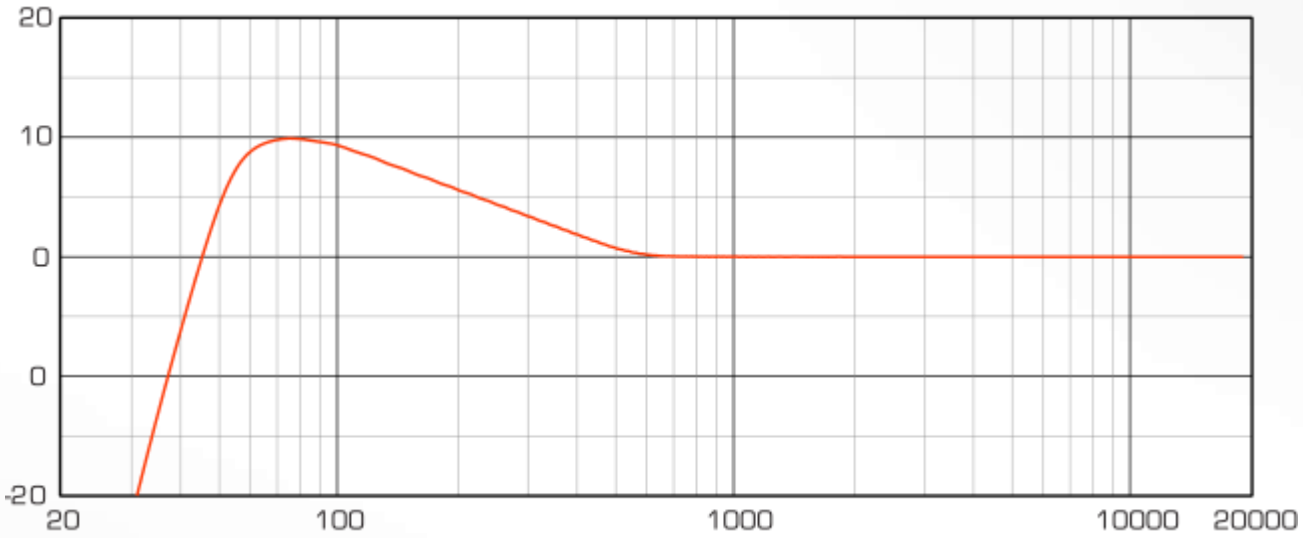
60 Hz

SRX900

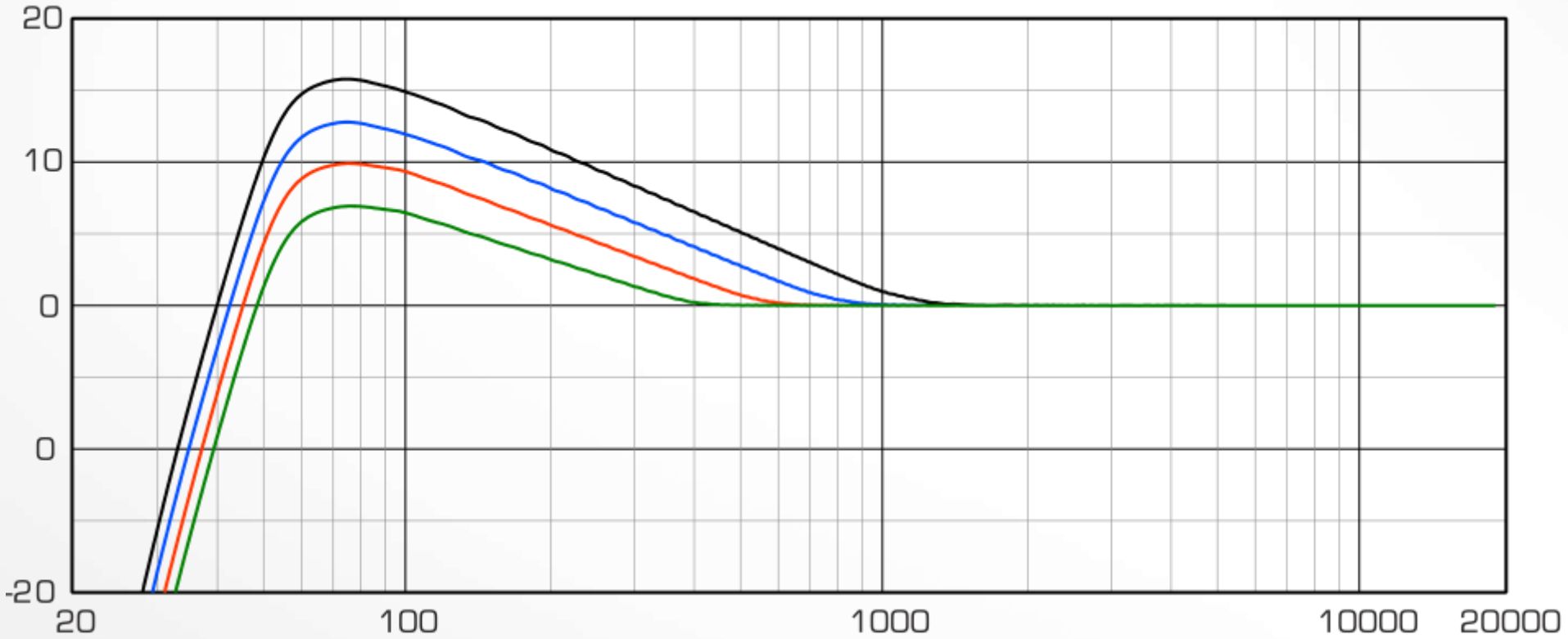
Array Preset Target

- Ideal for (8) box arrays
- Flat down to 500 – 600 Hz
- Rising LF response
- 8 – 10 dB rise depending on conditions

Frequency Response Target for (8) Box Array



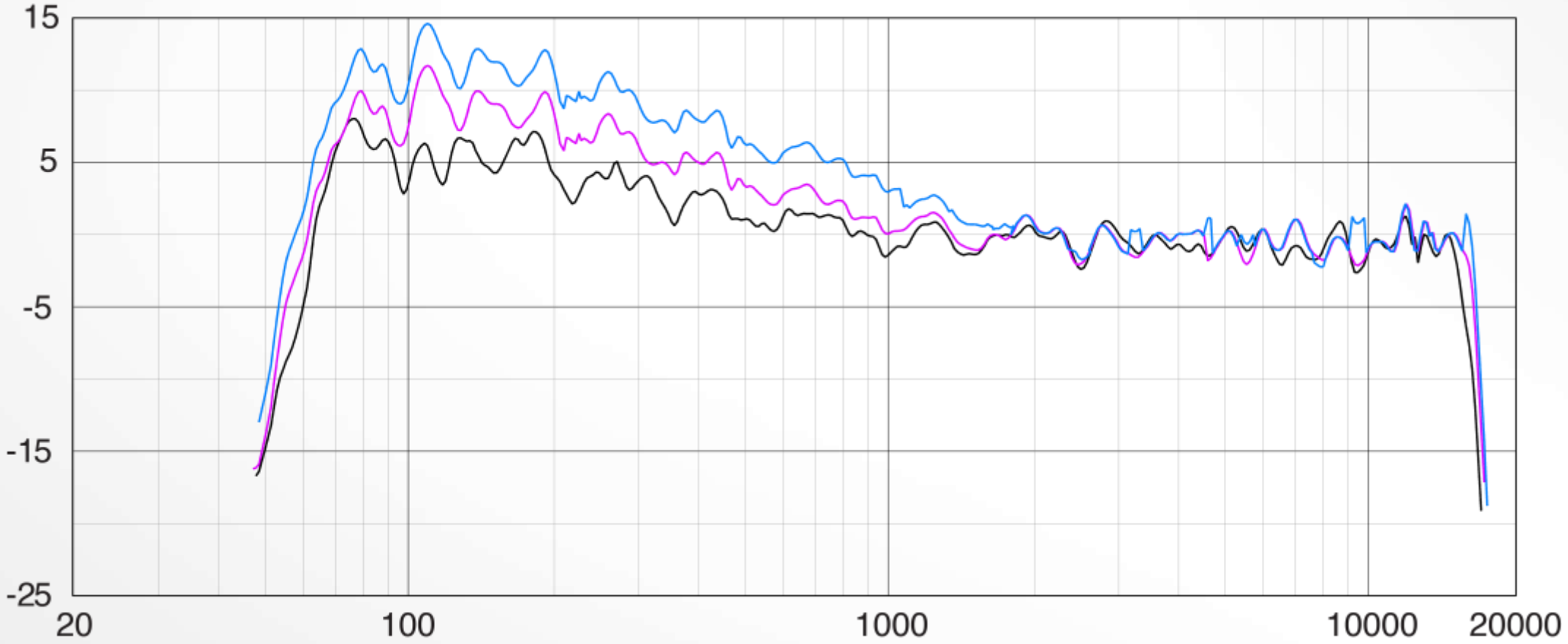
SRX900



(16) BOX (12) BOX (8) BOX (4) BOX

SRX900

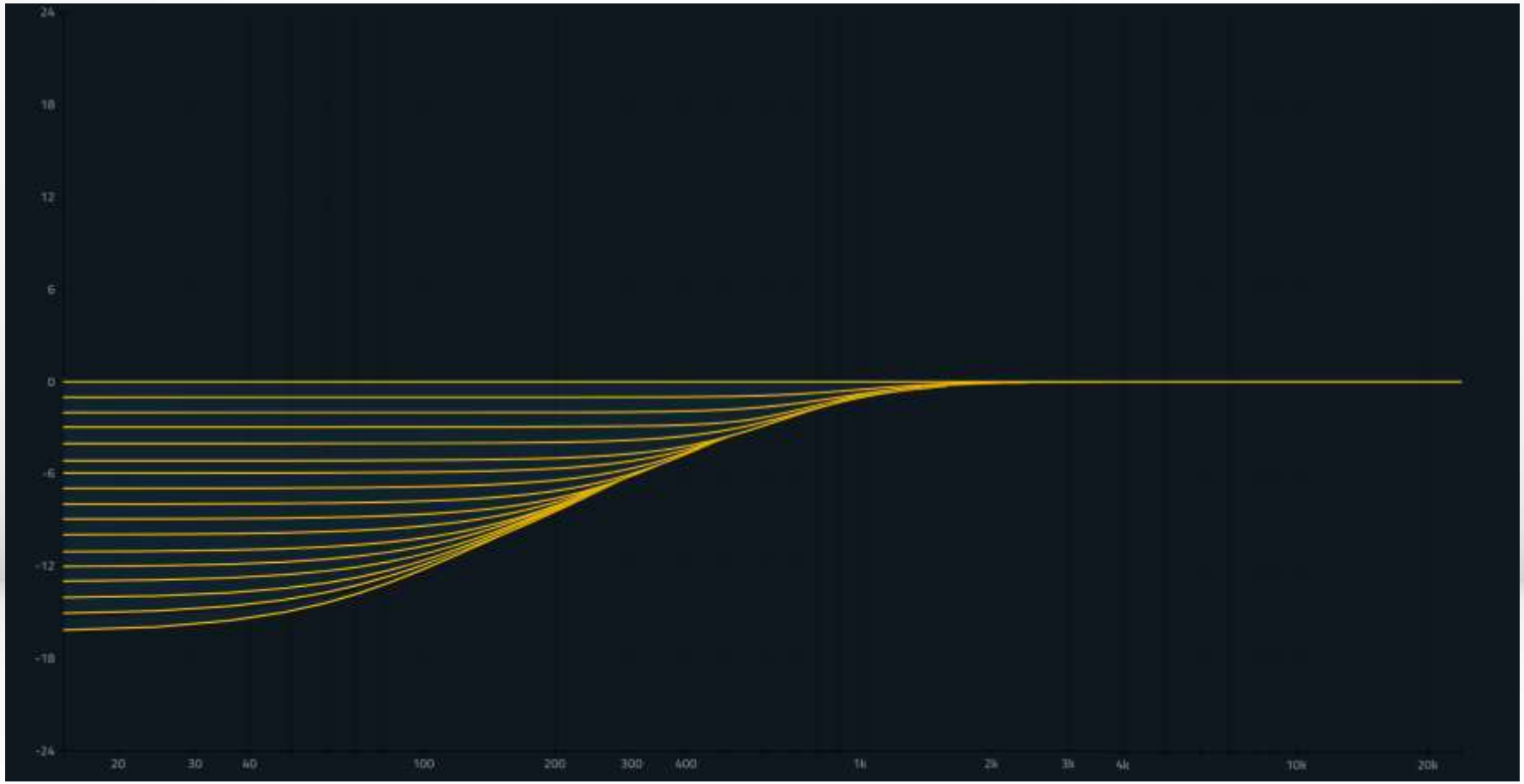
SRX906LA | (8) Mic Average | 8 – 12 – 16 Box Arrays



(8) BOX (12) BOX (16) BOX

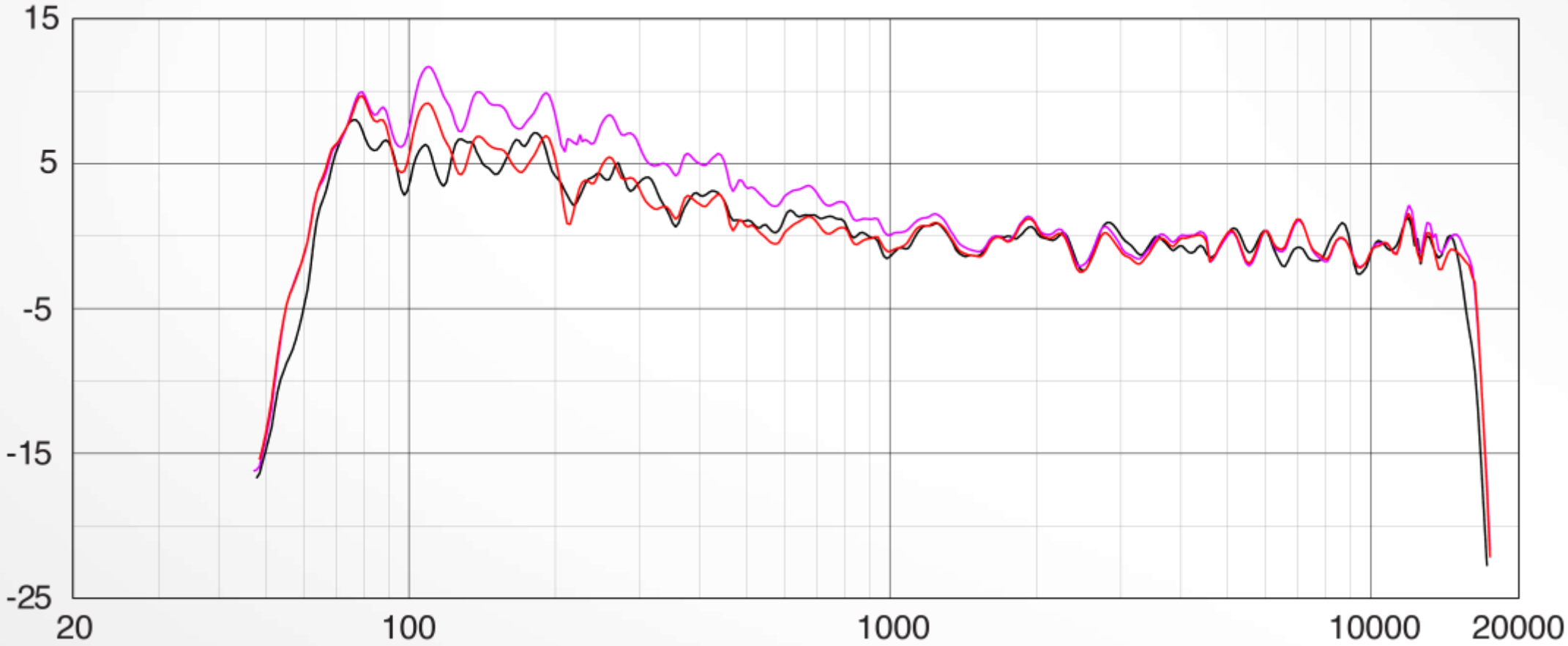
SRX900

Array Size Compensation (ASC)



SRX900

SRX906LA | (8) Mic Average | 8 – 12 Box Arrays



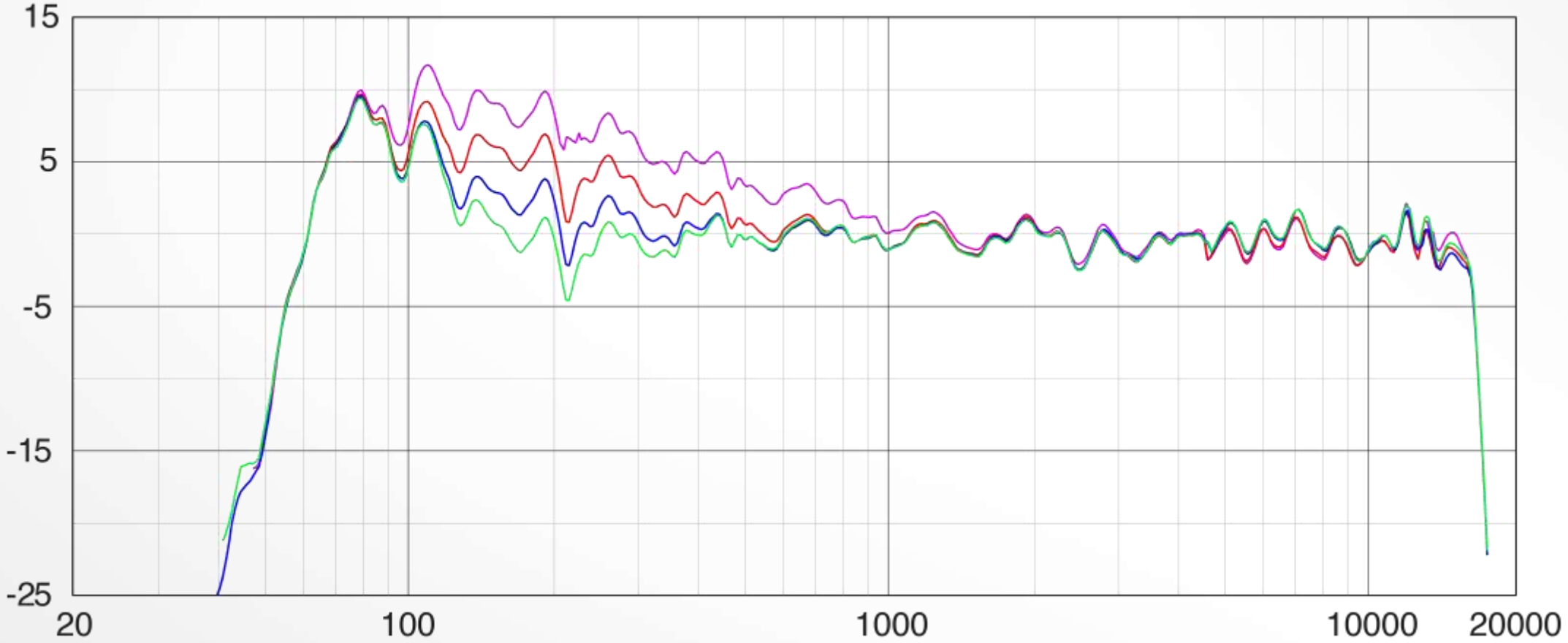
(8) BOX

(12) BOX

(12) BOX -3 dB ASC

SRX900

SRX906LA | (8) Mic Average | 12 Box Arrays



(12) BOX FLAT

(12) BOX -3dB ASC

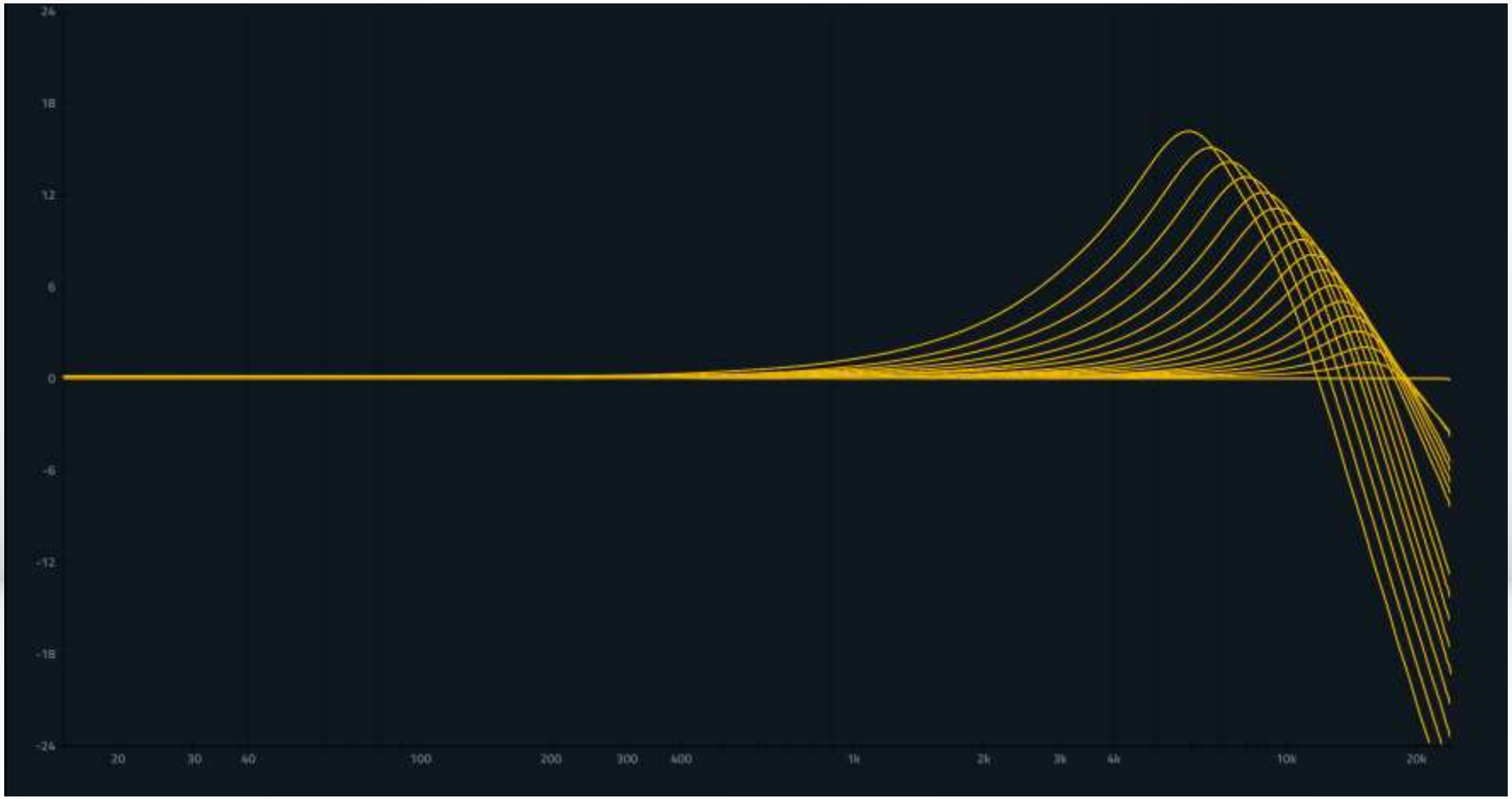
(12) BOX -6 dB ASC

(12) BOX -9 dB ASC

SRX900

JBL PROFESSIONAL

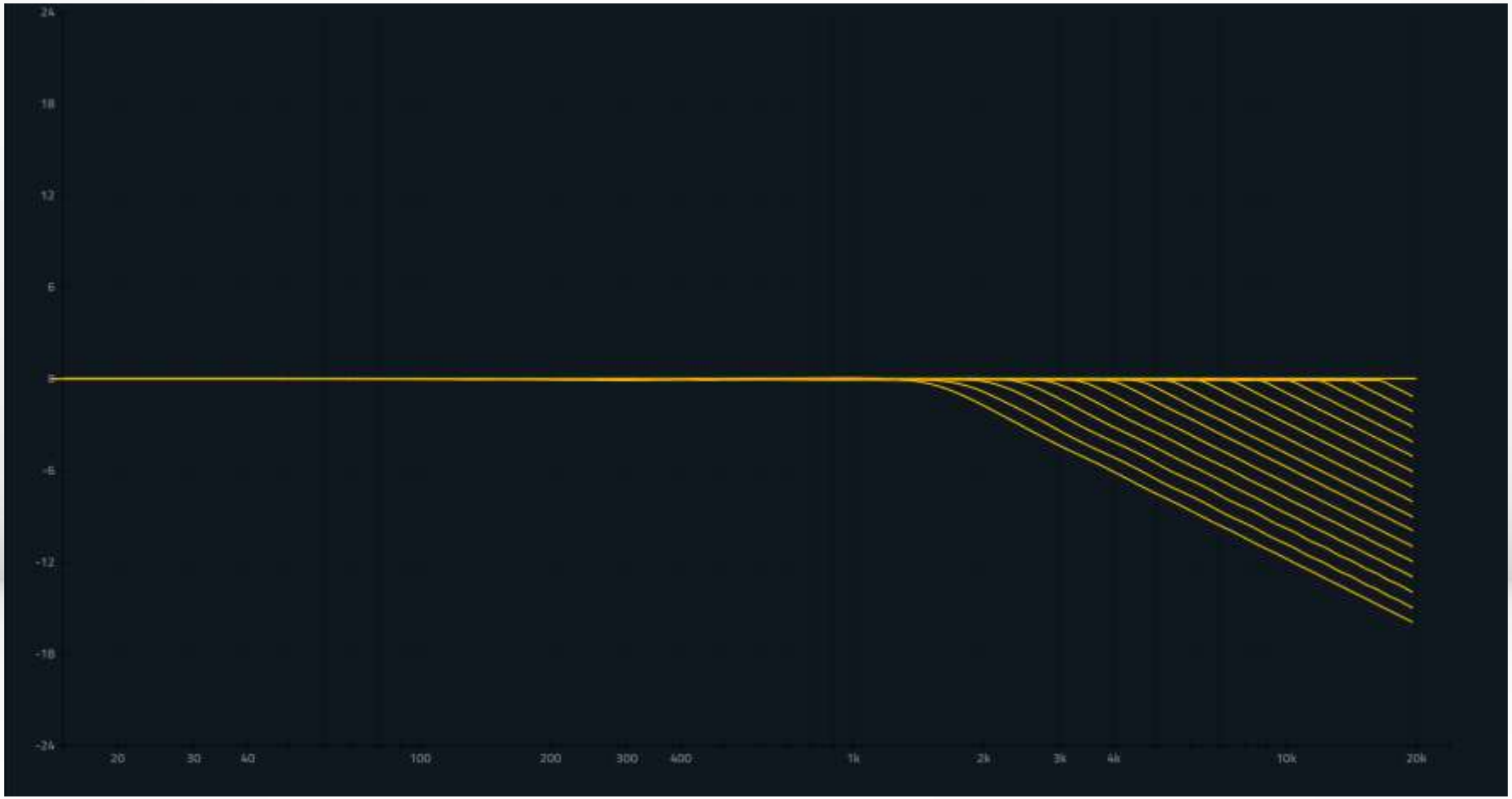
Throw Distance Compensation (TDC) | Positive Values



SRX900

JBL PROFESSIONAL

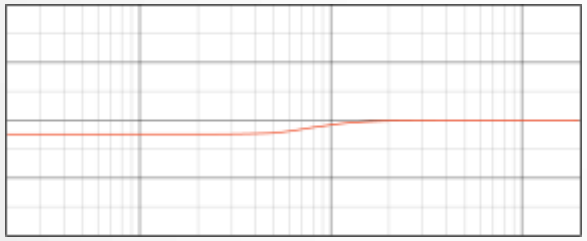
Throw Distance Compensation (TDC) | Negative Values

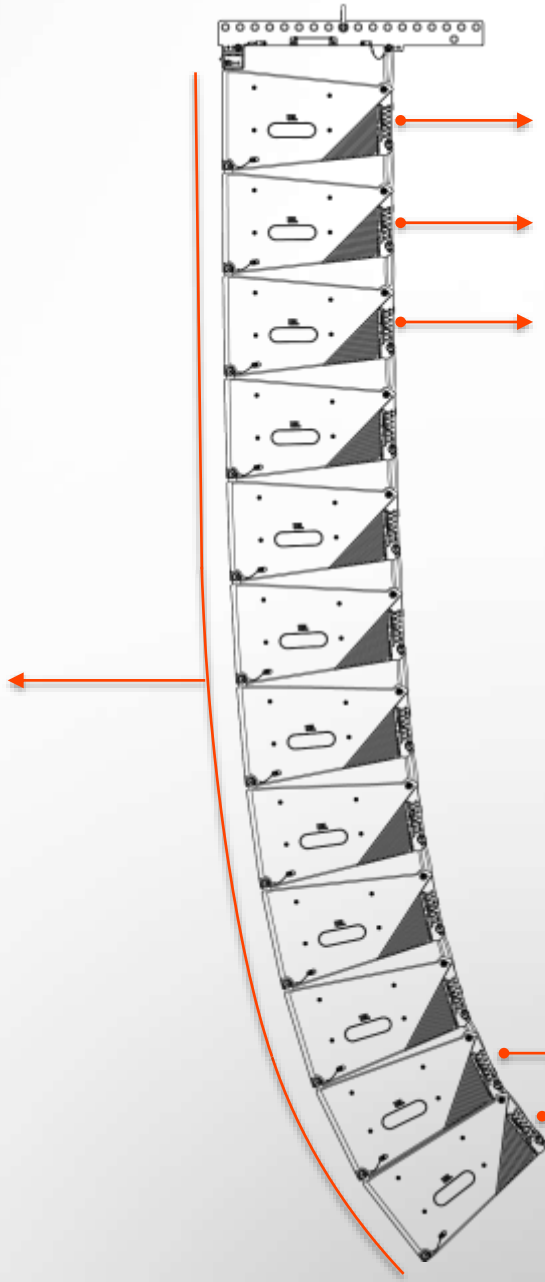


SRX900

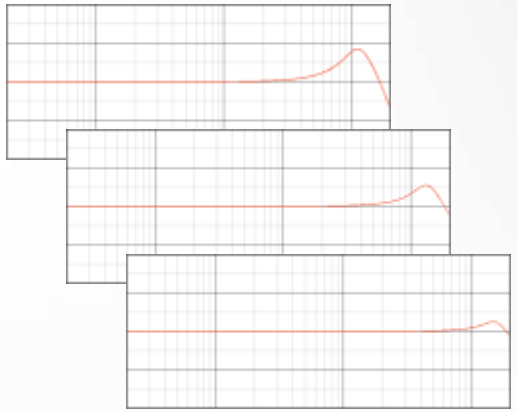
JBL PROFESSIONAL

Global ASC Filter

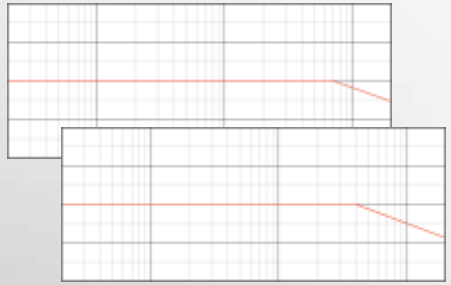


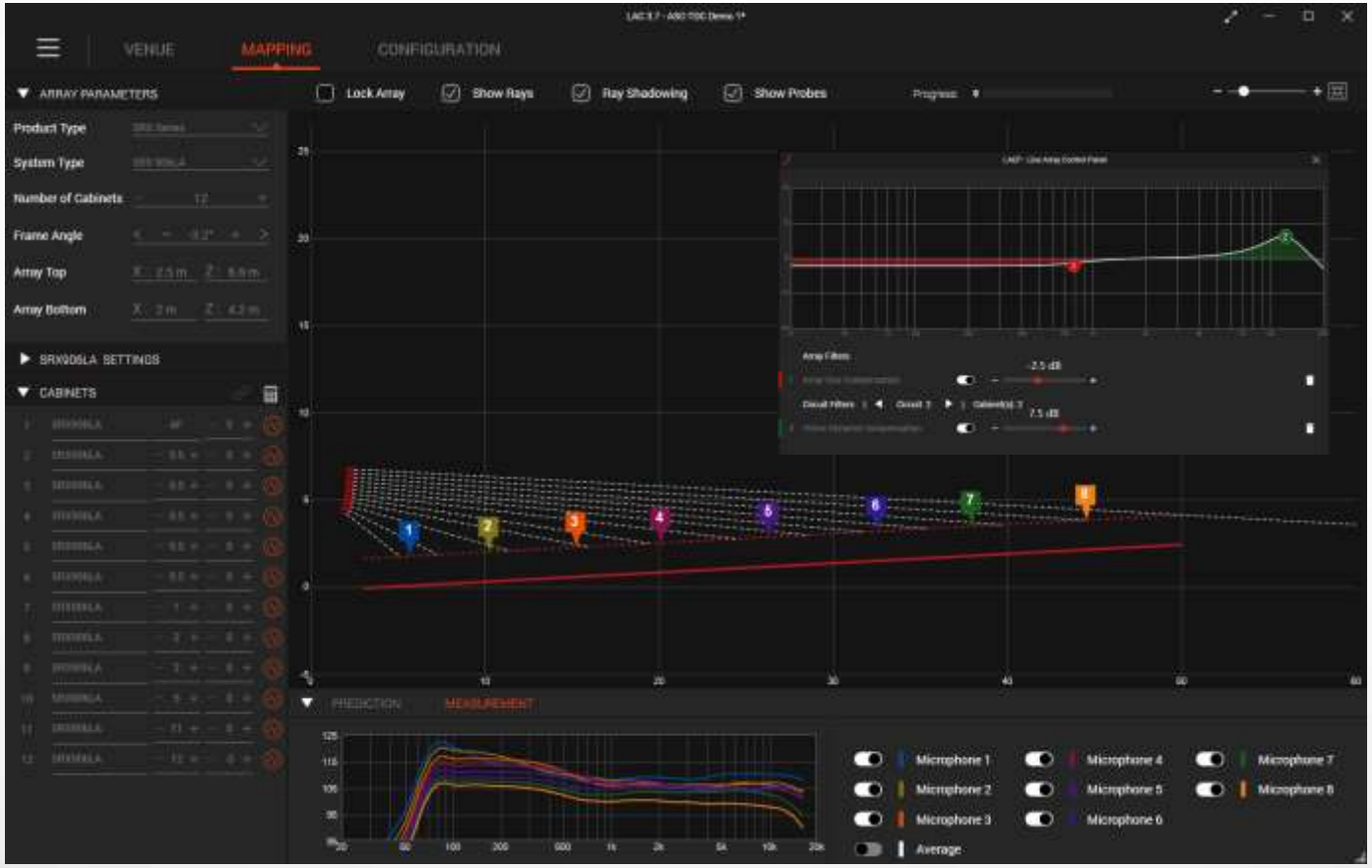


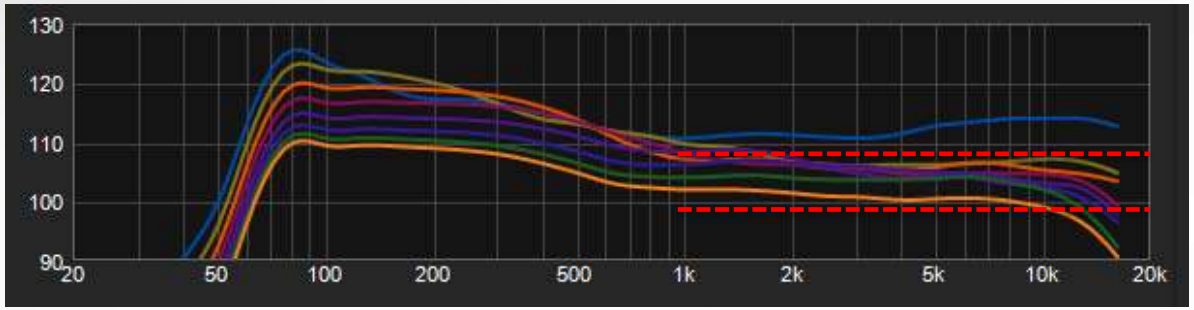
TDC Filter Increase

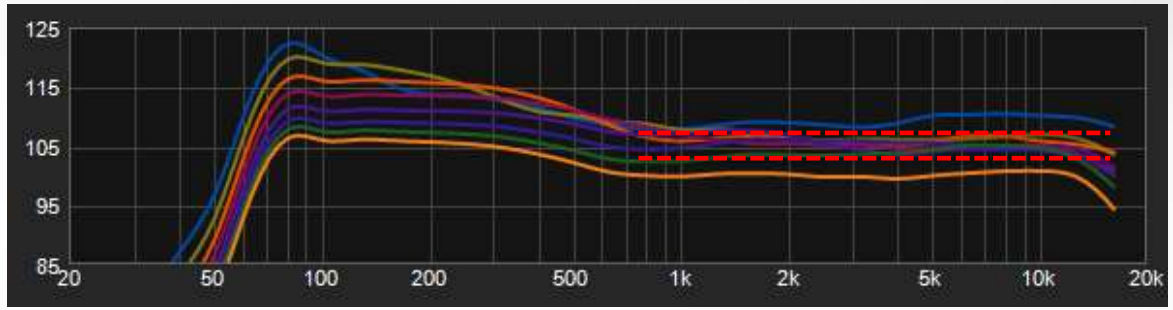


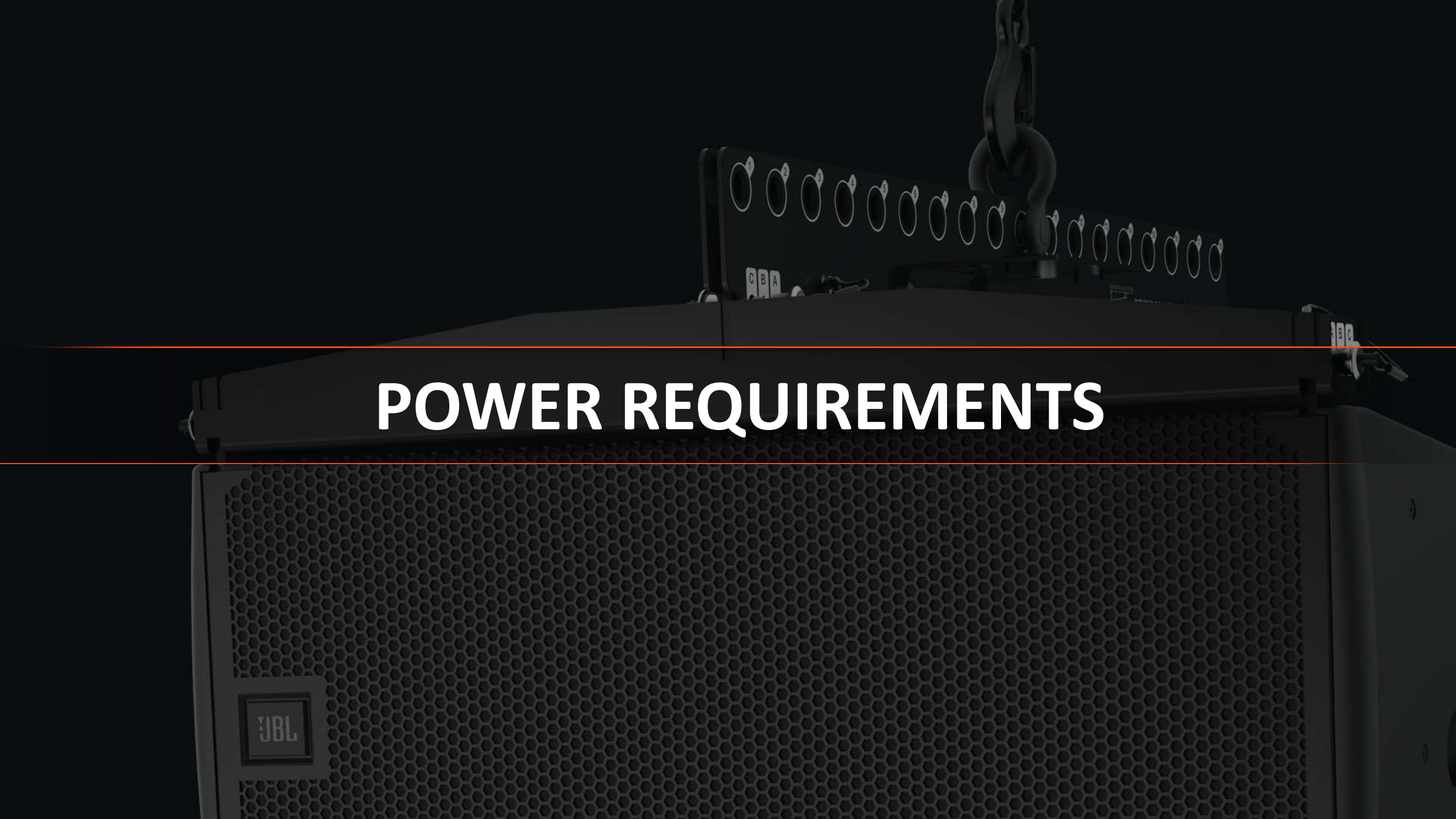
TDC Filter Decrease




VENUE
MAPPING
CONFIGURATION
ARRAY PARAMETERS
Lock Array
Show Rays
Ray Shadowing
Show Probes
Product Type
System Type
Number of Cabinets
Frame Angle
Array Top
Array Bottom
SRX906LA SETTINGS
CABINETS
PREDICTION
MEASUREMENT
Microphone 1
Microphone 2
Microphone 3
Microphone 4
Microphone 5
Microphone 6
Microphone 7
Microphone 8
Average


130
120
110
100
90
20
50
100
200
500
1k
2k
5k
10k
20k


125
115
105
95
85
20
50
100
200
500
1k
2k
5k
10k
20k

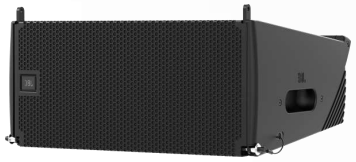


POWER REQUIREMENTS

SRX900

CURRENT DRAW			
	120 V	208 V	240 V
Standby :	0.2 A	0.1 A	0.1 A
Idle :	0.3 A	0.2 A	0.2 A
Continuous[4] :	1.3 A	0.8 A	0.7 A
Maximum Instantaneous Peak[5] :	7.0 A	5.4 A	4.7 A
Peak Inrush[6] :	2.2 A	3.6 A	4.3 A

SRX906LA



Footnotes:

4: System test using IEC shaped pink noise with 9 dB crest factor. System at maximum output without clipping or limiting. Ambient temperature: 20° C. Duration: 5 sec.

5: Two-tone, all channels driven, IMD test at maximum power and a duration of 200 ms.

6: Measured RMS inrush current for a 50 ms window.

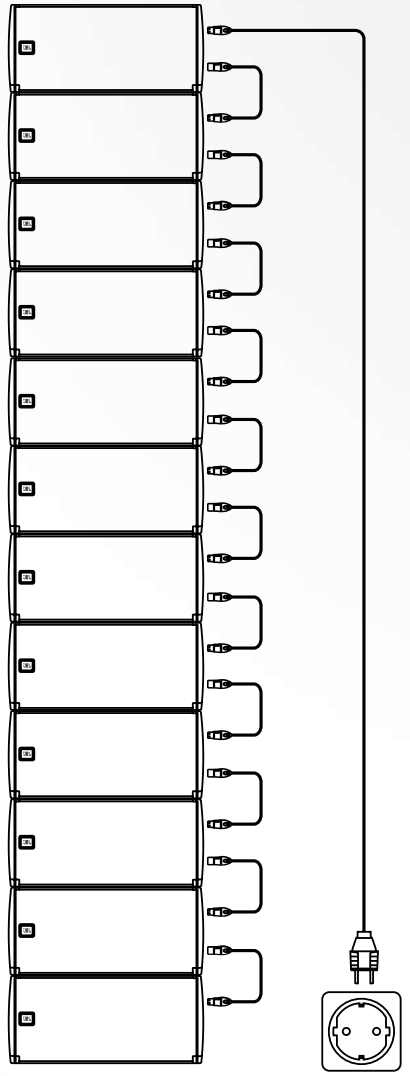
SRX900

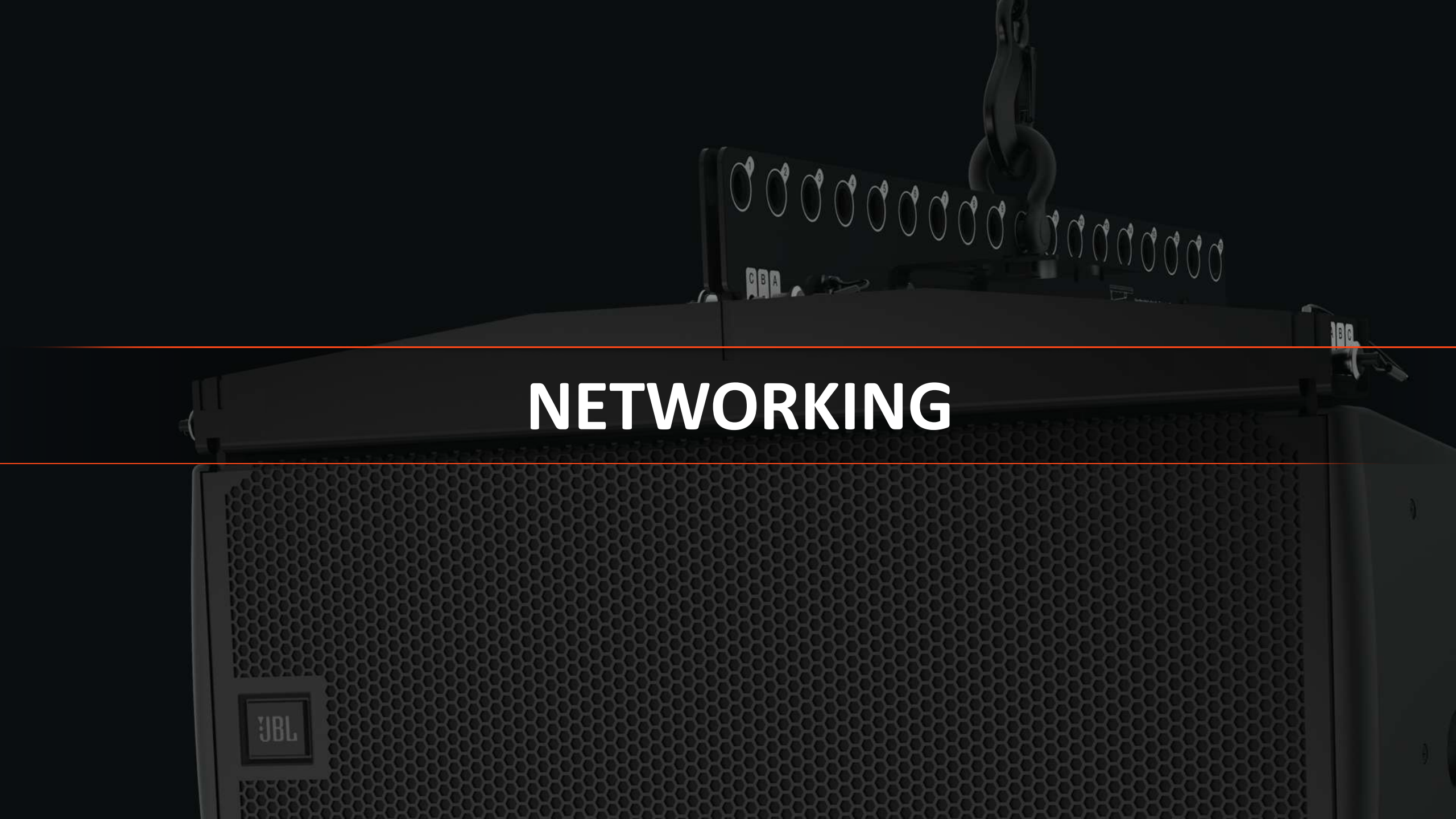
NUMBER OF SPEAKERS PER LINE			
	120 V (15A)	208 V (15A)	240 V (16A)
SRX906LA	(6)	(10)	(12)
SRX910LA:	(4)	(7)	(8)
SRX918S	(2)	(3)	(4)
SRX928S	(1)	(3)	(3)

$$Line\ Array = \frac{Breaker\ Value\ - 30\%}{Continuous + 30\%}$$

$$Subwoofer = \frac{Breaker\ Value\ - 30\%}{Continuous + 50\%}$$

$$Line\ Array = \frac{15A\ - 30\%}{1.3A + 30\%} \qquad 6.17\ = \frac{10.5A}{1.7A}$$



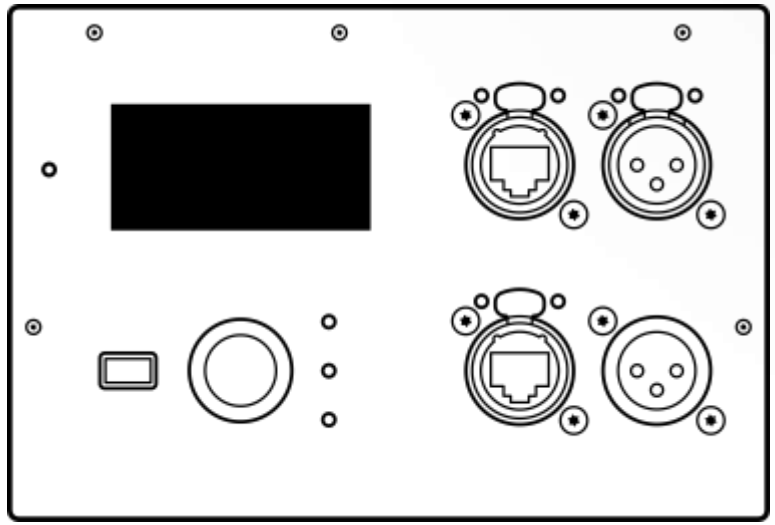


NETWORKING

SRX900

Hardware

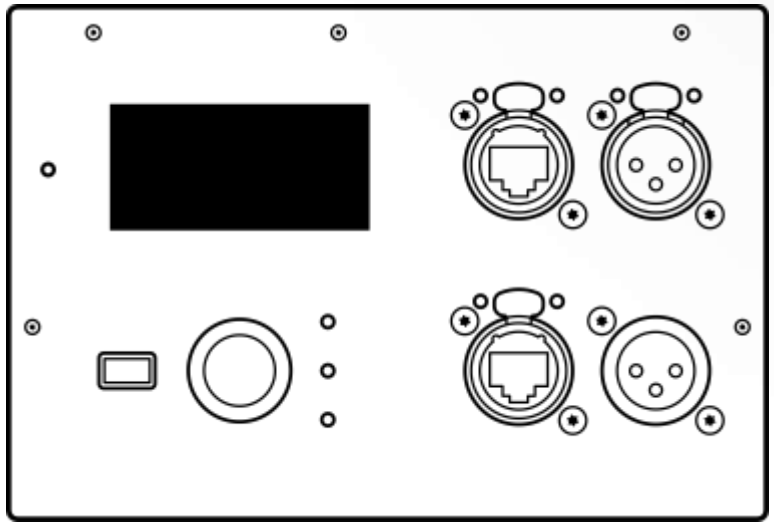
- Dual 100 Mpbs Ethernet ports
- Neutrik etherCON connectors
- Ports configured as a “switch” (no IN or OUT)



SRX900

IP Addressing

- Devices are optimized for Auto IP (DHCP/APIP)
- Fixed IP addresses are not required
- IP addresses are rarely relevant to the user
- Networking parameters accessible via LCD and software
- System uses Hcontrol IDs for device matching



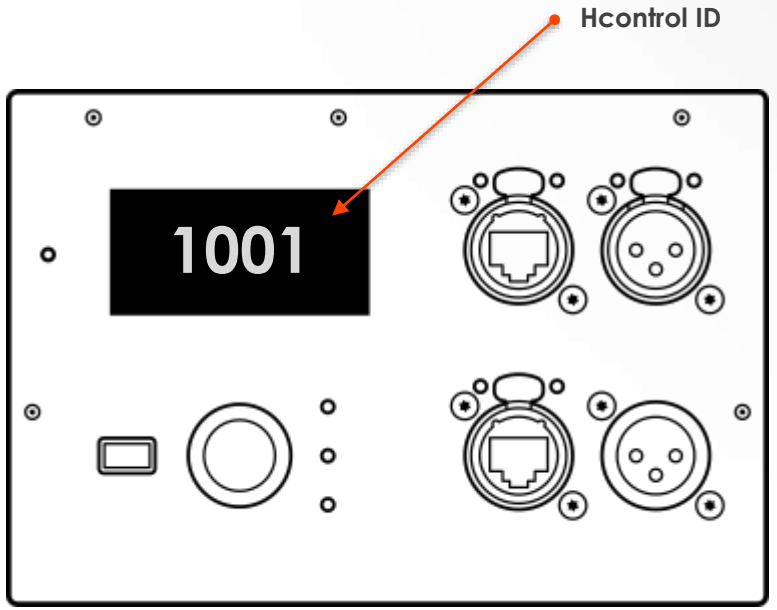
SRX900

Hcontrol

- Proprietary Harman communication protocol
- Replacement for HiQnet
- Optimized for Wi-Fi
- Confirmation based protocol
- Easy and fast device discovery
- Based on the latest networking standards

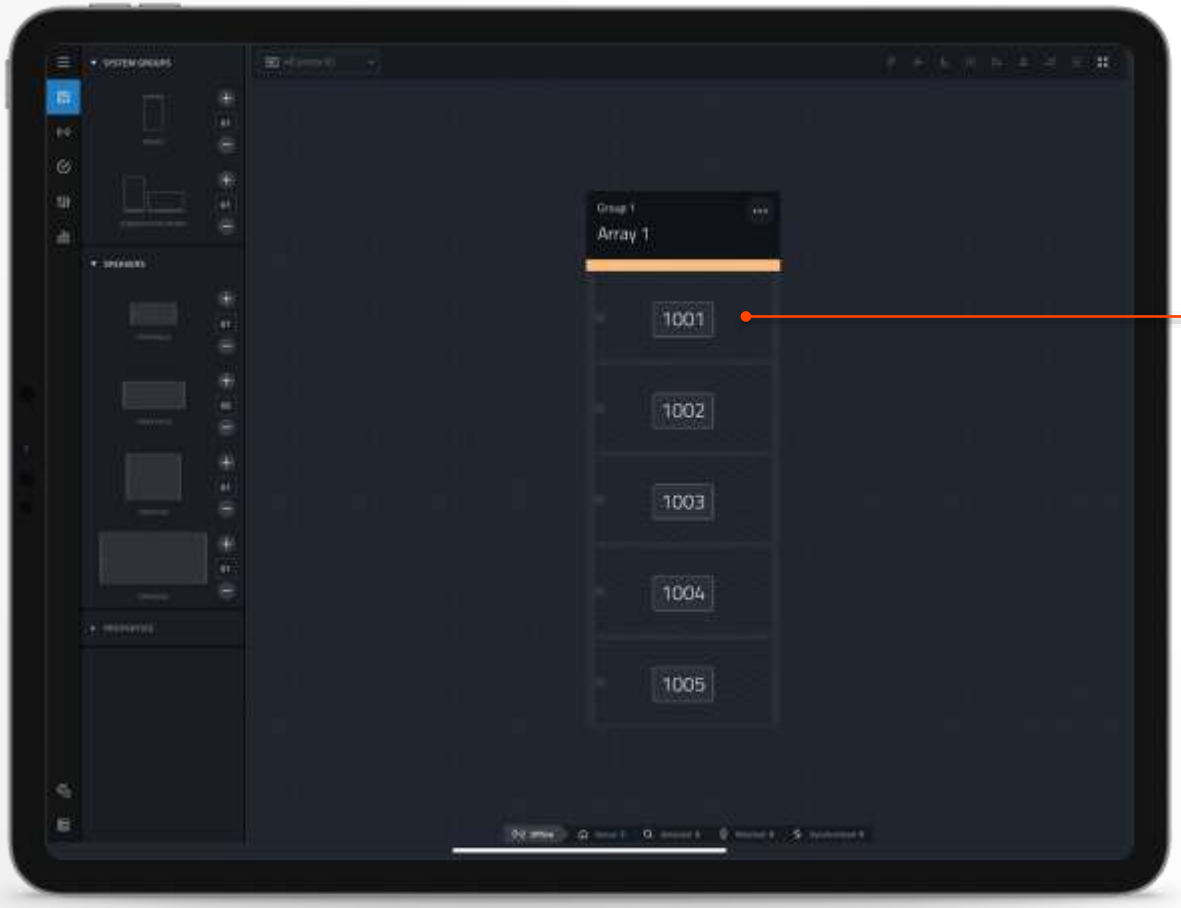
Uses numeric Hcontrol IDs for device matching

- Set via LCD or software
- Option to “lock” Hcontrol ID

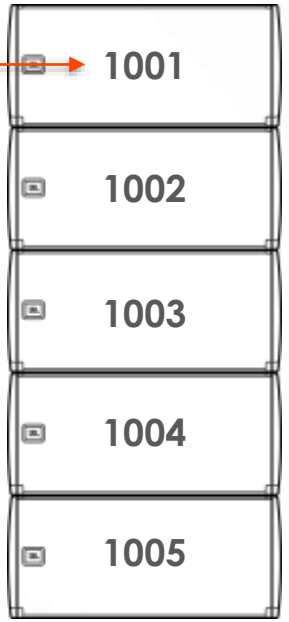


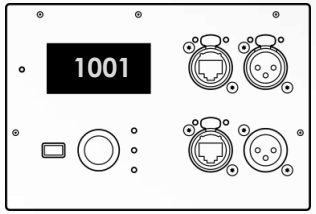
SRX900

Software



Hardware

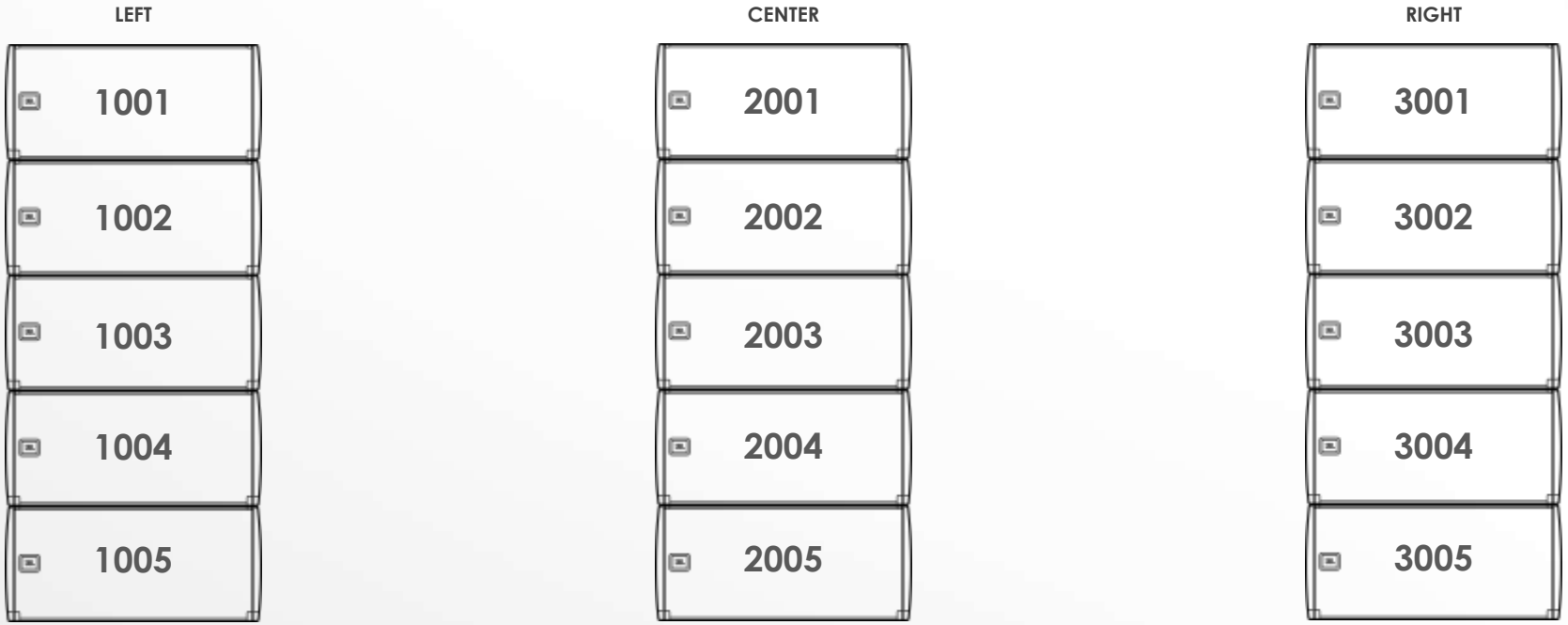




SRX900

- Hcontrol IDs can be up to six digits long (999999)
- Choose logical IDs to make matching easy

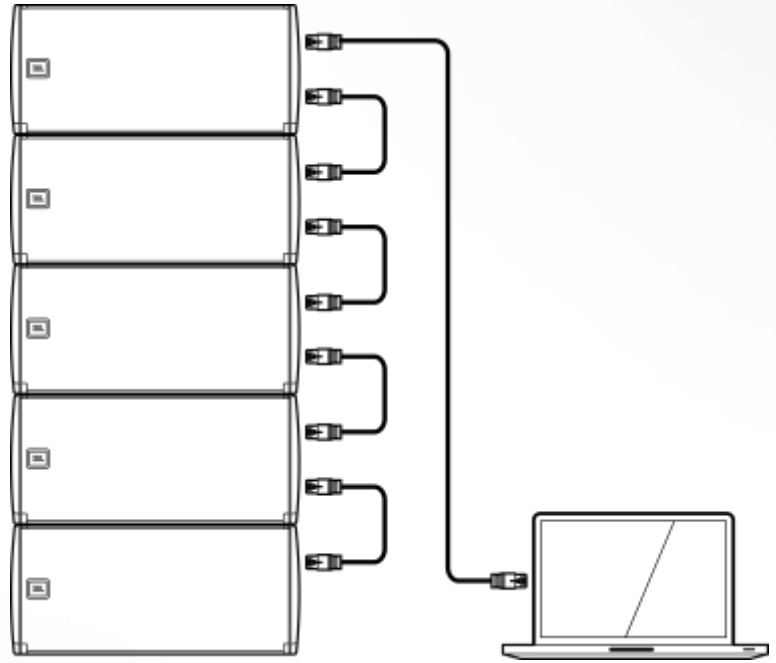
Example



SRX900

Daisy Chain (bus) Topology

- All devices are connected using the internal speaker switch
- PC or access point is connected to the first or last device
- Recommended maximum number of devices: **24**



Pros

- Simple and easy
- Ideal for smaller systems
- Minimal wiring requirements
- No external networking products required

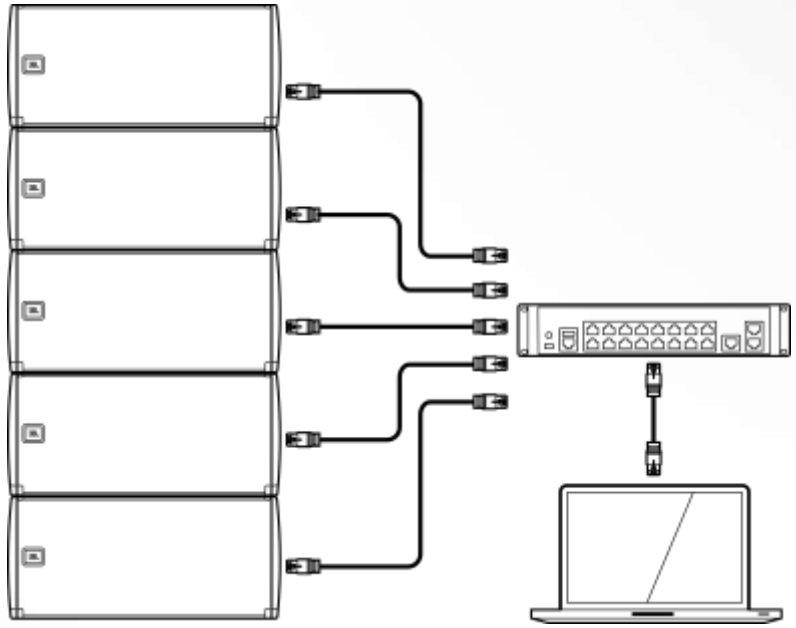
Cons

- Depending on system size, wiring can be cumbersome
- Can be unreliable, no redundancy
- **Can be problematic during firmware updates**

SRX900

Star Topology

- Each device is individually connected to a switch port
- The internal Ethernet switch is not used



Pros

- Fast and reliable
- Ideal for large installation where IT is involved
- Perfect for firmware updates

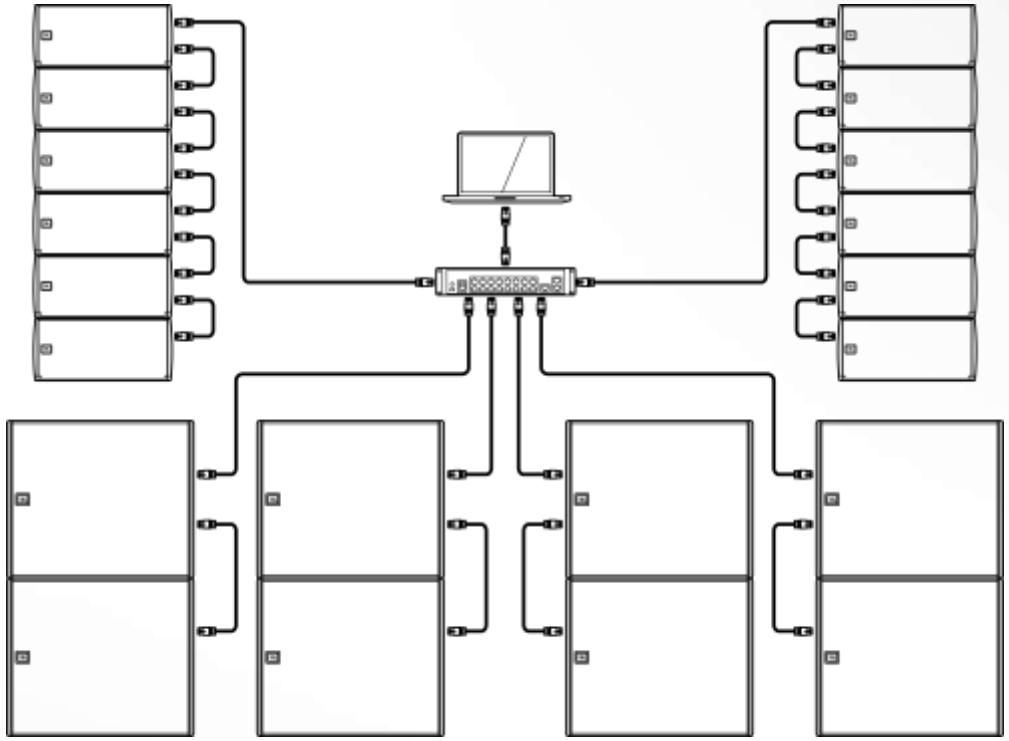
Cons

- Complex and expensive wiring
- Requires external Ethernet equipment
- **Not recommended for portable applications**

SRX900

Hybrid

- Devices within an array are connected together
- Each array/stack connects to a centralized switch



Pros

- Simple, easy and reliable
- Ideal for any size system
- Minimal wiring requirements
- Ideal for portable applications and installations

Cons

- Can be problematic during firmware updates


SOFTWARE

SRX900

JBL PROFESSIONAL

DESIGN

CONTROL

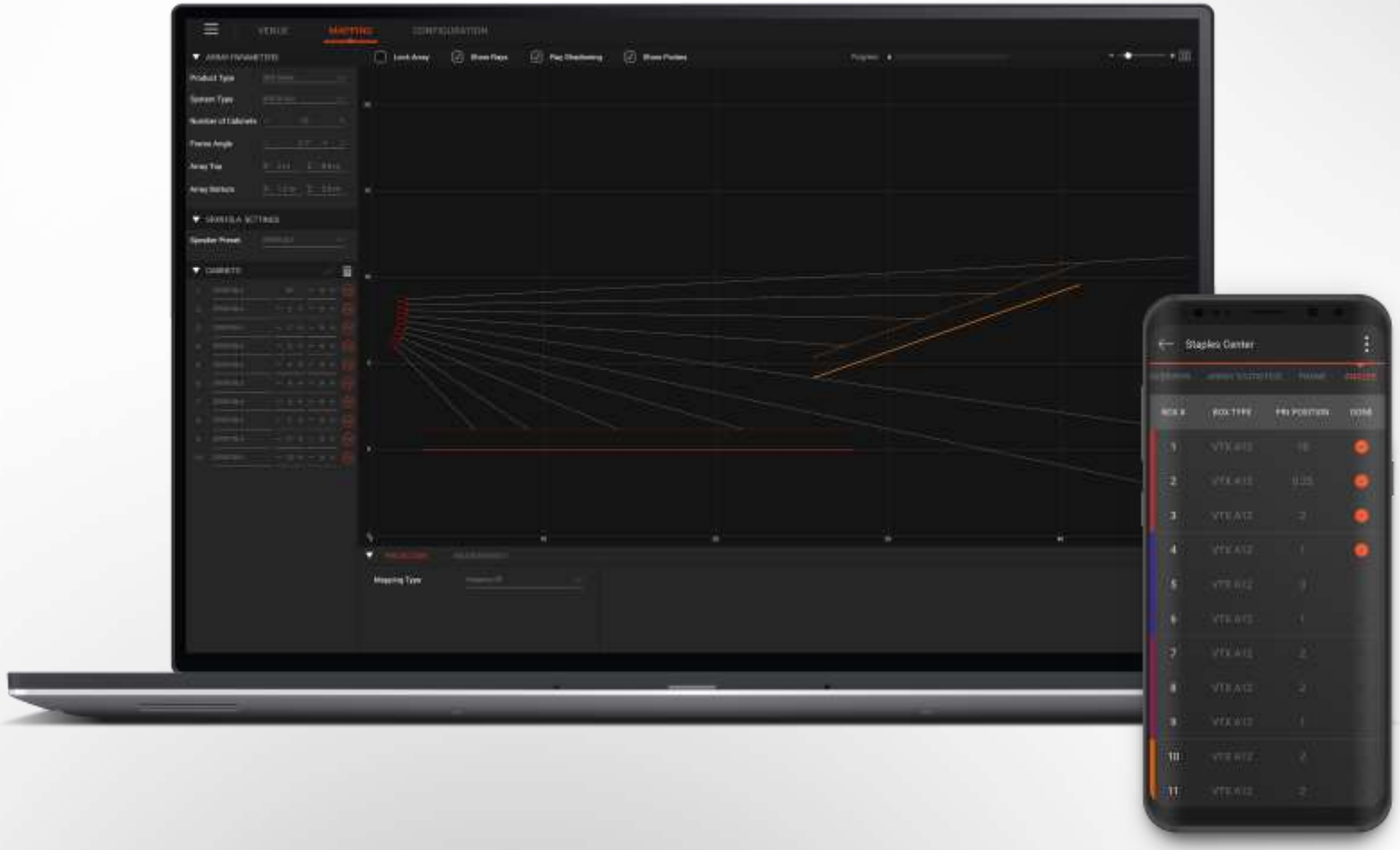
LINE ARRAY CALCULATOR 3™

ARRAY LINK™

JBL PROFESSIONAL

SYSTEM DESIGN

- Prediction for SRX products
- Fast and intuitive user interface
- Subwoofer coverage optimization
- Virtual measurement microphones
- Mechanical checks and safety reports
- DSP optimization features
- Array Link QR code generation



LINE ARRAY CALCULATOR 3™

ARRAY LINK™

JBL PROFESSIONAL

SYSTEM OPTIMIZATION

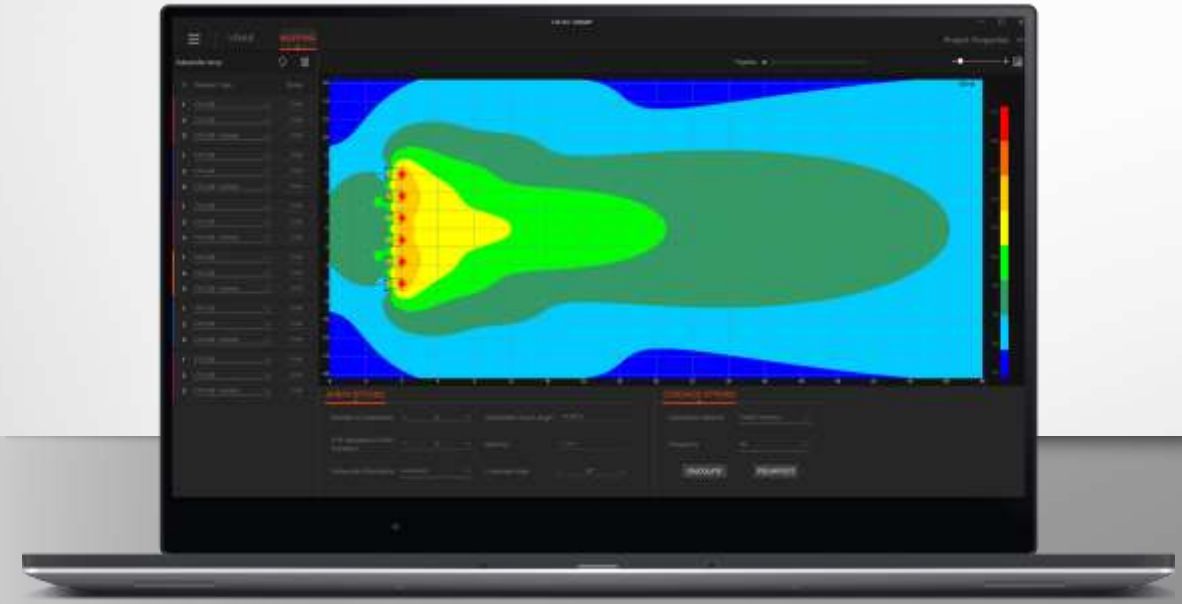
- Support for new SRX900 Series filters
  - Array size compensation
  - Throw distance compensation
  - Proximity correction

LINE ARRAY CALCULATOR 3™

JBL PROFESSIONAL

SUBWOOFER ARRAY OPTIMIZATION

- Support for distributed subwoofer arrays
- Cardioid coverage analysis
- Delay calculator for Electronic Delay Steering (EDS)

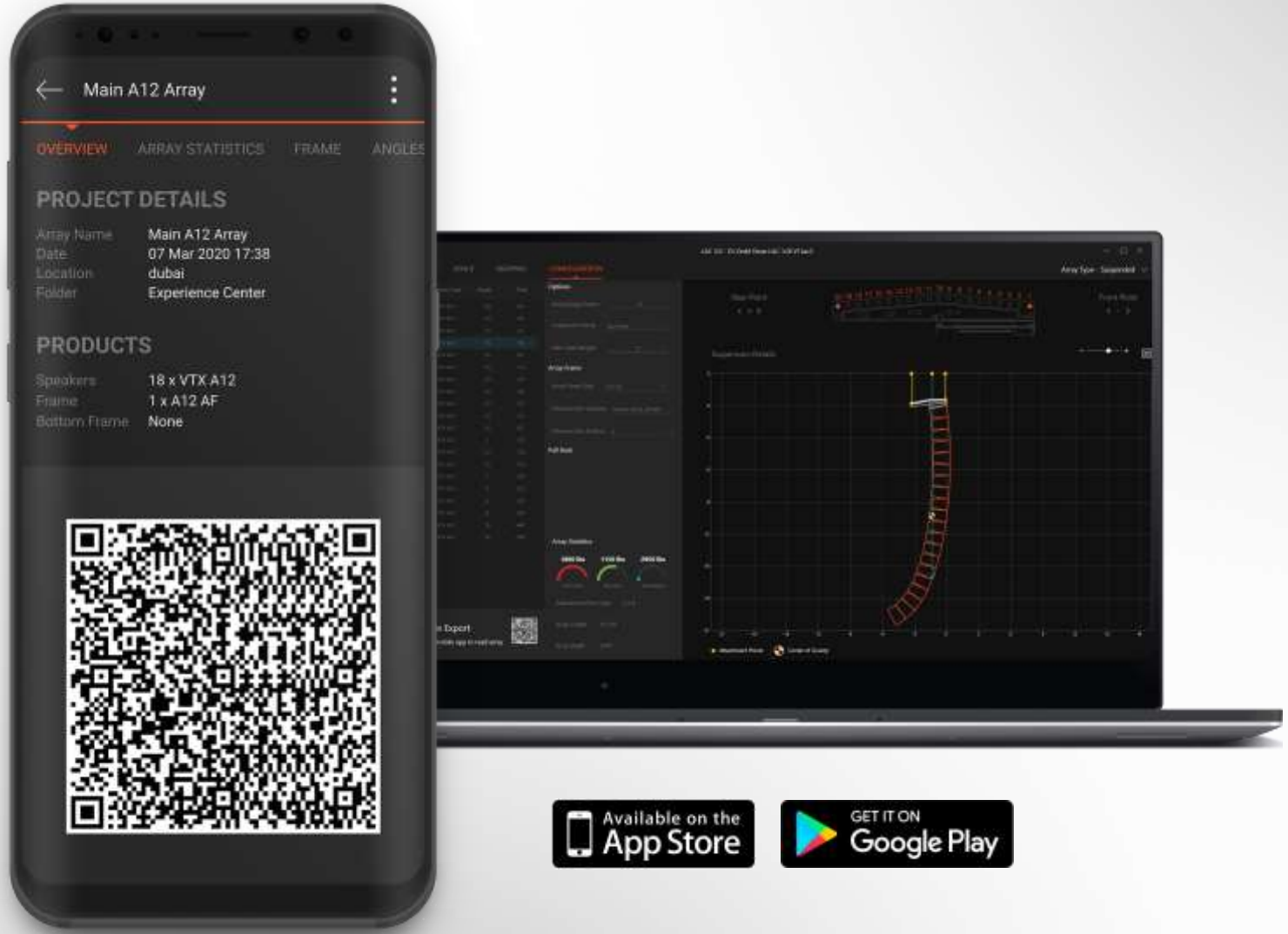


- Coverage **without** delays

- Coverage **with** delays

ARRAY LINK™

- Mobile app for iOS and Android
- Rigging information including:
  - Array size and location
  - Box-to-box angles
  - Array frame position and parameters
  - Array weight



Available on the App Store

GET IT ON Google Play

PERFORMANCE

SYSTEM CONTROL

- System control for SRX900 products
- Simple drag-and-drop interface
- Step-by-step guided workflow
- Automated grouping functionality
- Easy preset management
- Robust device discovery
- Easy networking
- Integrated NetSetter functionality

PERFORMANCE

CROSS PLATFORM

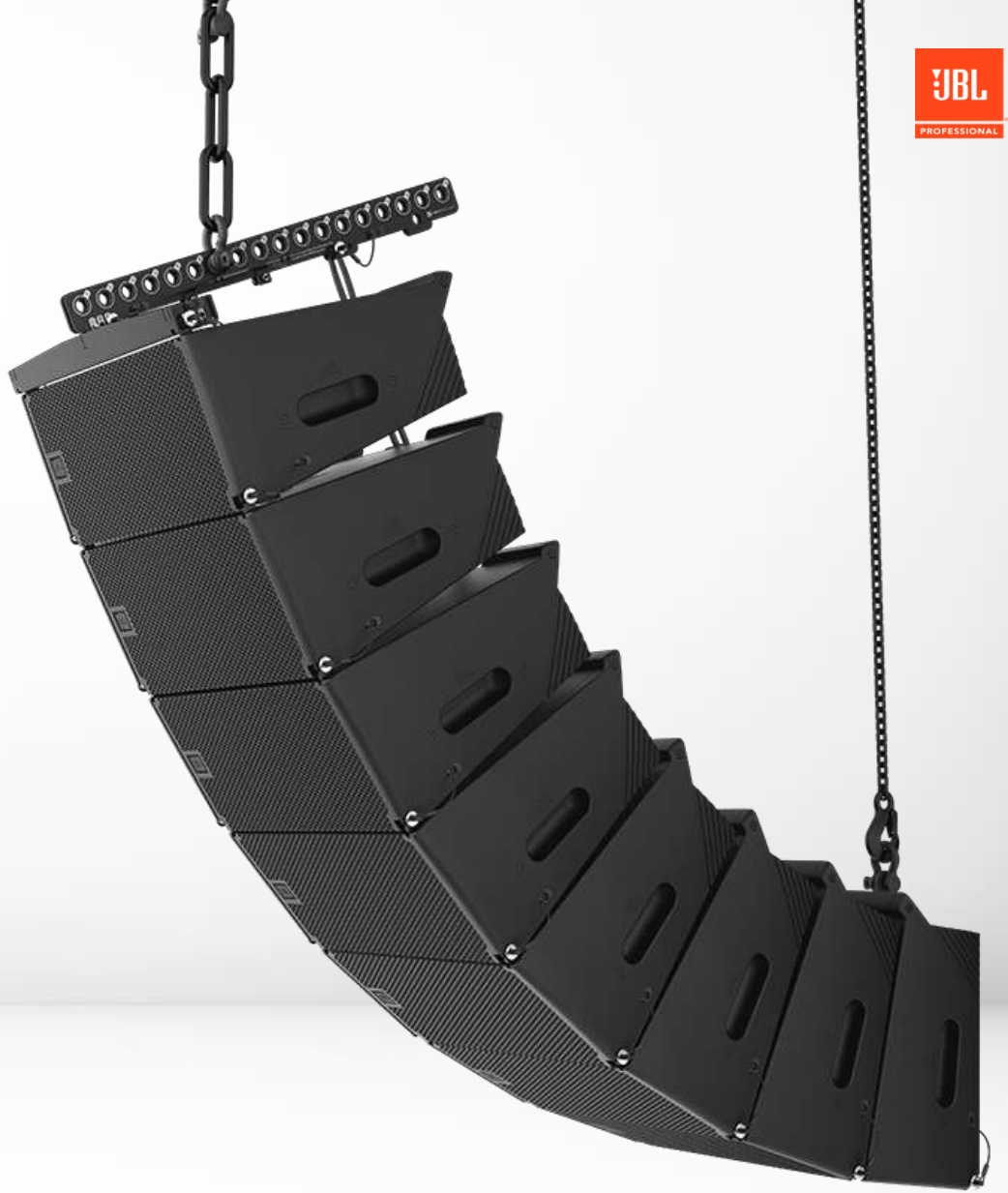
- Windows 10
- Windows 11
- iPad OS
- macOS

PERFORMANCE

NETWORKING

- New HControl connectivity
- Optimized for DHCP mode
- Easy device discovery and connectivity
- Confirmation based communication

- Support for AFMG EASE
- GLL files available for SRX906LA and SRX910LA

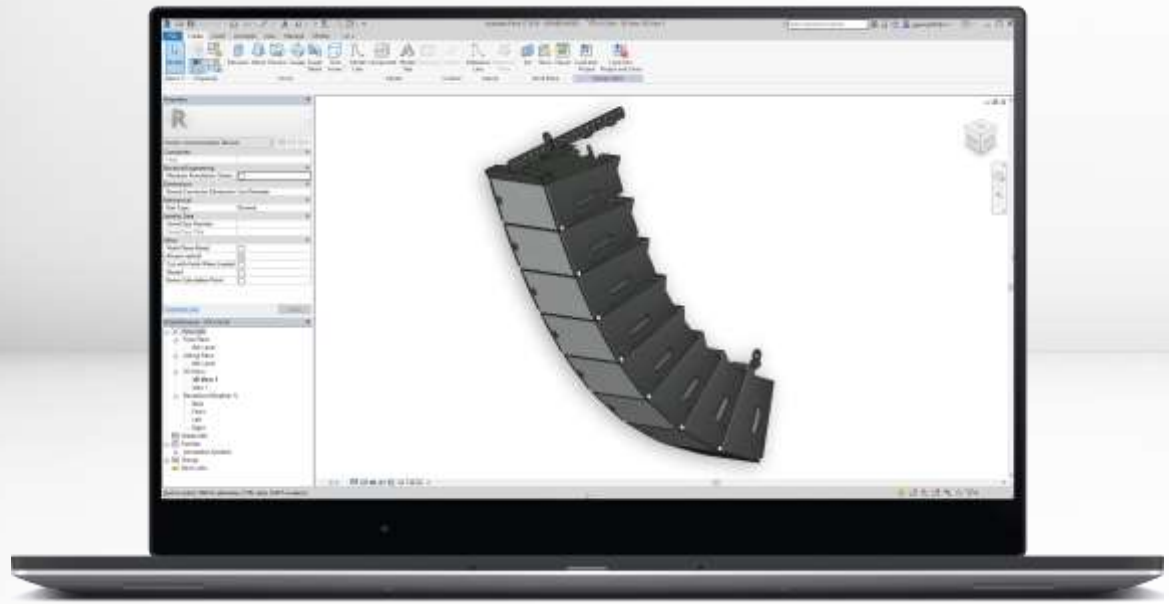


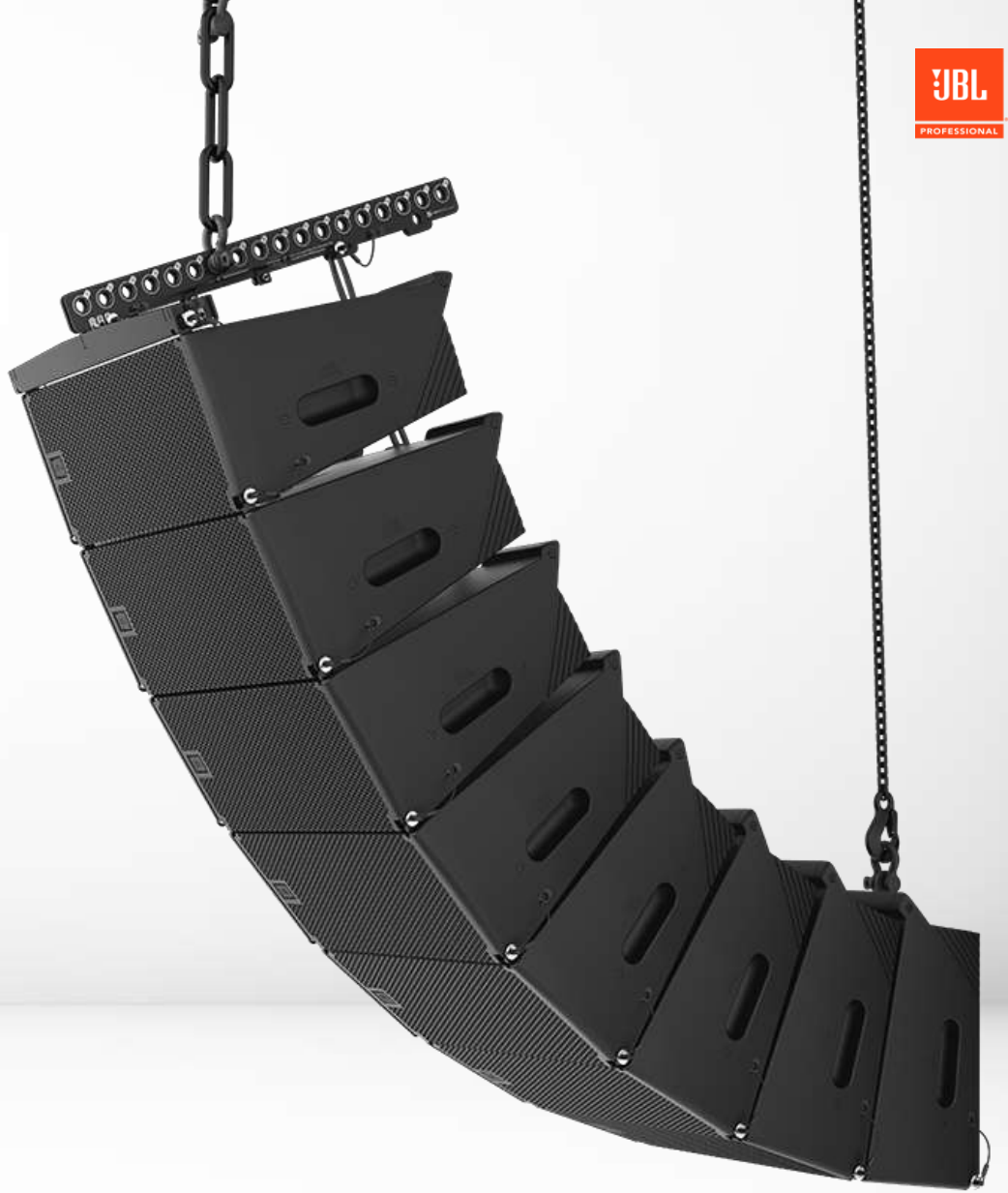
AUTODESK® REVIT®

SketchUp

AUTODESK® AUTOCAD®

- 2D/3D design files available for all popular platforms
- Library includes individual components and complete assemblies






THANK YOU