

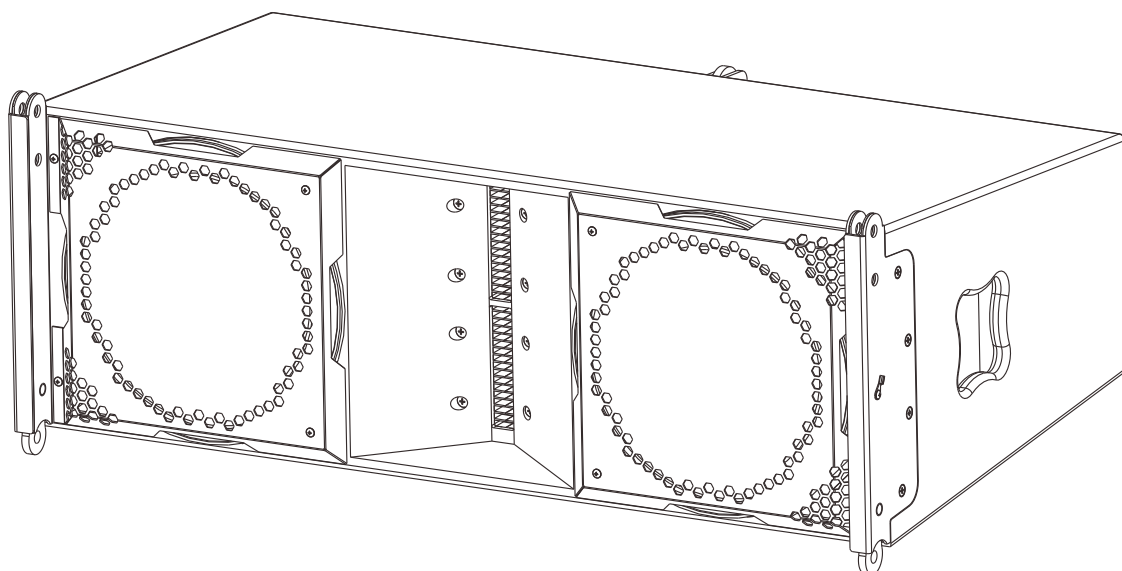


Beta Three

# TLA-121

Dual 12" line array speaker

## User Manual





UM-TLA-121-20090311 verB



# SAFETY INSTRUCTIONS


## PLEASE READ THIS MANUAL FIRST

Thank you for a buying  $\beta_3$  product. Read this manual first as it will help you operate the system properly. Please keep this manual for future reference.

**⚠ WARNING:** *This product must be installed by professionals. When using hanging brackets or rigging other than those supplied with the product, please ensure they comply with the local safety codes.*

	<b>CAUTION</b> RISK OF ELECTRICAL SHOCK DO NOT OPEN	
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.		

	<b>AVIS</b> RISQUE DE CHOC ÉLECTRIQUE NE PAS OUVRIR	
ATTENTION : POUR RÉDUIRE LE RISQUE DE DÉCHARGE ÉLECTRIQUE, NE RETIREZ PAS LE COUVERCLE (OU L'ARRIÈRE). IL NE SE TROUVE À L'INTÉRIEUR AUCUNE PIÈCE POUVANT ÊTRE RÉPARÉE PAR L'USAGER. S'ADRESSER À UN RÉPARATEUR COMPÉTENT.		

 *The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.*

**⚠ ATTENTION:** *Don't refit the system or spare parts without being authorized as this will void the warranty.*


**⚠ WARNING:** *Don't place naked flames (such as candles) close to the equipment.*

1. Read the instruction manual first before using this product.
2. Please keep this manual for future reference
3. Pay attention to all warnings.
4. Obey all operating instructions.
5. Do not expose this product to rain or moisture.
6. Clean this equipment with a dry cloth.
7. Do not block any ventilation openings. Install according to manufacturer's instructions .
8. Do not install this product near any heat source, such as a, heater, burner, or any other equipment with heat radiation .
9. Only use spare parts supplied by the manufacturer.
10. Pay attention to the safety symbol on the outside of the cover.



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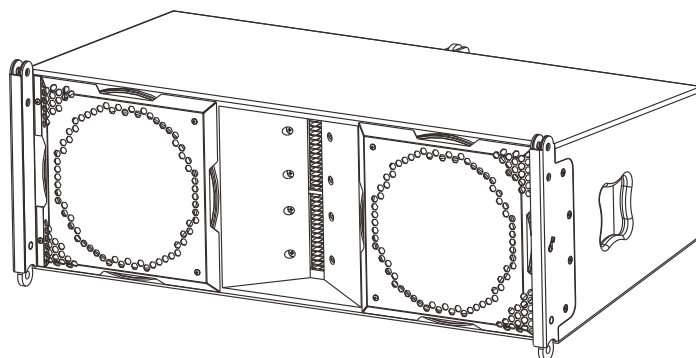
 Product information may be updated without notification, please visit [www.elderaudio.com](http://www.elderaudio.com) for latest update.

# TLA-121

Dual 12" line array speaker

## Main Features

- Dual 3" Neo compression driver.
- Dual 12" Neo woofer unit.
- Long term continuous power: LF 500W, HF 100W.
- Dispersion angle: LF 110° x 90°, HF 90°x20°.
- Frequency response: LF 90Hz-4KHz (-3dB), HF 900Hz-15KHz(-3dB).
- Sensitivity: LF 102dB, HF 110dB.
- Max SPL: LF 131dB, HF 134dB.
- The driver have function of overload protection.
- Appropriate hanging frame with shackle for installation.



## Product Description

3<sup>®</sup> TLA-121 is medium size line array speaker system, utilizing appropriate frame, which can hang 12pcs TLA-121 speaker at its maximum in vertical direction. TLA-121 is two-way speaker, built-in dual 12" Neo woofer and dual 3" Kapton compression driver. The Cylindrical wave segments of each cabinet will couple without gaps and sum up coherently. Splay angles between adjacent cabinets can be set in the range from 0° to 10°.

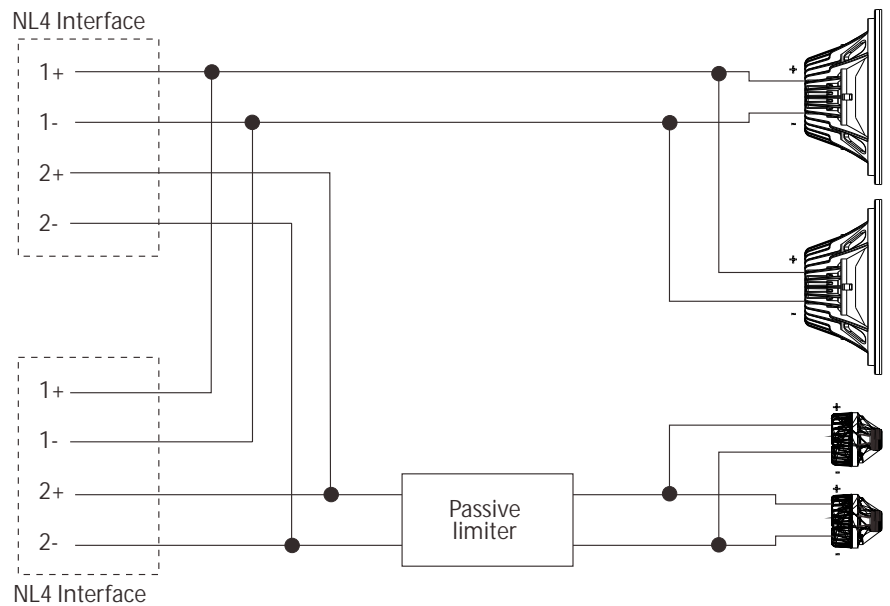
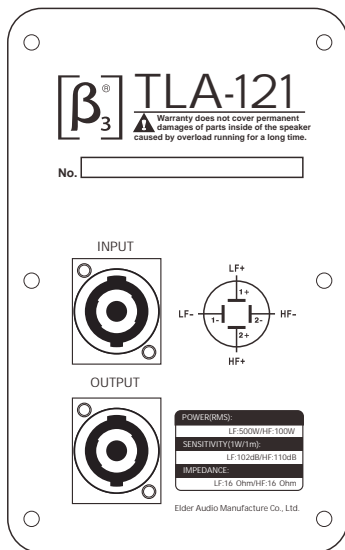
Through FEA (Finite Element Analysis) to optimize the magnetic system and copper ring, dual 12" LF driver can realize super low distortion and maximum cleanness, besides overheat protection for compression driver and perfect circuit protection for reliability. TLA-121 adopts multi-functional structure design, suitable for live performance and fixed installation. The cabinet is made of 15mm, 11 layers birch plywood and weather resistant polyurethane finish. The cabinet is included appropriate flying frame, which can be installed and hanged conveniently according to different environment.

## Application

- Religion Place
- Auditorium
- Multi-function hall
- Theater
- All kinds of living performance
- Sports events
- Mobile performance

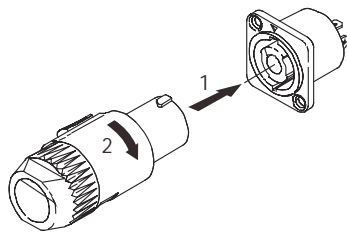
TLA-121 has two Speakon NL4 socket and amplifier connection. Two parallel connection socket is convenient to connect with another speaker.

Terminal Plate

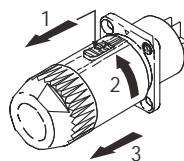


NL4 Connection

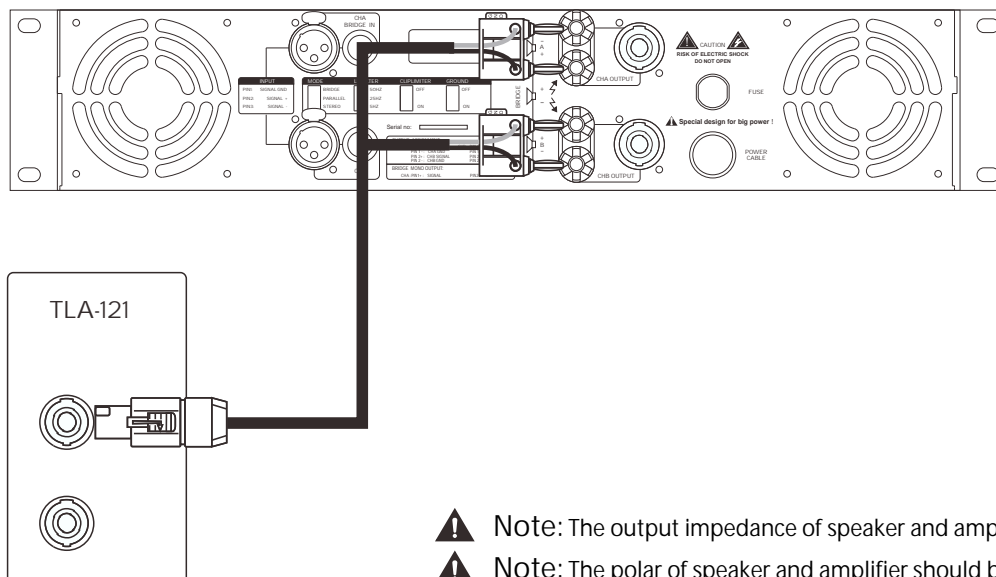
1: Connection



2: Disconnection

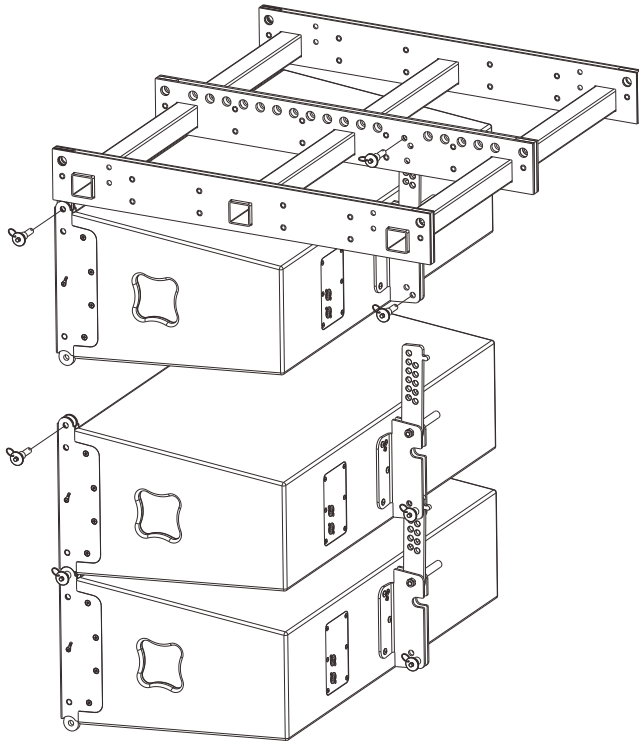


System Connection Demonstration



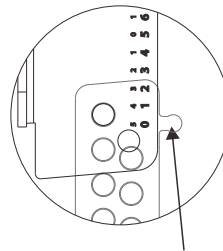
Installation Reference

1: Hanging



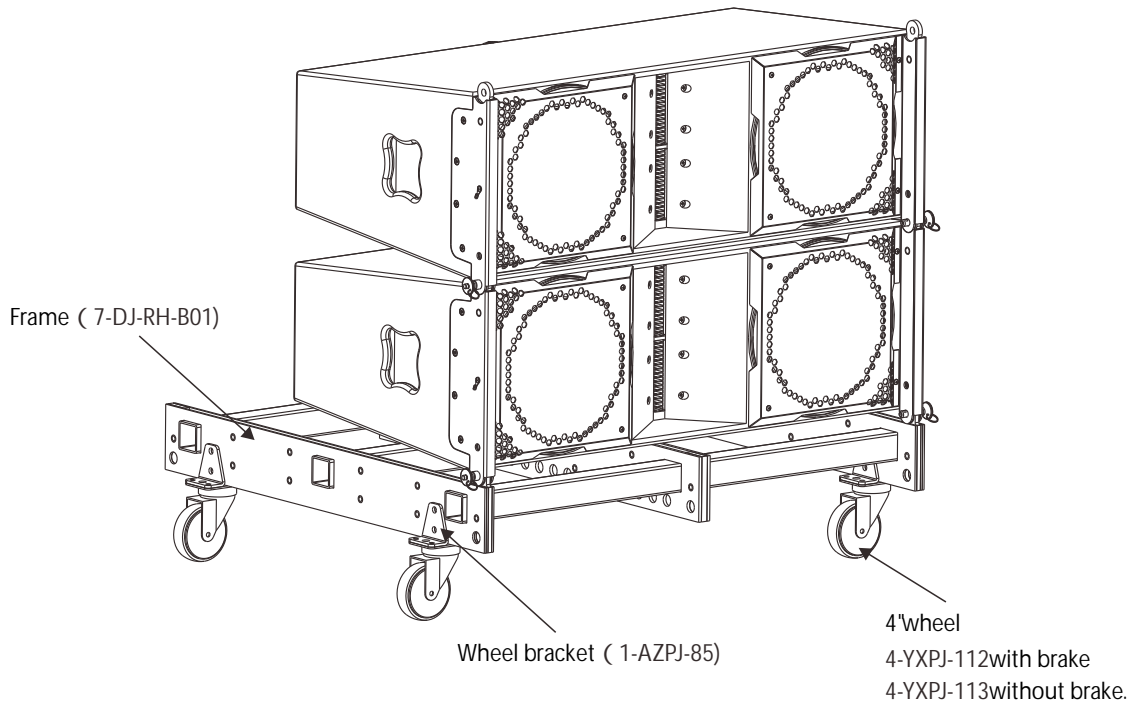
Installation Accessories

TLA-121 speaker includes appropriate flying frame and 4" wheel, which can be installed or hanged conveniently according to different environment.  
 Hanging system includes TLA-121 frame, front hanging plate, rear hanging plate and lockpin.  
 The rear hanging plate is fixed on cabinet to choose splay angle between adjacent speakers quickly.  
 TLA-121 frame is soldering steel frame, which can hang 12pcs TLA-121 speaker at its maximum.



The outstanding point of rear hanging plate indicates the present angle.

2: Installation drawing with wheels

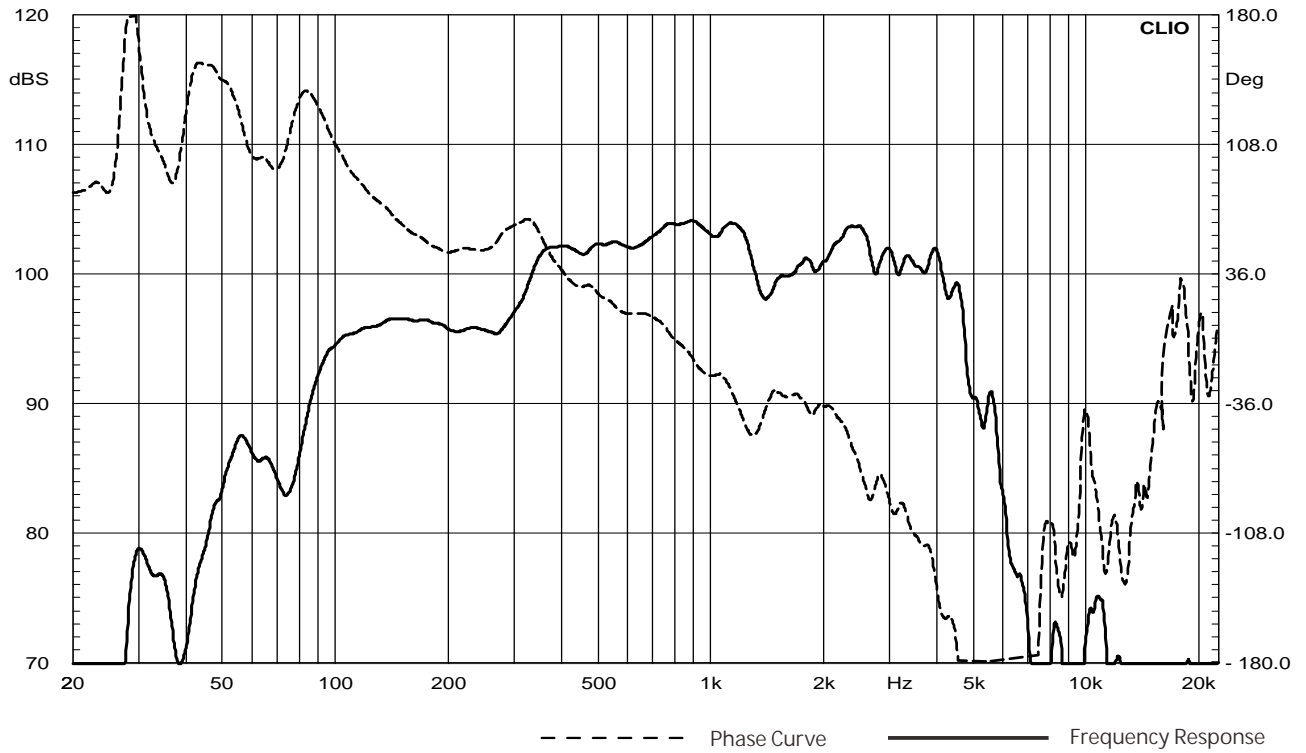




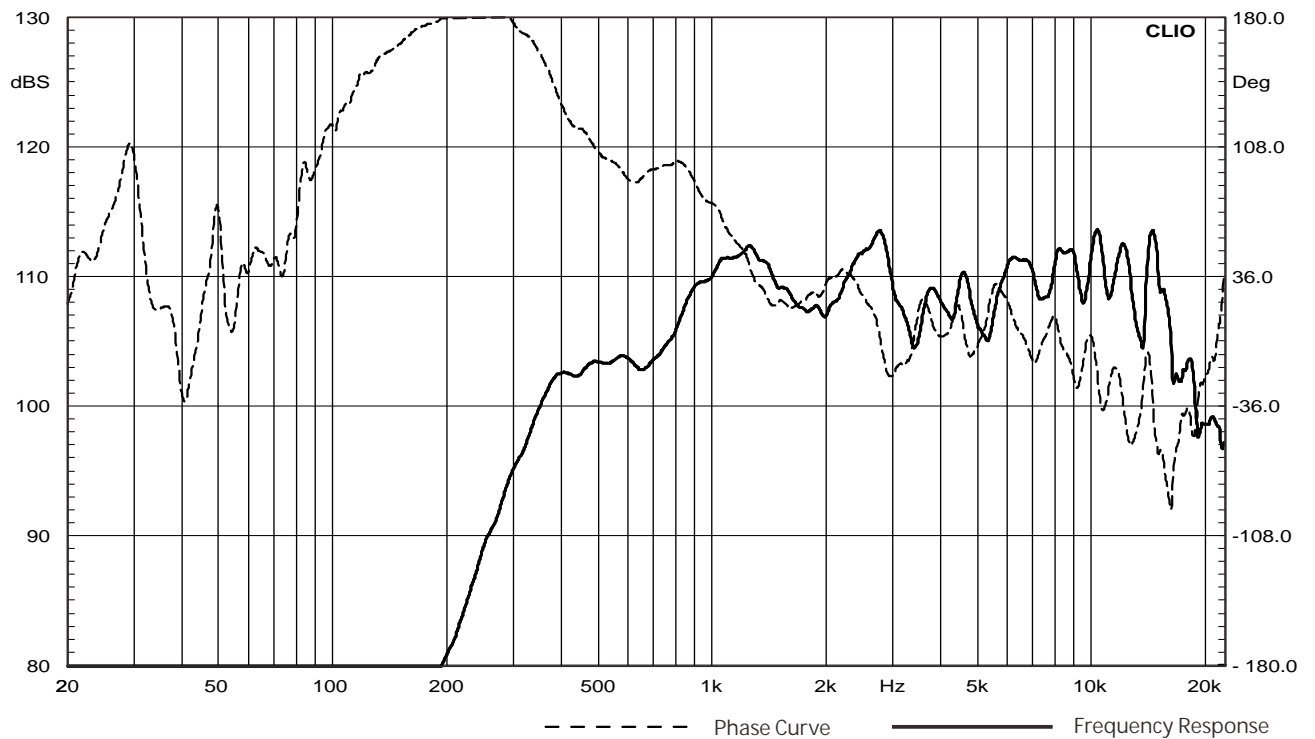
## Specification Sheet

System type:	Dual 12" line array speaker
HF driver:	Dual 3" Neo compression driver
LF driver:	Dual 12" woofer
Frequency response (-3dB):	LF:60Hz-4kHz HF:900Hz-15kHz
Sensitivity (1W@1m):	LF:102dB HF:110dB
Max SPL(1m):	LF:129dB/135dB(PEAK) HF:130dB/136dB(PEAK)
Power:	LF: 500W HF: 100W (RMS) LF: 1000W HF: 200W (MUSIC) LF: 2000W HF: 400W (PACK)
Dispersion ( H × V ) :	LF:30° × 90° HF:110° × 80°
Rated impedance:	LF:8 Ohms HF:8 Ohms
DC impedance:	LF:6 Ohms HF:6.4 Ohms
Cabinet:	15mm 11 layers birch plywood
Installation:	Appropriate frame with 3/4"shackle
Carry:	2 wooden handle
Finish:	weather resistant polyurethane finish, black powder coating for grille.
Connector:	NI4 × 2 @ LF:1+ 1-, HF2+2-
Cabinet dimension(W × H × D):	960 × 372 × 623mm(37.8 × 14.6 × 24.5in)
Package dimension(W × H × D):	700 × 1080 × 440mm(27.6 × 42.5 × 17.3in)
Net Weight:	37kg(81.4 lb)
Gross weight:	43kg(94.6 lb)
Optional accessory:	Frame (7-DJ-RH-B01), Wheel bracket (1-AZPJ-85), 4" wheel (4-YXPJ-112 with brake, 4-YXPJ-113, without brake.)

Frequency Response/phase Curve-LF

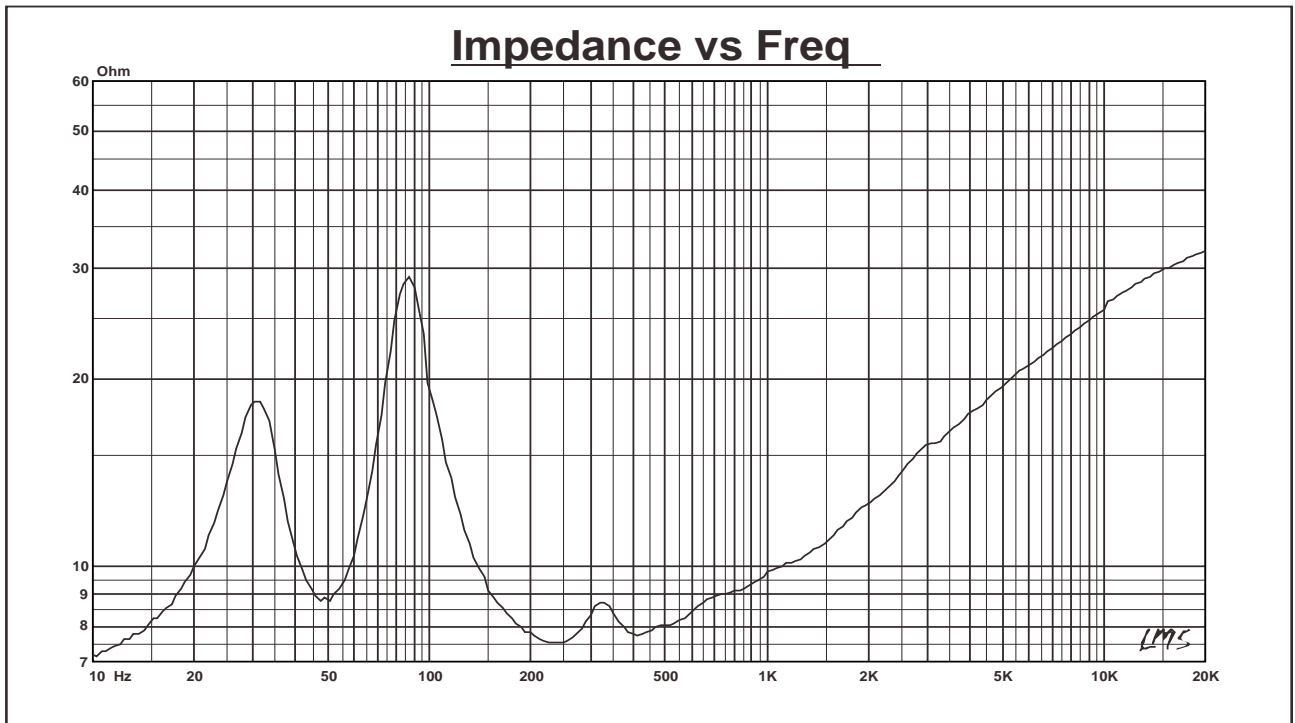


Frequency Response/phase Curve-HF

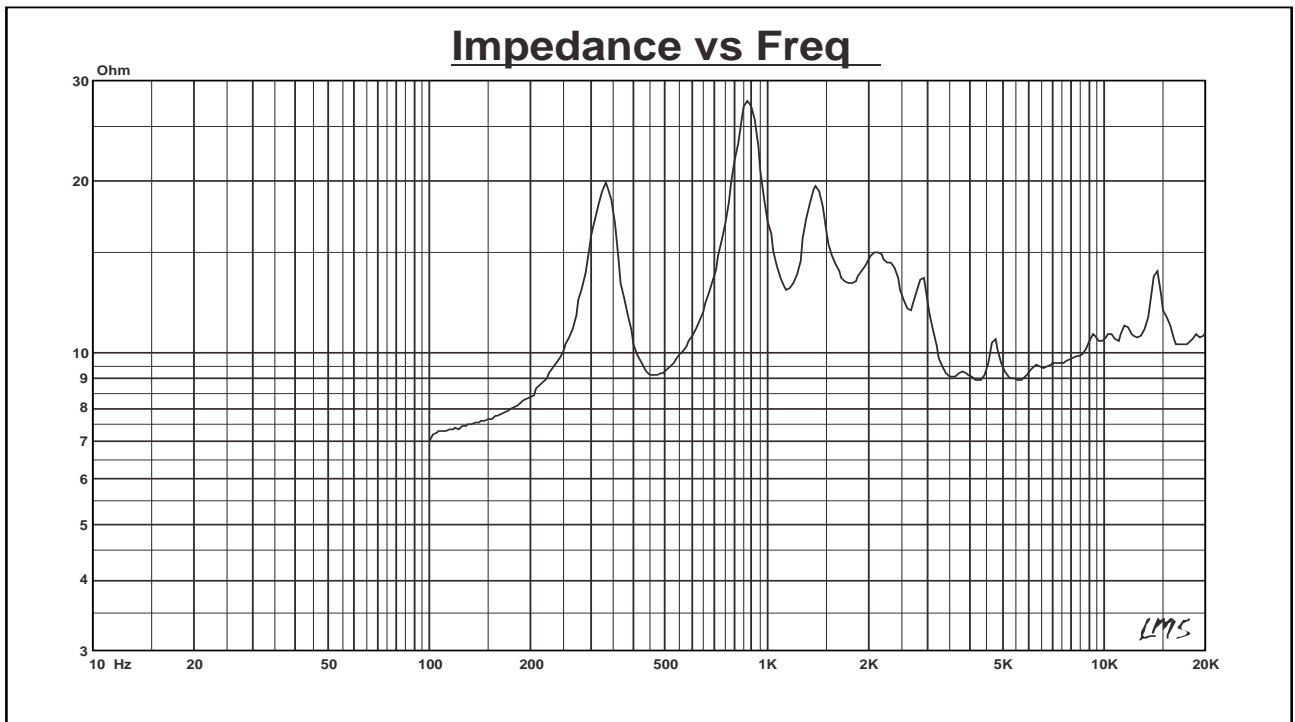




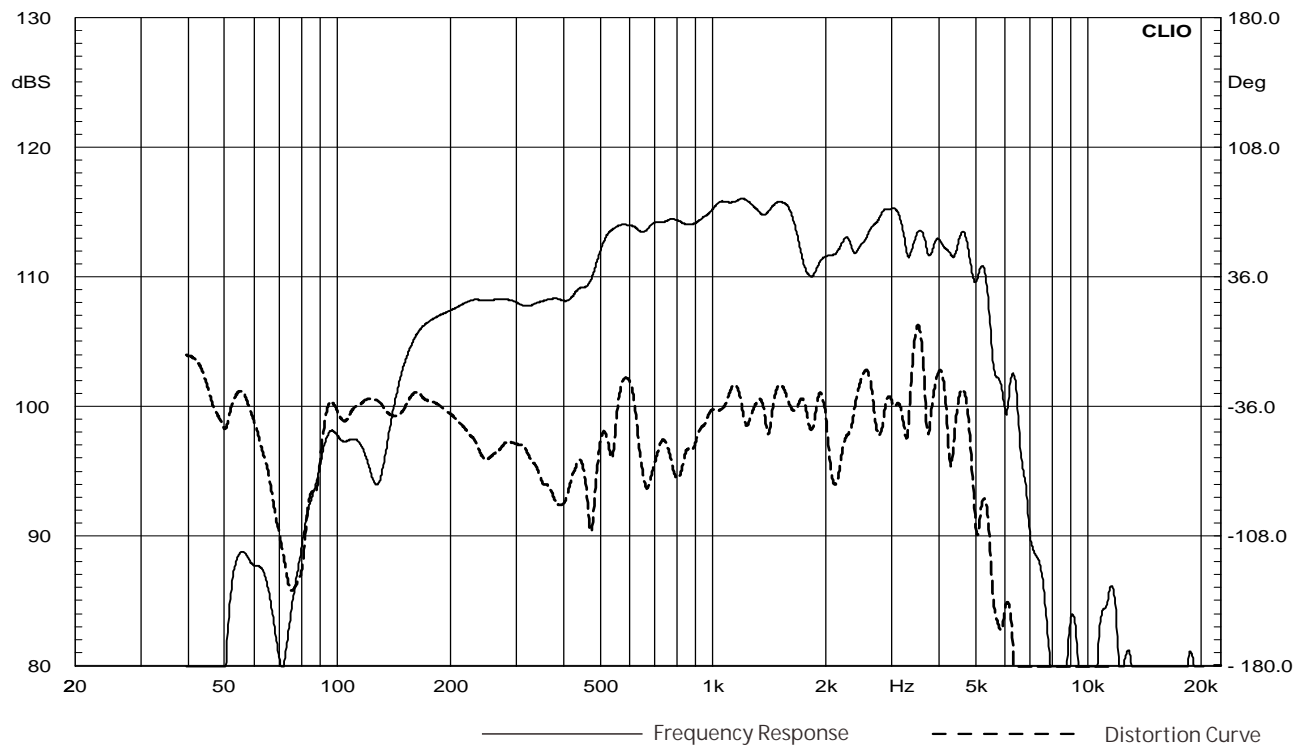
Impedance Curve-LF



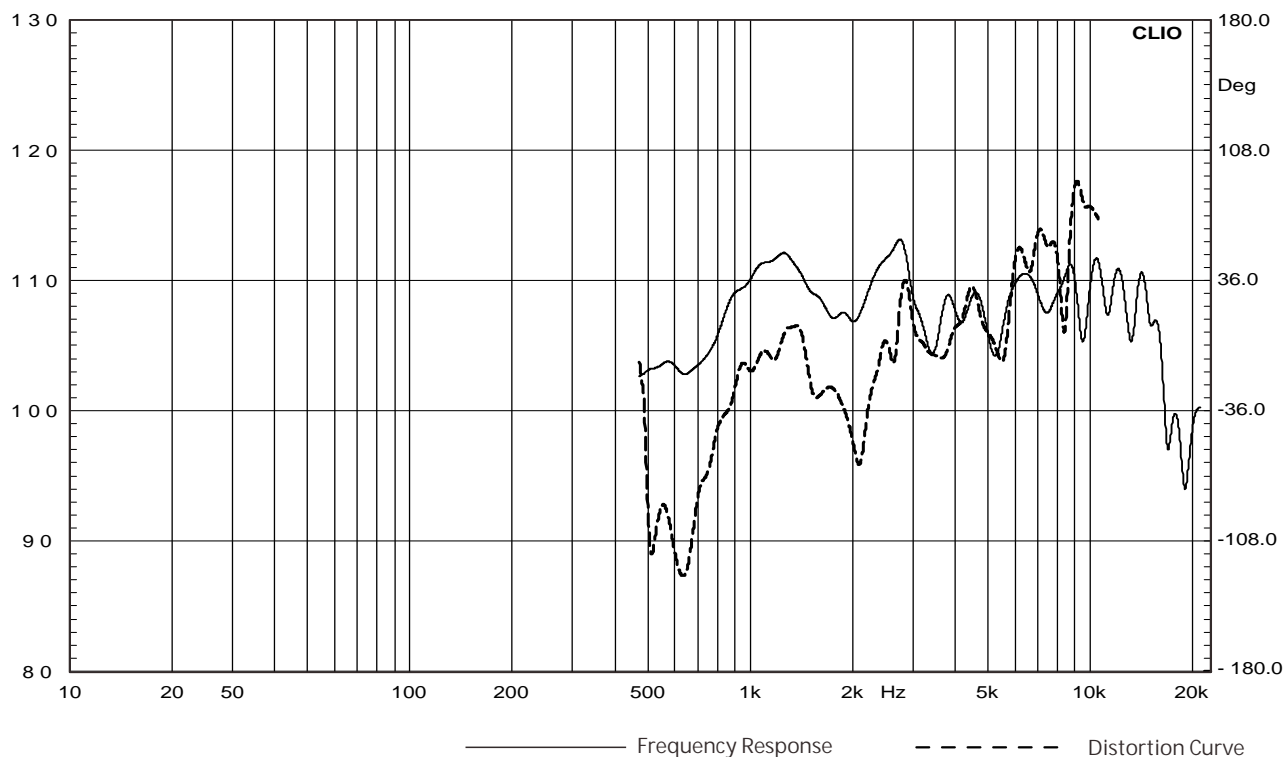
Impedance Curve-HF



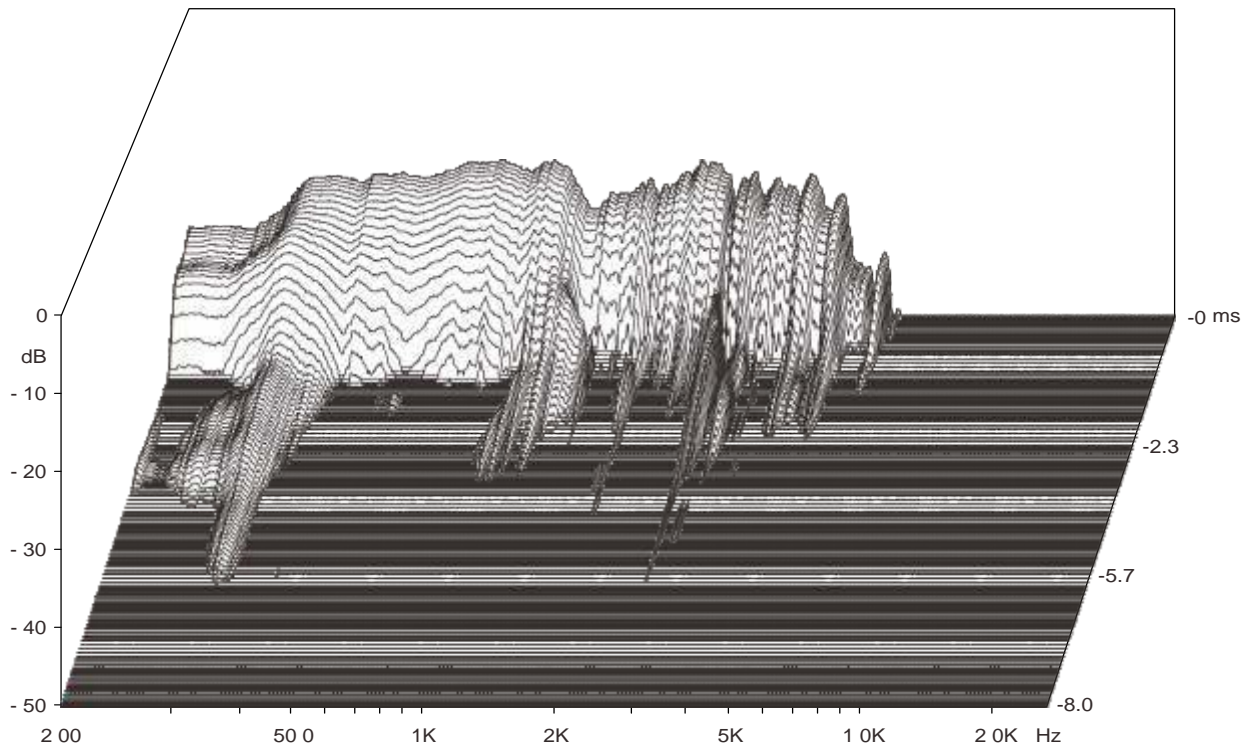
### Harmonic Distortion-LF



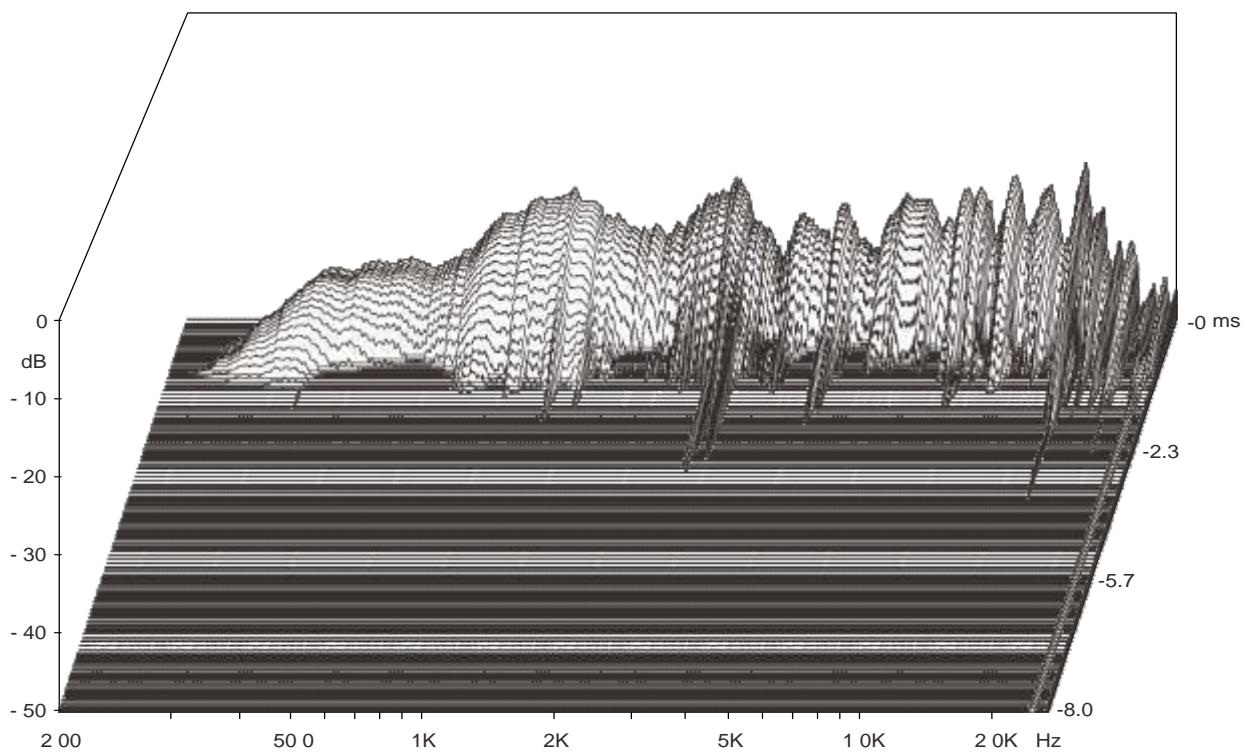
### Harmonic Distortion-HF



Waterfall-LF

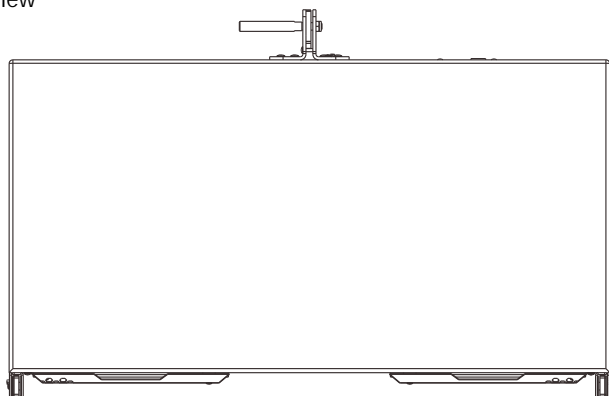


Waterfall-HF

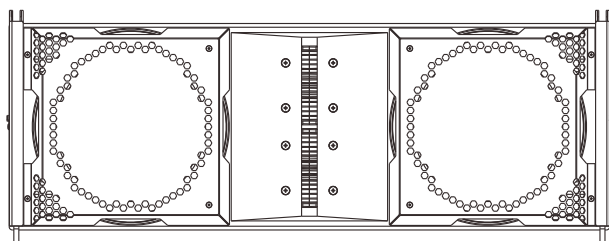


Dimension Drawing

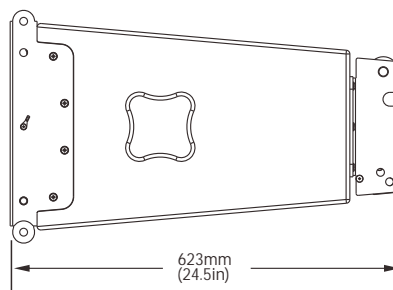
Top view



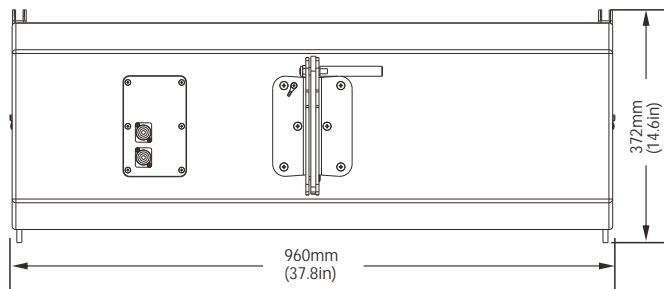
Front view



Side view



Back view



Notes:



**Beta Three**