



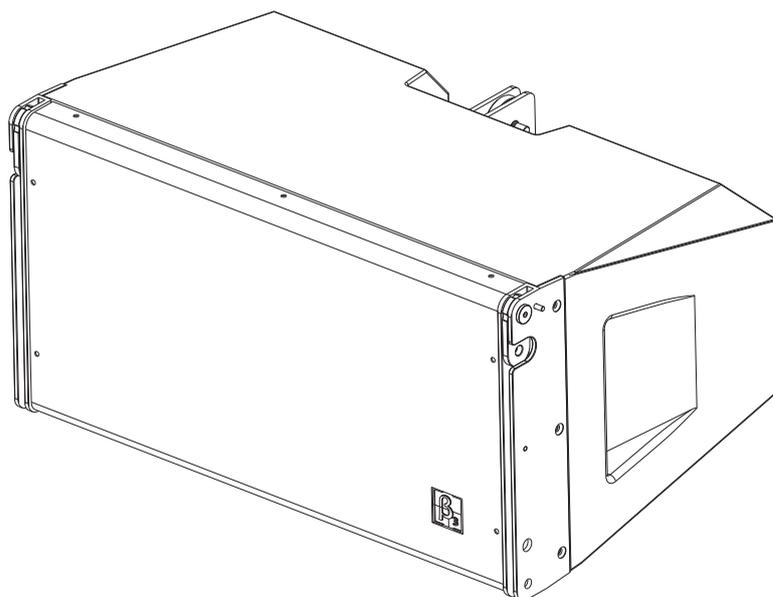
Beta Three

VR110

10" 3-Transducer Two Way Full Range Speaker

VEYRON PROFORM LINE ARRAY SYSTEM Series medium-size Line Array System

Users Manual



UM-VR110-20180816 Ver A

SAFETY INSTRUCTIONS

PLEASE READ THIS MANUAL FIRST

Thank you for buying β_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.*

	CAUTION 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.		

	AVIS 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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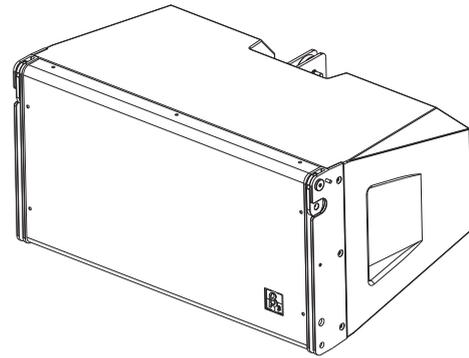
 Product information subjects to be updated without notification,
Please visit www.beta3pro.com for latest update.

VR110

3 Transducers 2-way 10" Full Range Loudspeaker

Features:

- VR110 is a full range speaker of midium sized array system. It compriesed by a 10" Neodymium magnetic sub units, two 44mm Neodymium treble drivers and built-in crossover.
- T-shaped cabinet and easy installation and uninstillation with lockpin, 10° adjustable cabinet angle range.
- 2pcs VR110 and 1pcs VR118suba make up excellent point source system.
- Easily to install and uninstill.
- VR110 Features of Sound Quality: clear, full and powerful.



Product description:

β 3 VR110 full range speaker comprised by one 10" Neodymium woofer and dual 44mm Neodymium drivers, it belongs to one of the VEYRON series Medium full-frequency speakers. The woofer unit uses a 65mm voice coil. The speaker crossover handled very reasonable.

Regarding structure of VR110, it applies the appearance with new surface painting process by advanced painting technology. And its T shape structure makes hardware installation and uninstillation easily by lockpins. Furthermore, the speaker can be conveniently adjusted 10 degrees vertically by angle adjustment.

The woofer unite uses a large power 65mm voice coil. The material of voice coil skeleton is high intensity TIL and the voice coil is wrapped by round copper wires, which not only strengthen its power handling ability, but also improve its sensitivity.

44mm titanium voice coil of its HF driver is wrapped by aluminum flat wire ring. Patented technology of the high frequency waveguide and horns also help a lot to sound quality that completely satisfies customers' demands.

VR110 cabinet is made up of 15mm thick laminate, brand-new acoustic design with compact, smart and fashionable appearance. Its polyurethane paint stands wear and tear. The tensile resistance

of itself is up to 3500N. Customized lifting hardware is applied to installation. The speaker itself is not influenced by other external force, but its own weight, when lifting going on, The weight of all speakers suffered by customized hardware is reasonable designed by our engineers. And the hardware can suffer the max pulling force 45000N, 7 times to the safety standards of entire product.

The front plate adopts overall grill design with grill material Q235, powder spray technology, which make the grill not only has high strength, but also has good.

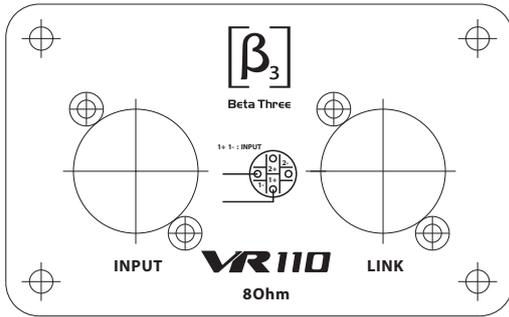
salt-resistance. It can resist salt spray .Rain proof can be achieved by external stretching cloth design for iron grill. VR110 full range speaker, working with VR118Suba bass speaker, is used to the application including Gymnasium, theater, arena, living performance venue, etc.

Application

- Gymnasiums
- Theatres
- Arenas
- Living Performance Venue

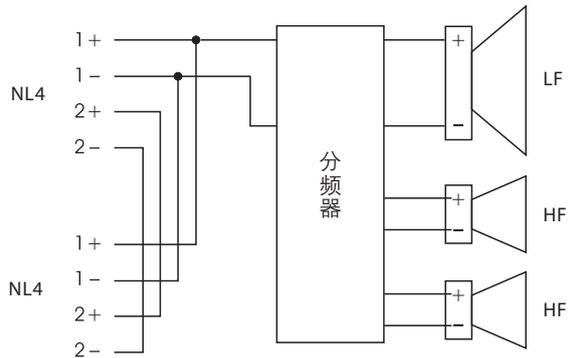
VR110 has two speakon NL4 interfaces and power amplifier connections. Two parallel interfaces make it easy to connect to the other speaker.

Back Plate:



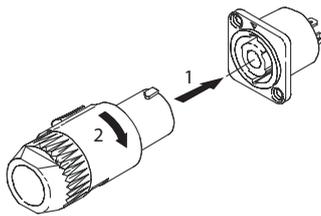
Connection:

1+1-INPUT

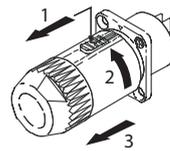


NL4 Connection:

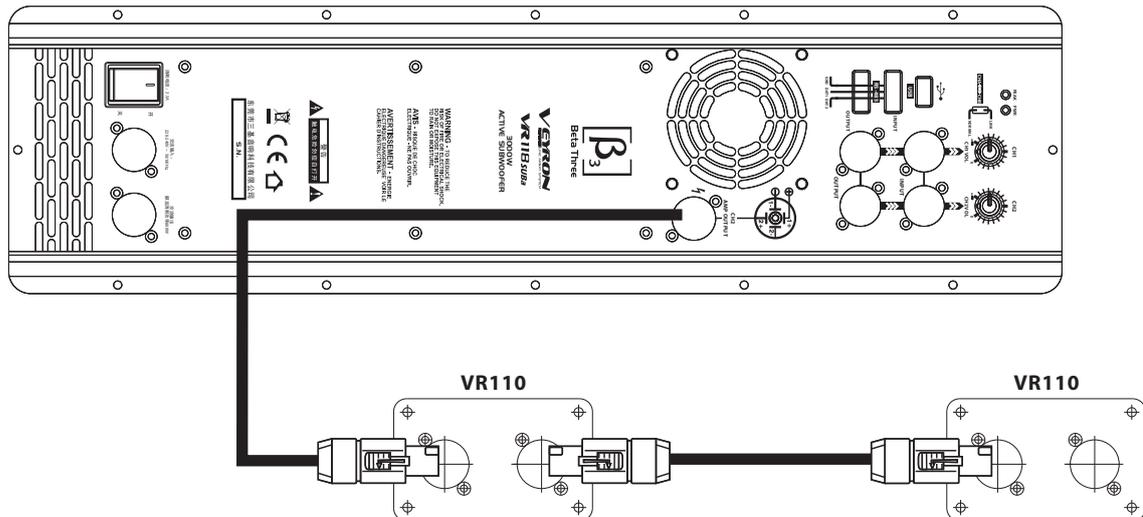
1: Connection



2: Take Off



Example:



⚠ Note: when connecting the system, keep the output impedance of speaker matches the amplifier's.

⚠ Note: connecting the polarity correctly.

INSTALLATION

Installation Instructions

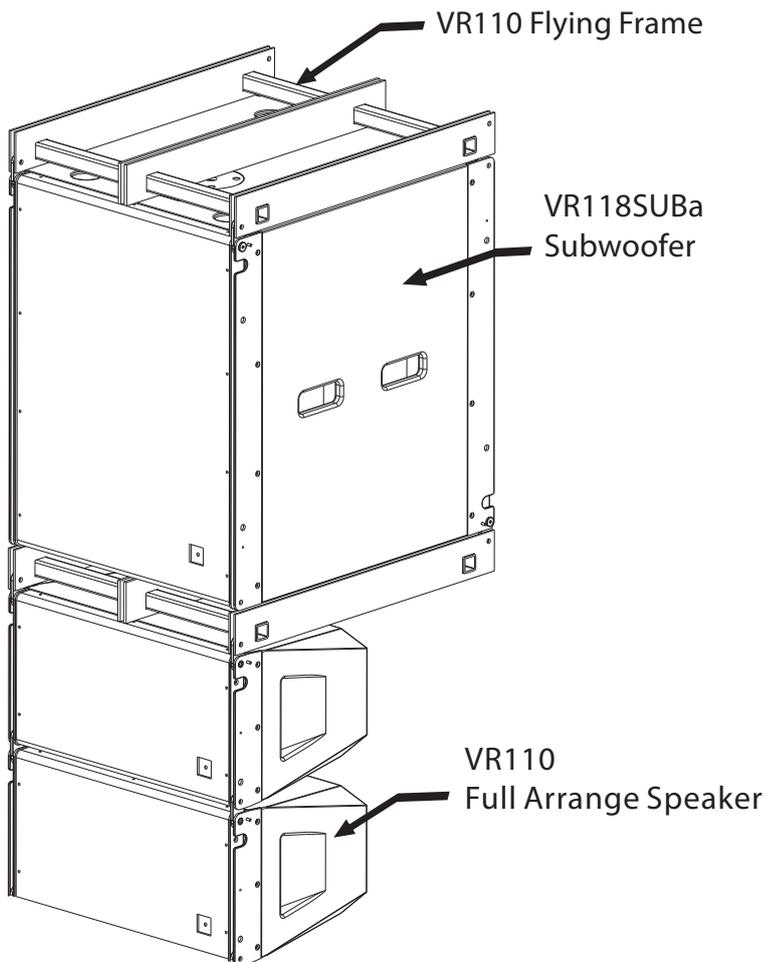
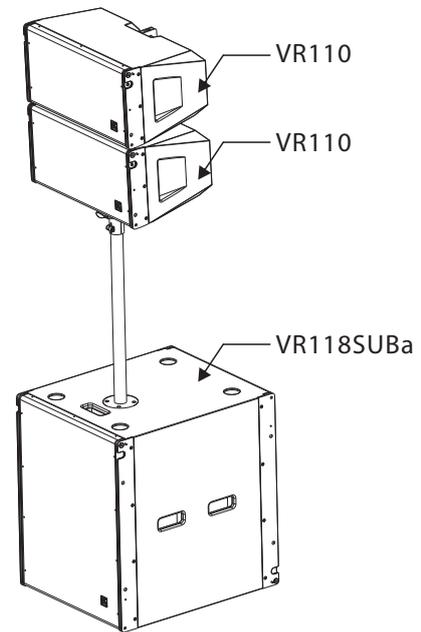
VR110 cabinet is equipped with special hanging system. It can be installed easily and reliably because of different environment.

Hanging system include Flying frame of VR110. VR110 cabinet front hanging, rear hanging (back of box hanging) and locking pin .

The rear hanging pendant has been fixed on the cabinet for quick and convenient selection of the straight angle of the speaker in the vertical direction

VR110 hanger is steel frame structure, standard with 1 VR118SUBa subwoofer and 2 VR110 full frequency speakers

Matching installation



Warning: All accessories should be with safety factor larger than or equal to 5:1 or refer to local safety standard.

Specification

Construction:	High pressure level two way passive line array full frequency loudspeaker
Transducer:	2x44 mm Neo compression driver 1X65mm Neo LF
Frequency response (-3dB):	55Hz18kHz
Sensitivity(1W@1m):	97dB
Maximum SPL(1m):	118dB/124dB(Peak) power: 250W(RMS),500W(PG),1000W(PK)
Dispersion(H×V):	100°× 30°
Rated Impedance:	8 Ohms
Crossover point:	1.6KHz
Cabinet:	15 mm plywood
Installation:	easy installation system
Finish:	surface of cabinet with Black polyurethane spray surface of grill with black mesh
Connector:	NL4× 2
Cabinet Dimension (W× D× H):	540× 334× 280mm (21.3× 13.2× 11.0in)
Packing Dimensions (W× D× H):	430× 383× 655mm (16.9× 15.1× 25.8in)
Net weight:	17.0kg(37.4 lbs)
Gross weight:	19.0kg(41.8 lbs)
Accessories(Optional):	Flying frame

Speaker Testing Method

1. Frequency Response

Use pink noise to test the speaker in the anechoic chamber, adjust the level to make the speaker work at its rated impedance and set the output power at 1W, then test the frequency response 1m away from the speaker.

2. Sensitivity

Use full range pink noise which has been modified using an EQ curve to test the speaker in the anechoic chamber, Increasing the signal to make the speaker work at its rated impedance and set the power output at 1W, then test the sensitivity 1m away from the speaker.

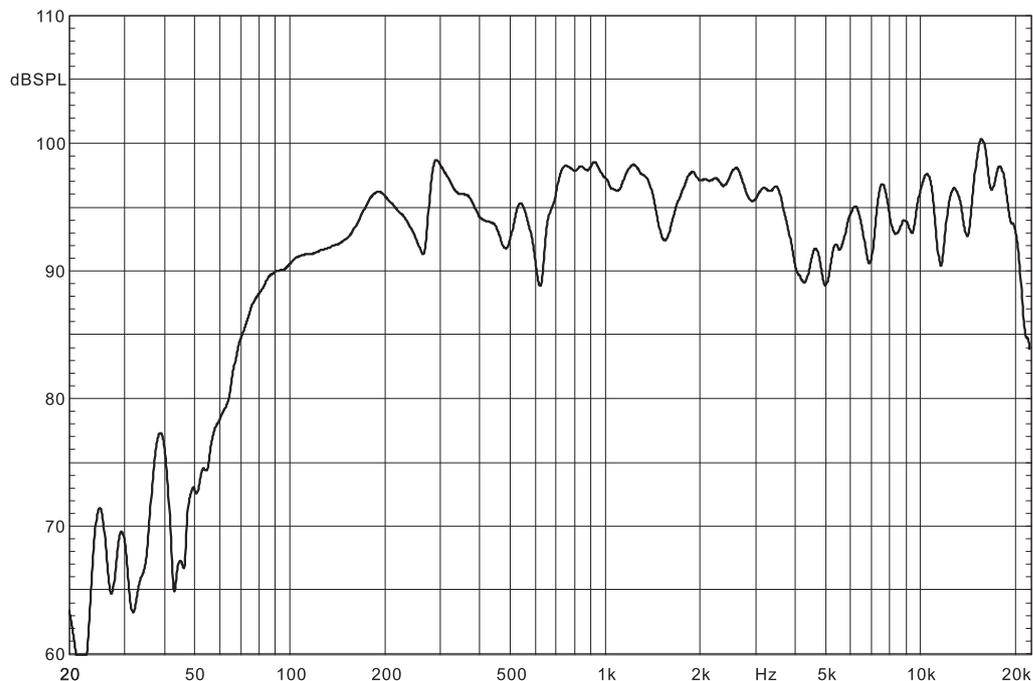
3. MAX.SPL

Use full range pink noise which has been modified using an EQ curve to test the speaker in the anechoic chamber , increase the signal to make the speaker work at its maximum power output level, then test the SPL 1m away from the speaker.

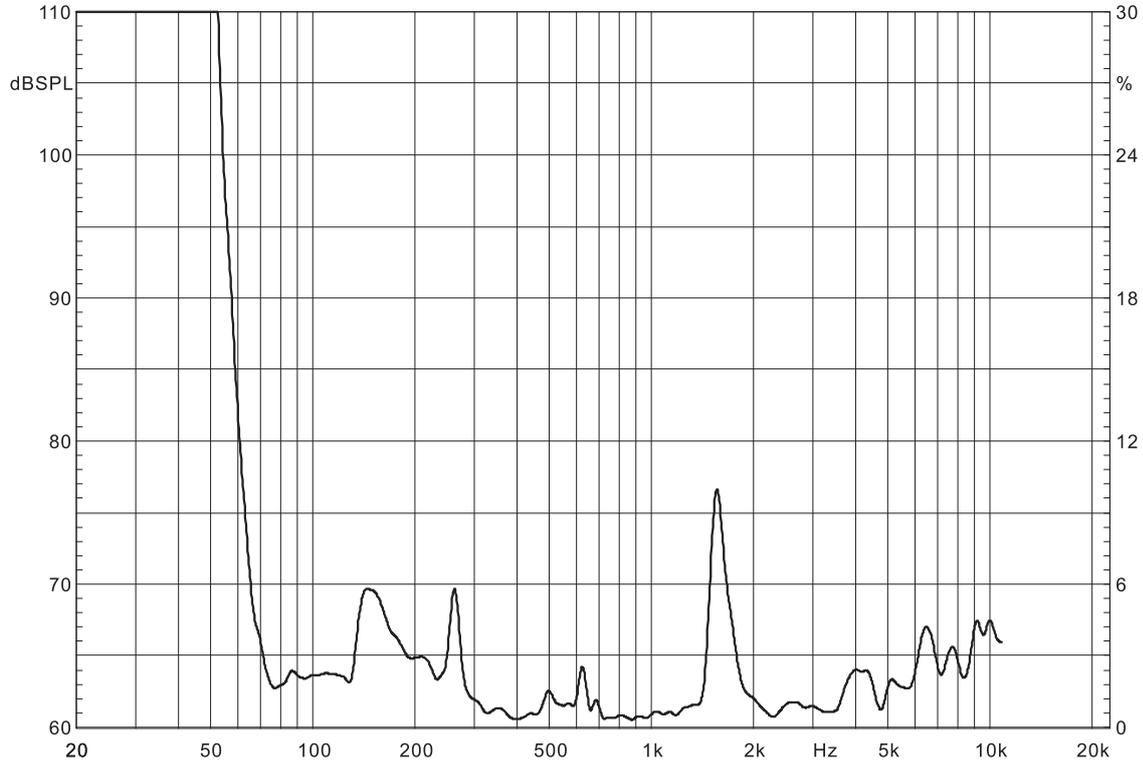
4. Rated Power

Use pink noise to the IEC#268-5 standard to test the speaker, increase the signal for a continuous period of 100 hours, the rated power is the power when the speaker will show no visible or measurable damage.

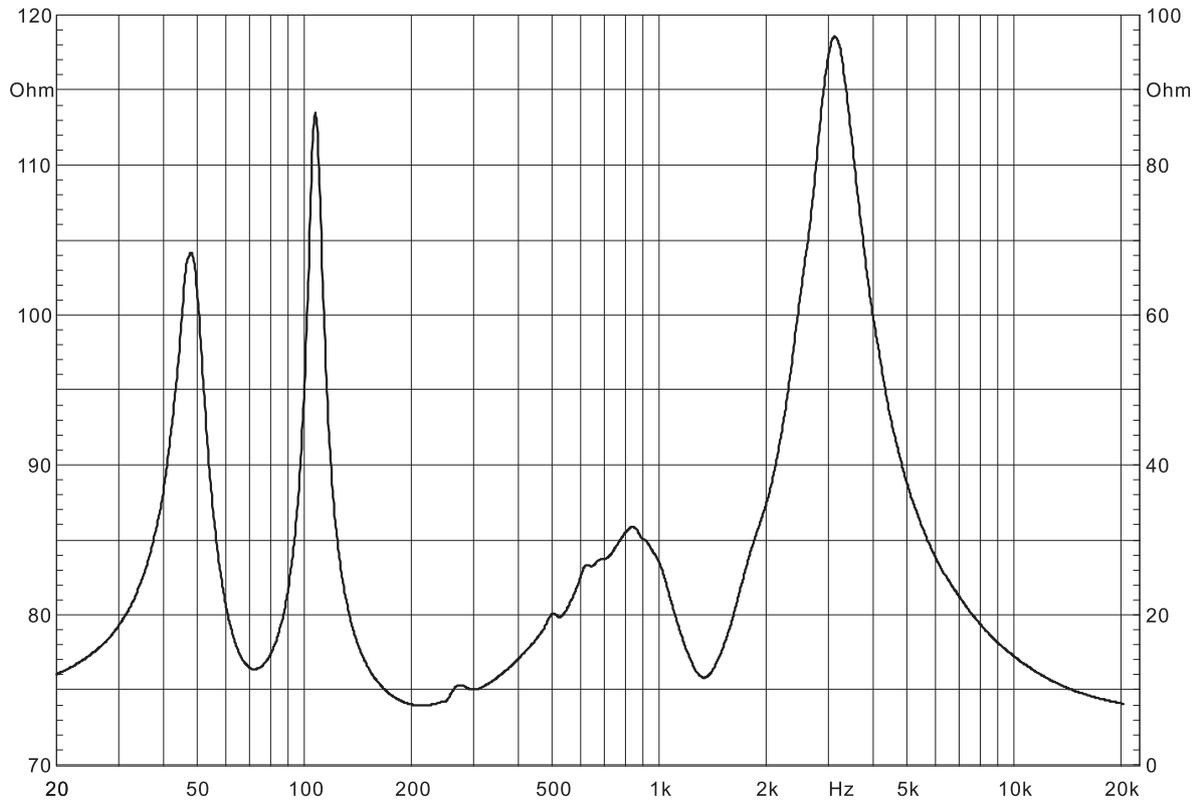
Frequency Response



THD

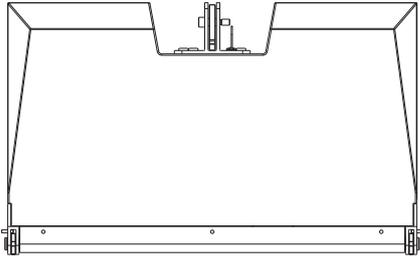


Impedance

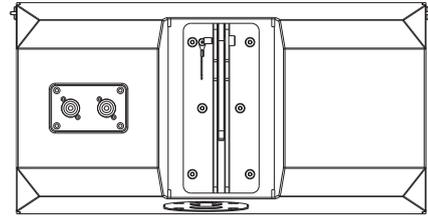


2D Dimension

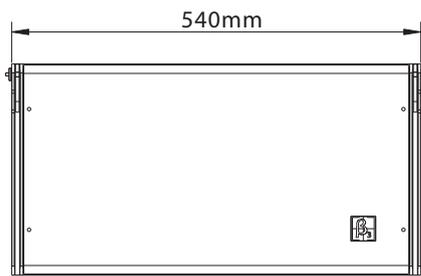
Top view



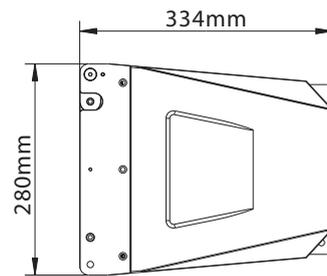
Back view



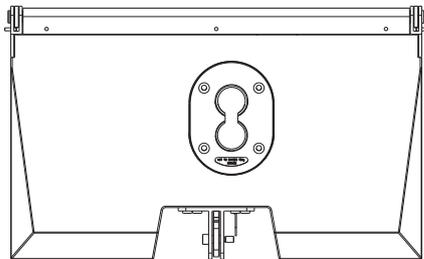
Front view



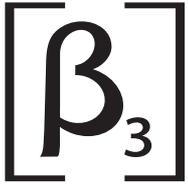
Side view



Bottom view



Notes:



Beta Three