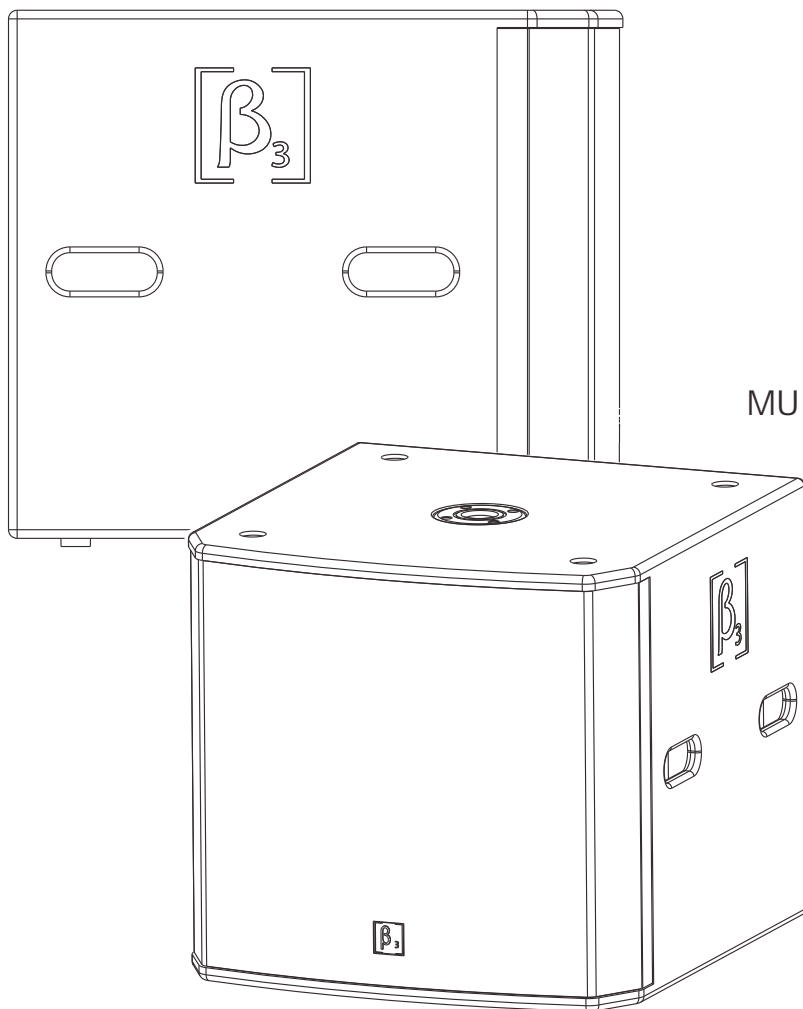




Beta Three



# MU18B

18" subwoofer

MU Series Pro Loudspeaker System

User Manual





UM- MU18B- 20090928 ver A



# 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.



CONTENT

INTRODUCTION	3
Features	3
Description	3
Applications	3
CONNECTION	4
Terminal Plate	4
NL4 Connection	4
System Connection Reference	4
Loudspeaker Connection	5
INSTALLATION	6
Installation Accessories	6
Installation Reference	6
TECHNICAL SPECIFICATION	7
Technical Sheet	7
Frequency Response And Impedance Curve	7
2D Dimension	8

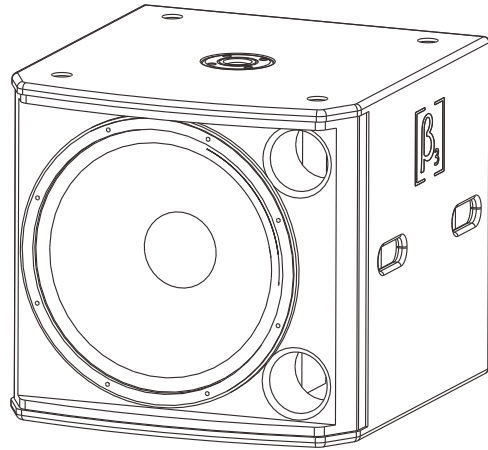
 Product information subjects to be updated without notification, please visit [www.elderaudio.com](http://www.elderaudio.com) for latest update.

# MU18B

18" subwoofer

## Feature

- Single 18" phase inverted subwoofer.
- Sensitivity is 97dB, Max. SPL is 124dB.
- Rated power is 500W, peak power is 2000W.
- Powder coated grille can be used outdoors for 5 years. The foam backside of the grille can prevent the rain.
- The new paint materials and advanced painting technology make the surface very rigid.



## Description

3<sup>®</sup> MU18B is a subwoofer adopting new structure and new painting technology in MU family. It integrates a 18" /8ohm woofer with 100mm voice coil. The rated power is 500W, peak power is 2000W. Symmetrical magnet circuit design reduce the impar HD effectively and enhance the LF sound quality.

Cabinet is made of 18mm birch plywood with advanced environmental protection Polyurethane-based painting which is very rigid. The cabinet strength reach to 4500N. Q235 grille is coated by powder to provide strong ultra-Weatherability, can be used outdoors for 5 years. The backside foam of grille can prevent the rain.

The special feet in the bottom can assure the stable working.

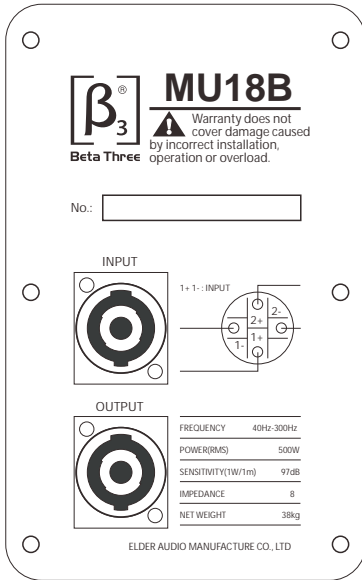
MU18B is mainly designed for the applications in conference room, multifunctional hall, small auditorium, church, living performance.

## Application

- Church
- Conference Room
- Multifunctional Hall
- Medium And Small Auditorium
- Medium And Small Living Performance

Two NL4 connectors are available for amplifier connections. Paralleled connector is very convenient for another speaker connection.

Terminal Plate

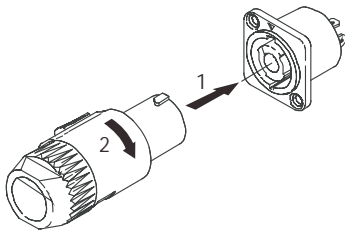


1+ 1- INPUT

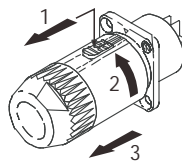


NL4 Connection

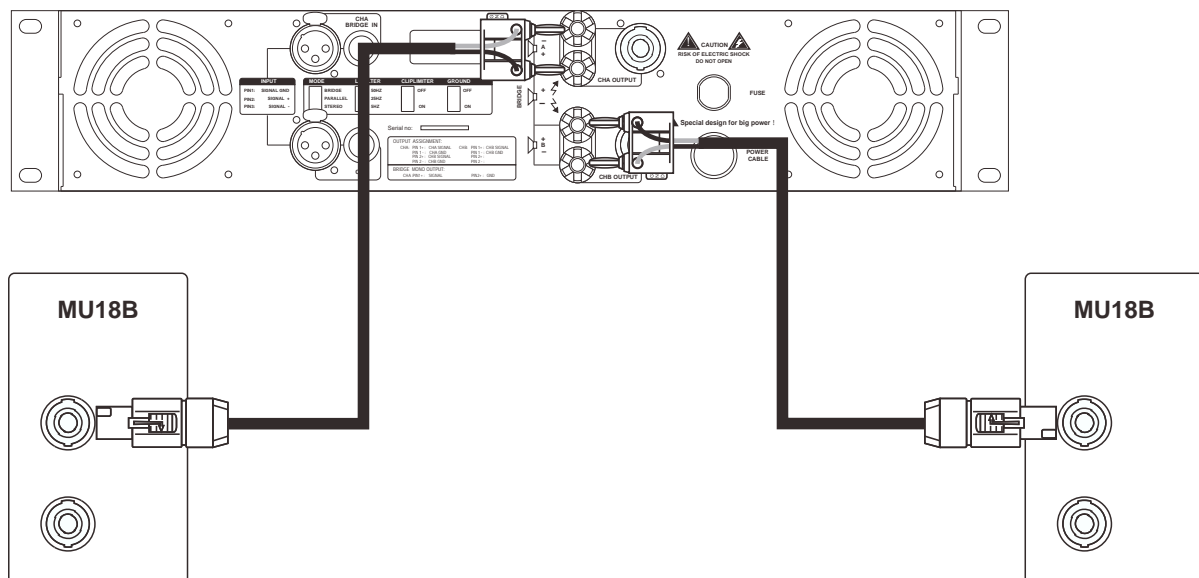
1. Connect



2. Disconnect



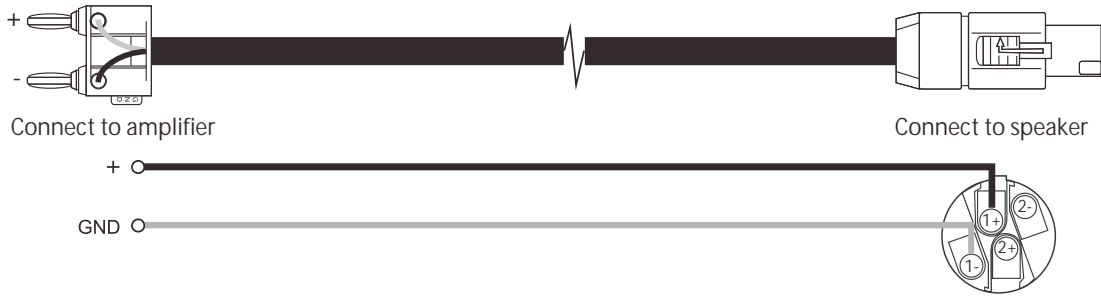
System Connection Reference



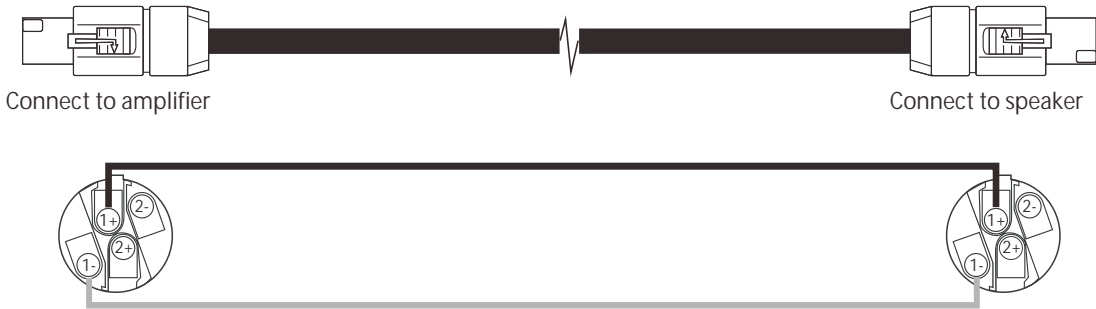
- Attention: The impedance of connected speaker must match the impedance of amplifier output.
- Attention: Make sure the polarity of speaker and amplifier correctly.

Speaker Wiring

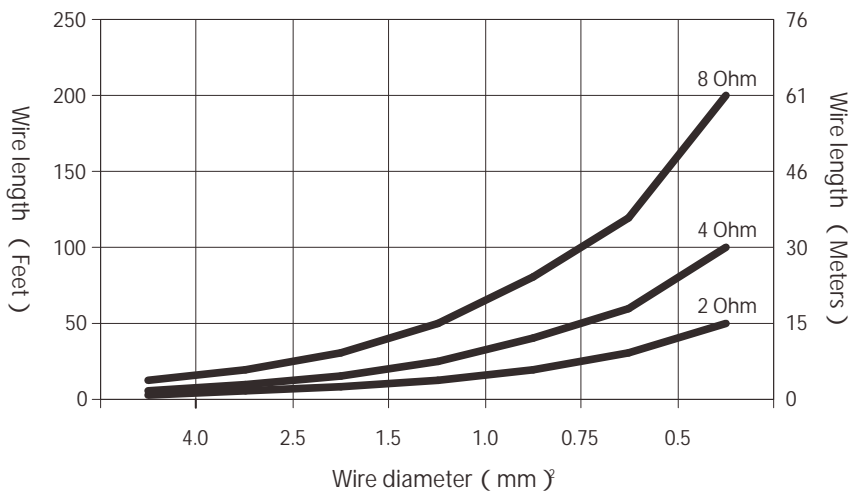
1. Banana plugs to NL4



2. NL4 to NL4



3. Consumption curve of connection cable(Only for reference, the result is different if adopting the different cables)

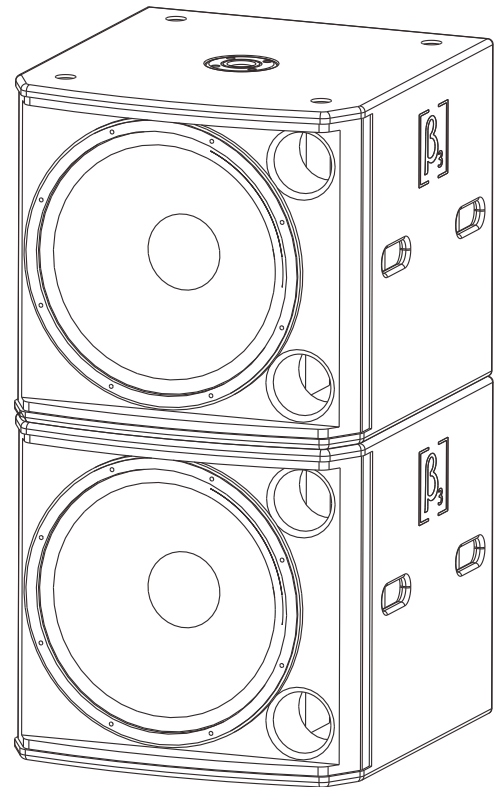
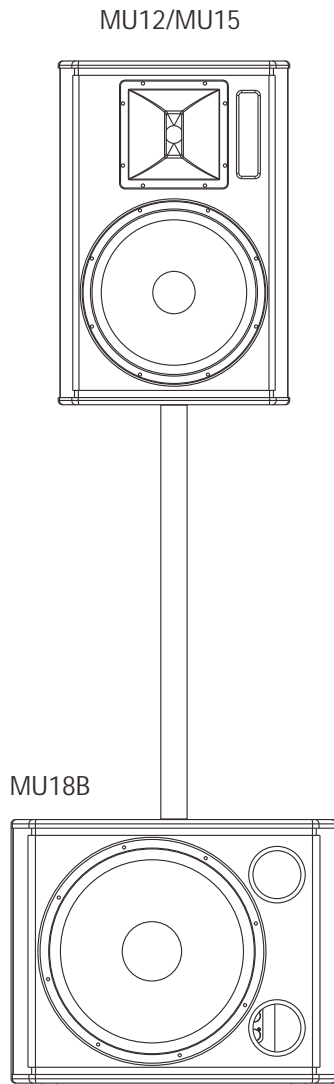


### Mounting Accessories

The support flange in the top of MU18B is for the pole mounting application with MU12/MU15.

### Installation Reference

1. Stack



**⚠ Warning:** Make sure the mounting accessories safety factor not less than 5:1 or meet the local standard during installation .

Specification

System:	Passive low-frequency speaker
Woofer :	1 x 18" Woofer
Frequency response(-3dB): <sup>1</sup>	40Hz-300Hz
Frequency response(-10dB):	35Hz-600Hz
Sensitivity(1W@1m): <sup>2</sup>	97dB
Max.SPL(1m): <sup>3</sup>	124dB/130dB(PEAK)
Power:	500W (RMS) <sup>4</sup> 1000W (MUSIC) 2000W (PEAK )
Rated impedance:	8 ohm
Cabinet:	18mm birch plywood
Mounting accessories:	Fixed supporting base
Handle:	
Painting:	Cabinet coated by Polyurethane paint; grille is powder coated
Connector:	NI4 x 2
Cabinet dimension: (W×D×H)	600 x 640 x 550mm (23.6 x 25.2 x 21.7in)
Package dimension: (W×D×H)	750 x 710 x 670mm (29.5 x 28.0 x 26.4in)
N.W.(pc):	38kg(83.6lb)
G.W.(pc):	44kg(96.8lb)
Optional mounting accessories:	Speaker stand

Speaker Testing Method

1. Frequency response

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

2. Sensitivity

Use full range Pink noise which was modified by EQ curve to test the speaker in the anechoic room, enlarge the signal to make the speaker work at its rated impedance and the power output is 1W, then test the sensitivity 1m away from the speaker.

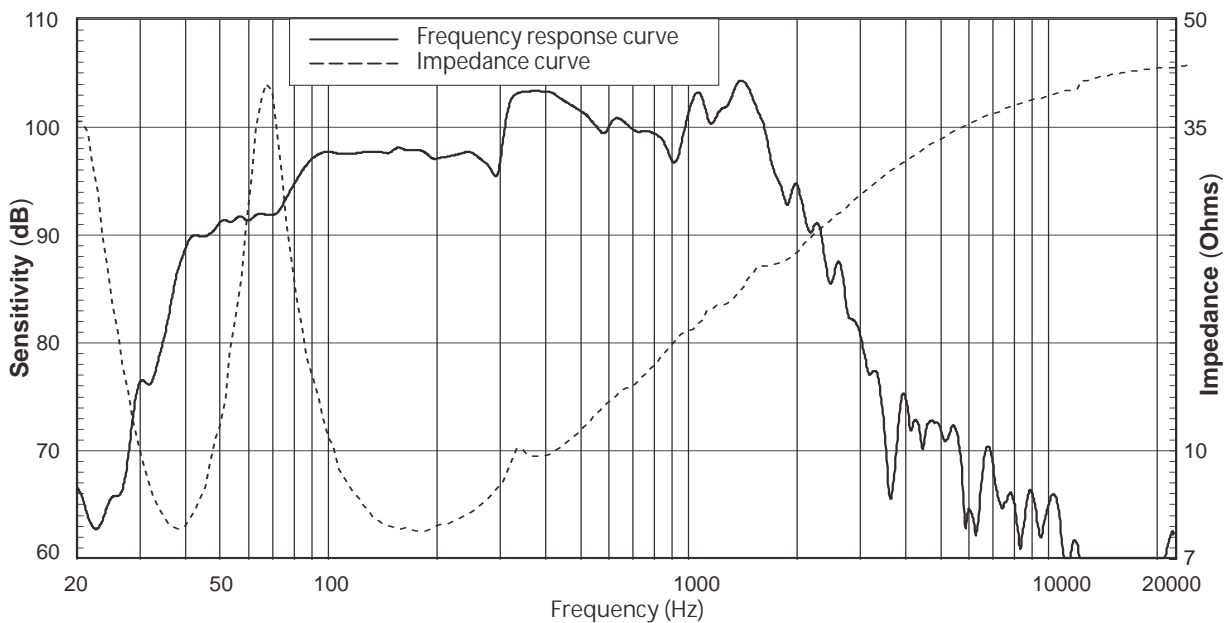
3. MAX.SPL

Use full range Pink noise which was modified by EQ curve to test the speaker in the anechoic room, enlarge the signal to make the speaker work at its instant power output level, then test the SPL 1m away from the speaker.

4. Rated Power

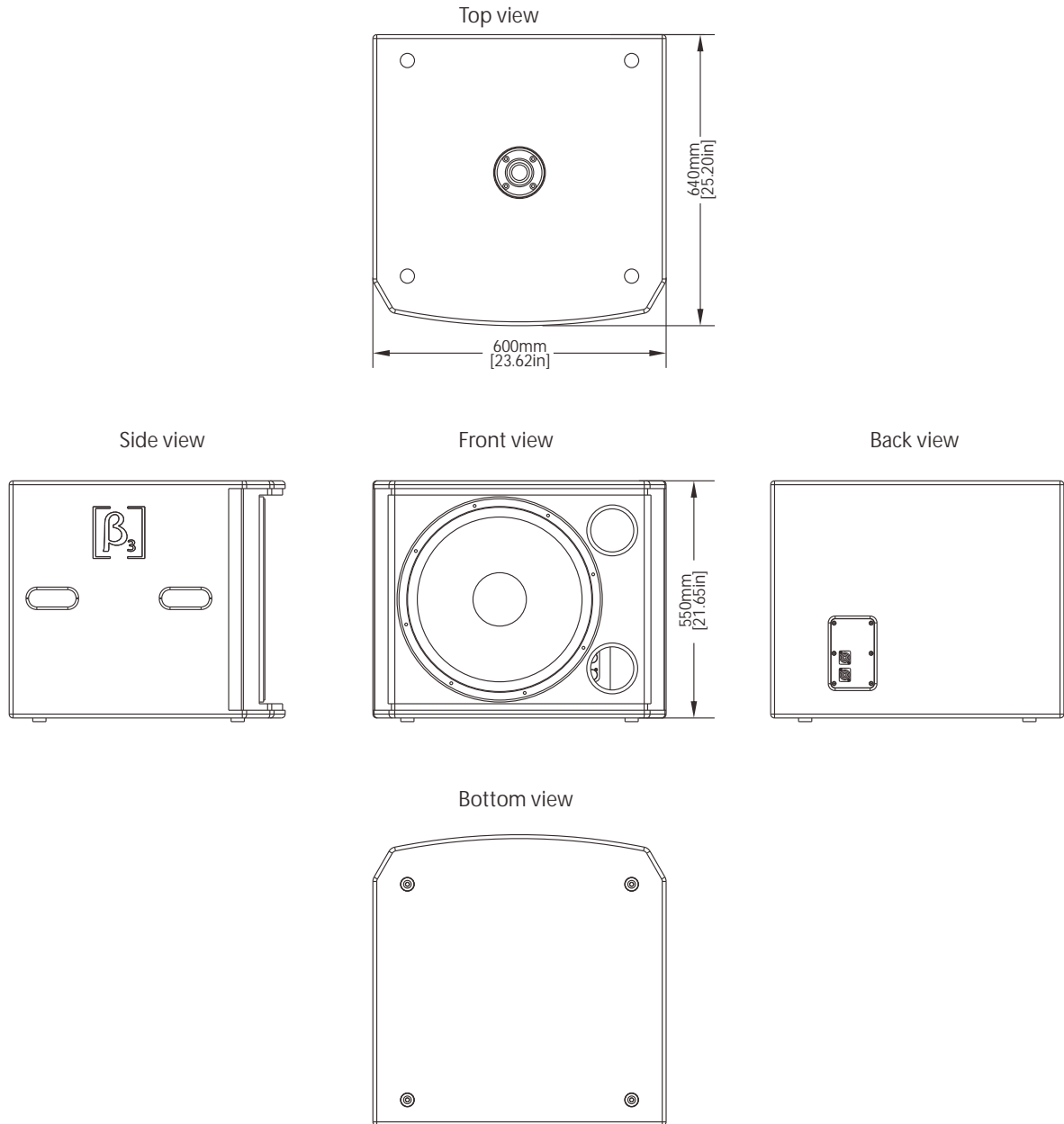
Use the pink noise according to IEC#268-5 to test the speaker, enlarge the signal for continuous 100hours, the rated Power is the power when the speaker will not incur hot damage or mechanics damage.

Frequency response curve & Impedance curve





2D Dimension



Notes:



**Beta Three**