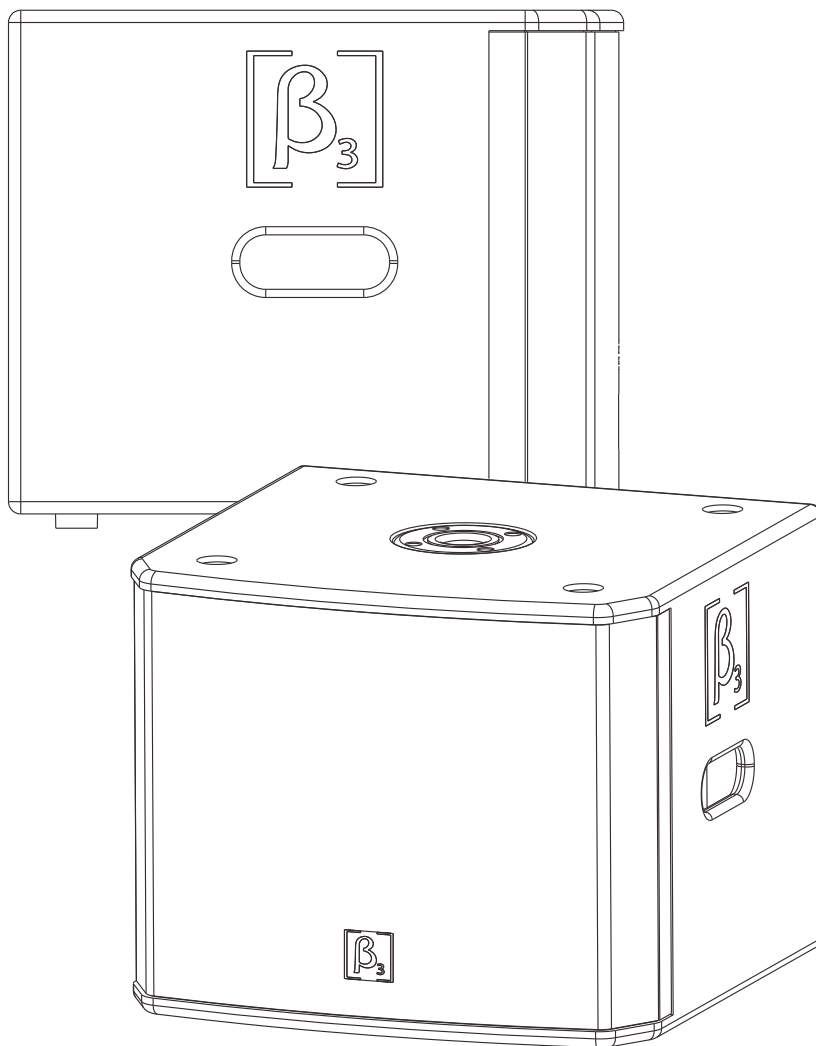




Beta Three



MU12B

Single 12 " Subwoofer
With Built-in Crossover
MU Series Pro Loudspeaker System

User Manual





UM- MU12B- 20091225 ver A



SAFETY INSTRUCTIONS

PLEASE READ THIS MANUAL FIRST

Thank you for a 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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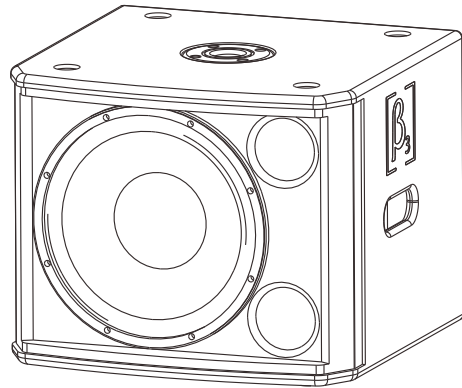
 Product information subjects to be updated without notification, please visit www.elderaudio.com for latest update.

MU12B

Single 12 " subwoofer with built-in crossover

Feature

- Single 12 " subwoofer, phase inverted configuration.
- Advanced free protection design assure the reliability of tweeter.
- Sensitivity 92dB, Max.SPL 117dB.
- Rated power 300W, peak power 1200W.
- 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.
- Sound features: Clarity, powerful with flexibility.



Description

3[®] MU12B is a brand new design subwoofer in MU family. It adopts one 12" LF woofer, built-in crossover . 3" voice coil with round copper wire and Aluminium bobbin delivery 300W power, symmetrical magnet circuit design reduce the impar HD effectively and enhance the LF sound quality.

Cabinet is made of 15mm birch plywood with advanced environmental protection Polyurethane-based painting which is very rigid. The cabinet strength reach to 4500N. The 35mm flange can be used to support Mu8a.

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.

MU12B is a protection free design, which reduce the interfere and enhance the sound quality.

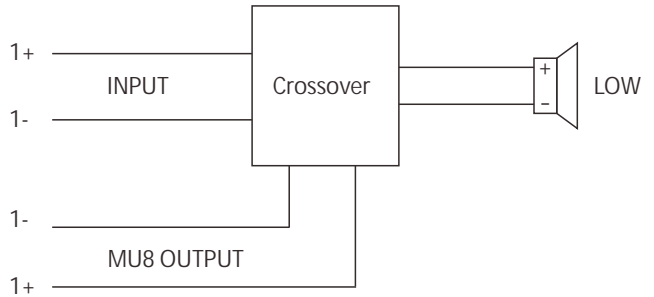
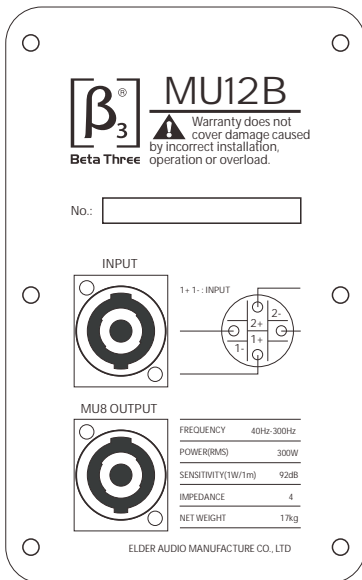
MU12B can be used with MU8a together to meet the application in conference room, multifunctional hall, small auditorium, church, living performance, etc.

Applications

- Conference Room
- Small Auditorium
- Multifunctional Hall
- Church
- Small Performance

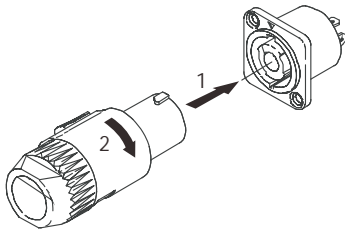
MU12B has two NI4 connectors, one is connected to full range output from amplifier, another one is only for Mu8 connection.

Terminal Plate

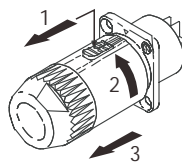


NL4 Connection

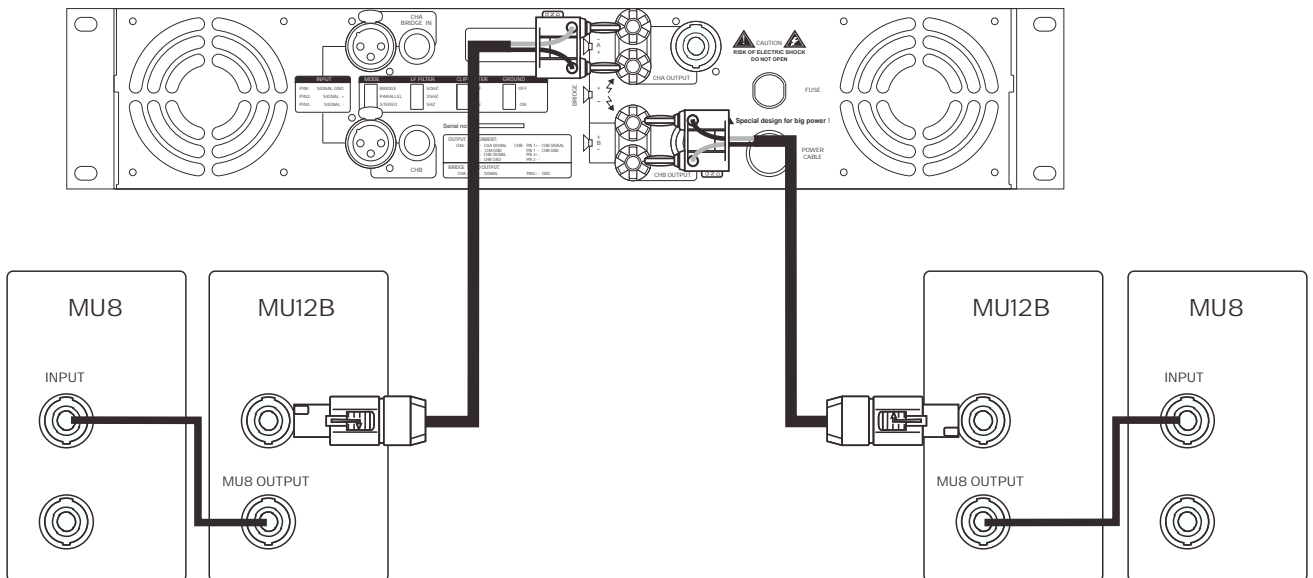
1. Connect



2. Disconnect



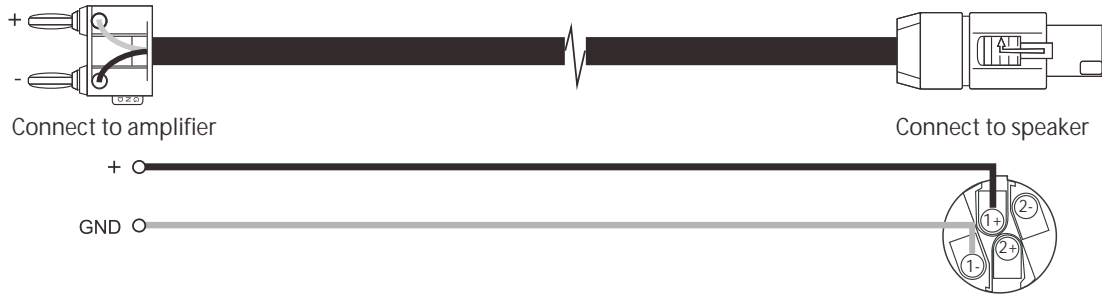
System Connection Reference



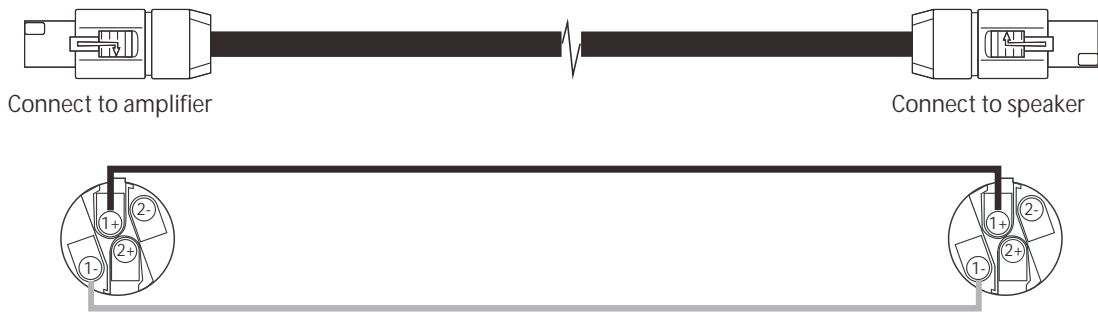
- Attention: The impedance of connected speaker must match the impedance of amplifier output.
- Attention: Make sure the polarity of speaker and amplifier correctly.

Speaker Wiring

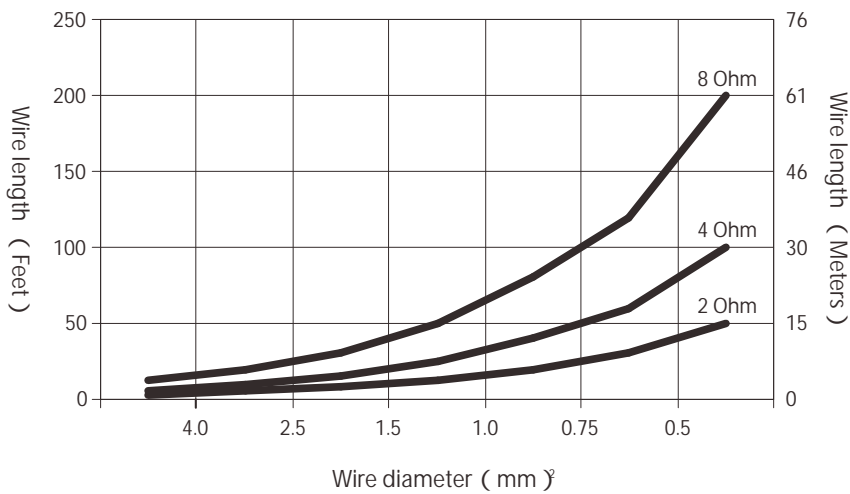
1. Banana plugs to NL4



2. NL4 to NL4

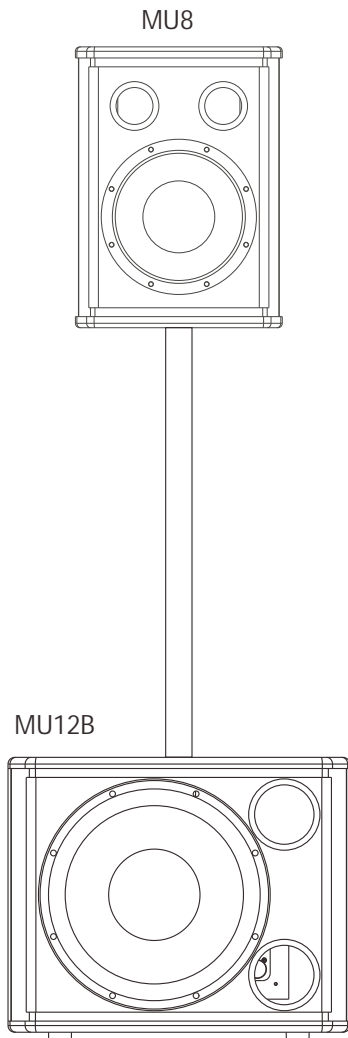


3. Consumption curve of connection cable(Only for reference, the result is different if adopting the different cables)



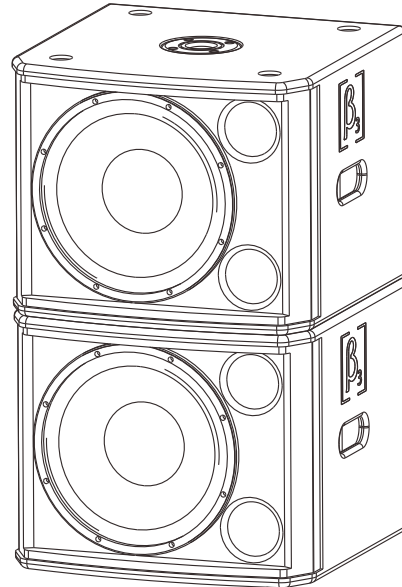
Mounting Accessories


The support flange in the top of MU12B is for the pole mounting application with MU18.



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
Woofers:	1 × 12" Woofer
Frequency response(-3dB): ¹	40Hz-300Hz
Frequency response(-10dB):	35Hz-600Hz
Sensitivity(1W@1m): ²	92dB
Max.SPL(1m): ³	117dB/123dB(PEAK)
Power:	300W (RMS) ⁴ 600W (MUSIC) 1200W (PEAK)
Rated impedance:	4 Ohms
Cabinet:	15mm birch plywood
Mounting accessories:	Fixed supporting base
Handle:	2 × Wooden handle
Surface:	Polyurethane-based painting. Steel grille is coated by powder to provide strong ultra-Weatherability.
Connector:	NL4 × 2(one input, one output)
Cabinet dimension: (W × D × H)	460 × 452 × 370mm (18.1 × 17.8 × 17.6in)
Package dimension: (W × D × H)	550 × 550 × 470mm (21.7 × 21.7 × 18.5in)
N.W.(PC):	17kg(37.4 lb)
G.W.(PC):	19kg(41.8 lb)
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.

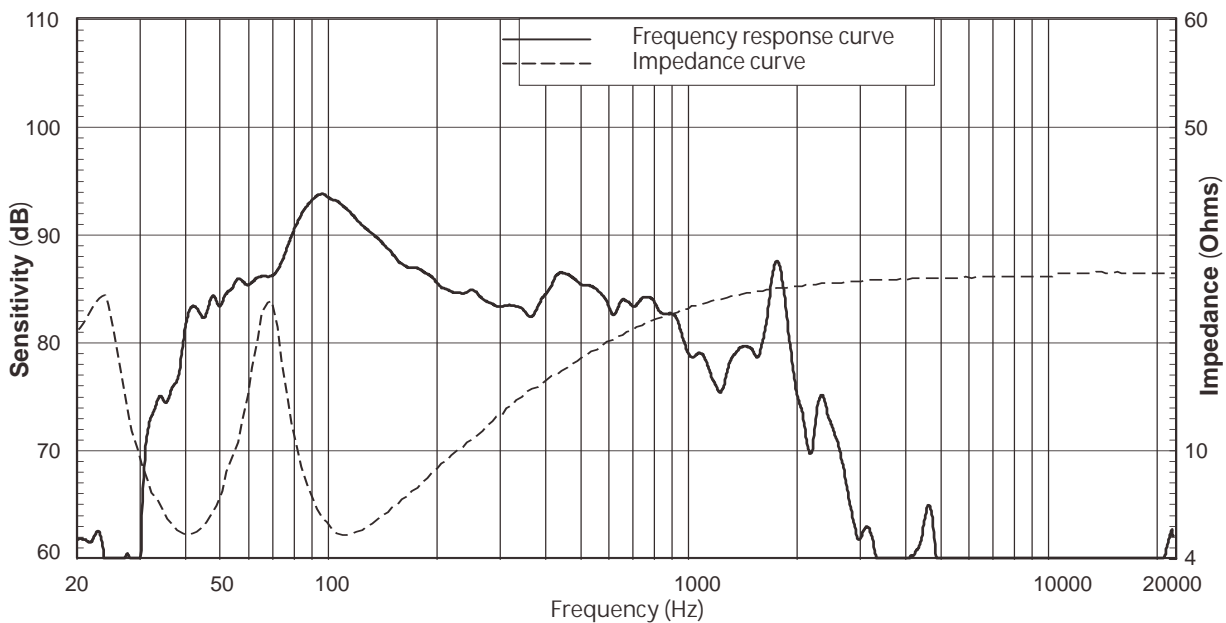
3. MAX.SPL

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

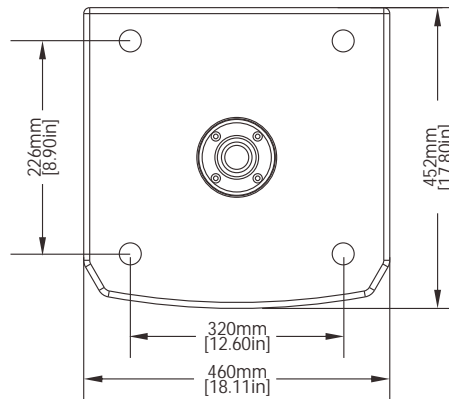
Use the pink noise according to IEC#268-5 to test the speaker, enlarge the signal for continuous 100hours, the rated Power is the power when the speaker will not incur hot damage or mechanics damage.

Frequency response curve & Impedance curve

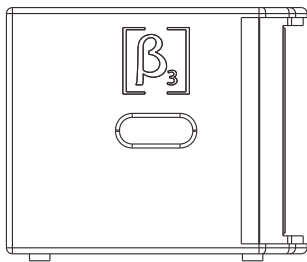


2D Dimension

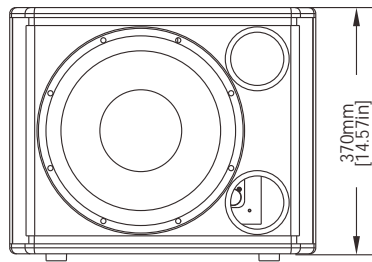
Top view



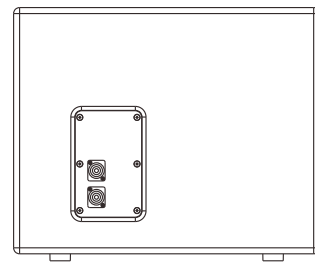
Side view



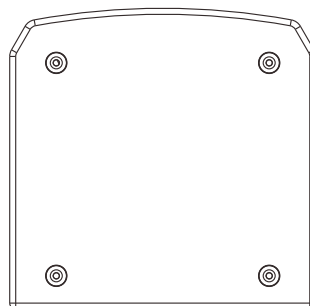
Front view



Back view



Bottom view



Notes:



Beta Three