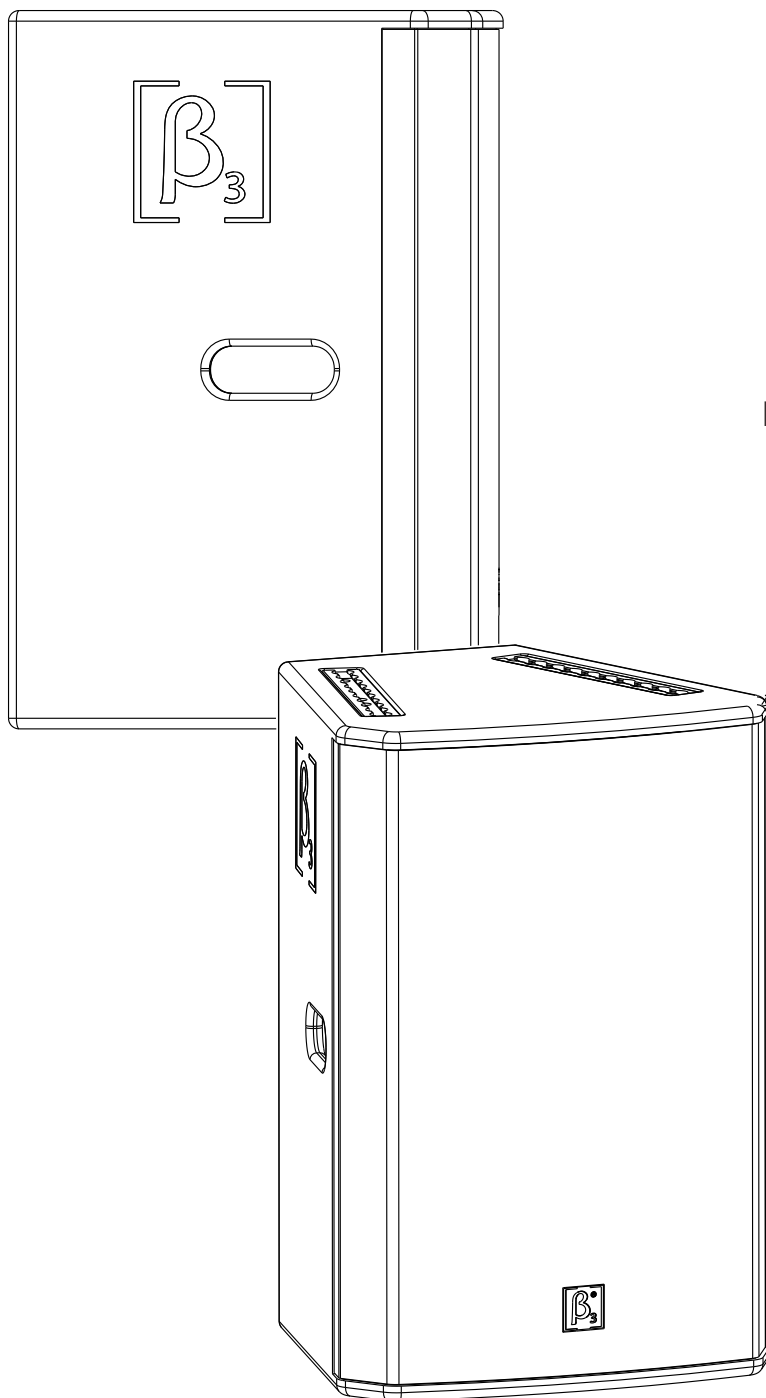




Beta Three



# MU12a

Two Way 12" Full Range  
Active Speaker

MU Series Pro Loudspeaker System

User Manual





UM- MU12a- 20100514 - 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

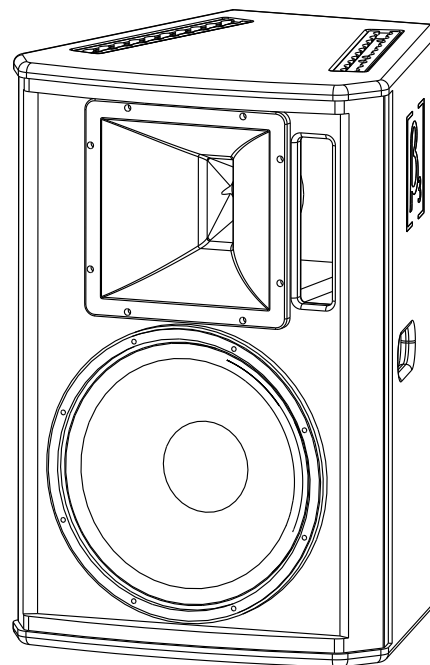
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# MU12a

12" two way full range speaker with built-in crossover

## Features

- Phase reversed active speaker with 12" woofer and 3" compression driver.
- Built-in one channel 300W/40ms and one channel 100W/40ms big power amplifier modules.
- One channel combo input connector to enhance volume control.
- Easy setup and teardown of rigging system.
- Attached the necessary flying mounting accessories. The suspending weight can reach to 385Kg.
- Powder coated grille can be used for 5 years. The foam at backside of the grille makes the speaker weather resistant.
- The paint and advanced painting technology make the cabinet surface very rigid.
- Sound quality: clear, mellow and stretchy.



## Description

3<sup>®</sup>MU12a is a two way full range active speaker adopting the new structure and new painting technology. It consists of one 12" transducer, one 3" compression driver and one two channel high power amplifier module.

Round copper wire used in 75mm voice coil in the 12" transducer, and the bobbin uses high intensity TIL material, which both enhances the intensity and bearing capacity of the voice coil. Symmetrical magnet circuit design reduces the odd harmonic distortion to minimum to satisfy listening requirement of human being.

The wedge shaped cabinet is made from 15mm birch plywood without using any nail, and be painted with advanced environmental protection Polyurethane-based paint which is very rigid.

The tension of the cabinet reaches to 4500N.

Q235 grille is coated by powder to ensure its weatherproof ability, which can be used for 5 years.

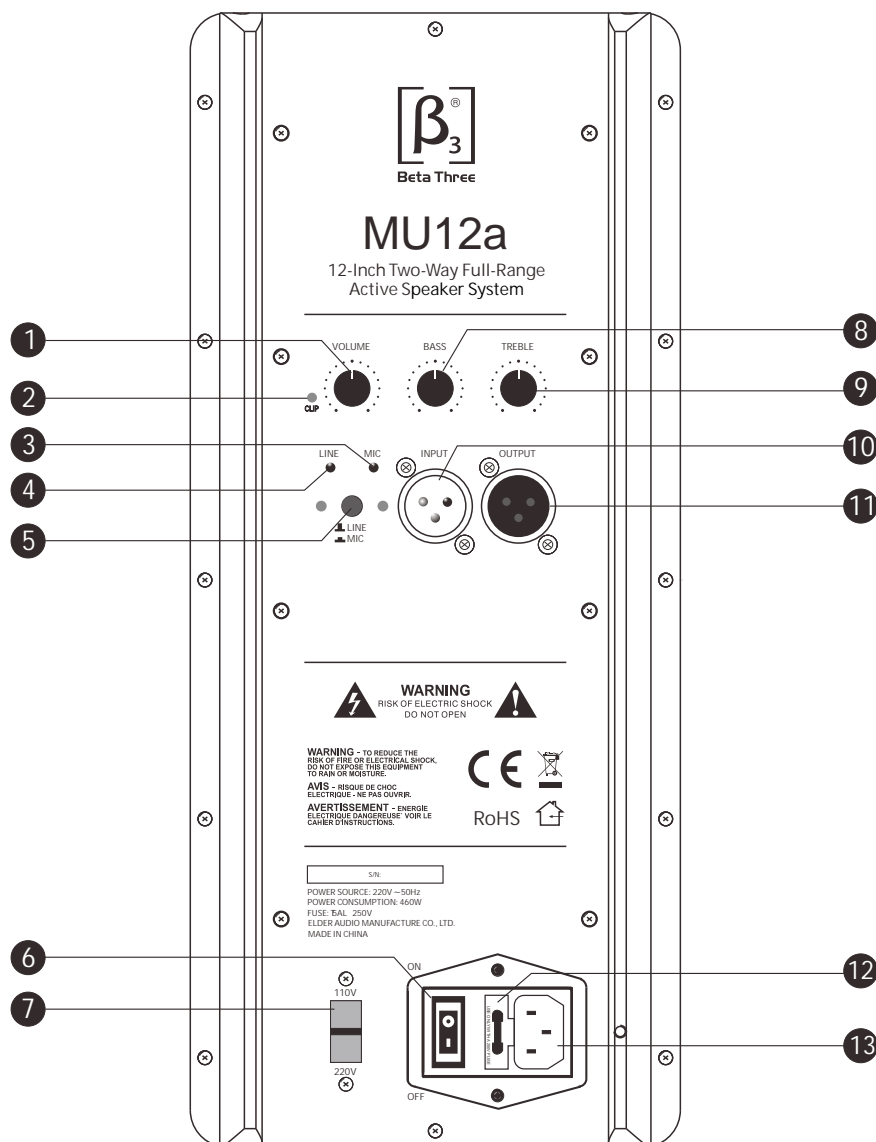
To meet the sound requirement, a lot of new materials were used on MU12a. For the driver, the diaphragm is using Aluminum magnesium alloy to reduce the distortion.

MU12a is mainly designed for conference room, multifunctional hall, hall of worship, auditorium, church and touring performance.

## Applications

- Church
- Small Auditorium
- Conference room
- Small performance
- Multifunctional hall

# AMPLIFIER MODULE



1. Volume control.
2. Clip indicator.
3. Microphone input signal presence indicator.
4. Line input signal presence indicator.
5. Line/microphone selector.
6. Power **ON/OFF** switch.
7. 110V/220V voltage input selector.
8. Bass control.
9. Treble control.
10. Line/microphone input.
11. Line/microphone output.
12. Protection fuse. Use only fuses of the correct amp rating.
13. Power supply input. Make sure that the voltage selector is set for your country's correct voltage.

## Mounting Accessories(Optional)

The standard flying mounting hardware is very convenient for different installations and applications.

1. Speaker stand  
SPS-502BC Black



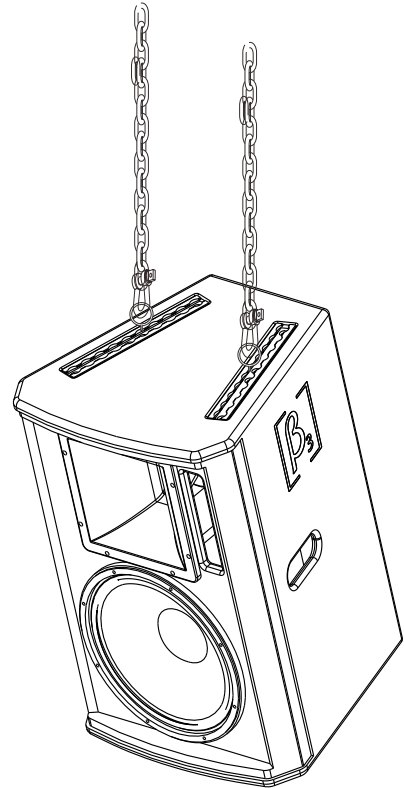
2. Standard flying mounting ring



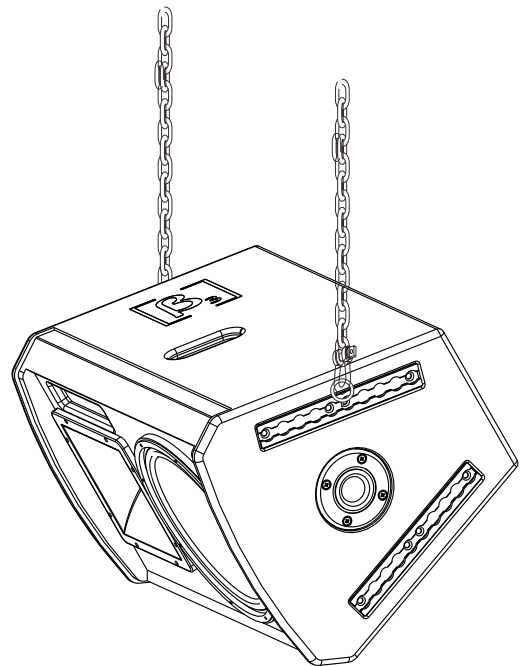
**⚠ Warning:** Make sure the mounting accessories safety factor not less than 5:1 or meet the local standard during installation .

## Installation Reference

1. Vertical flying mounting installation



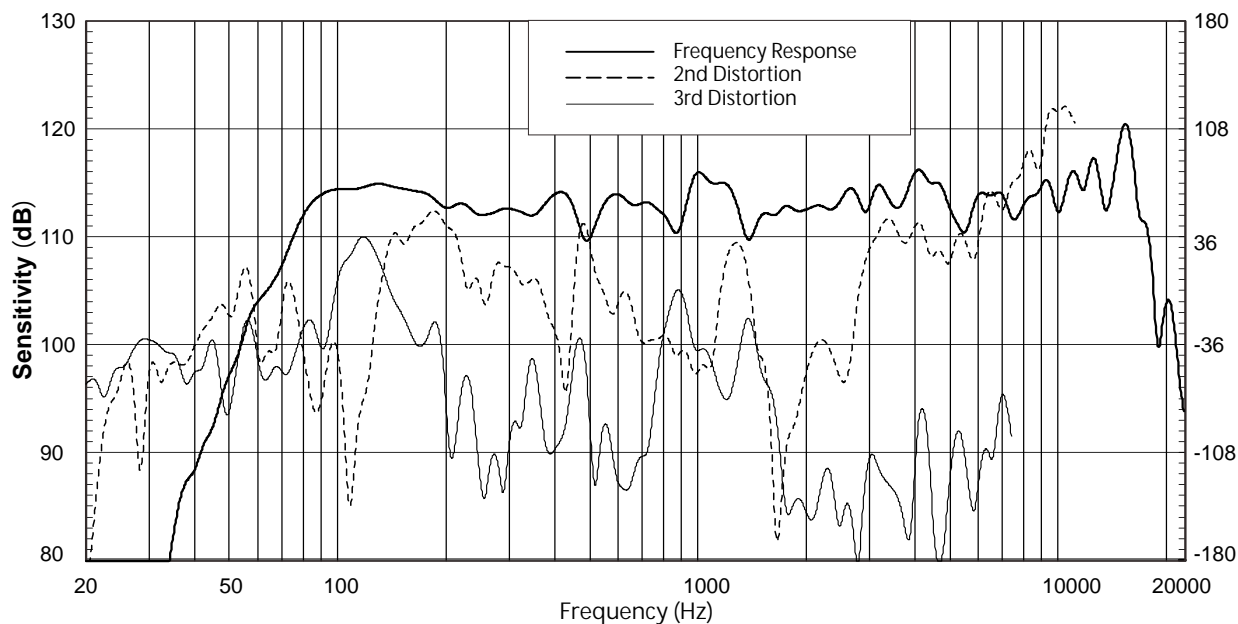
2. Horizontal flying mounting installation



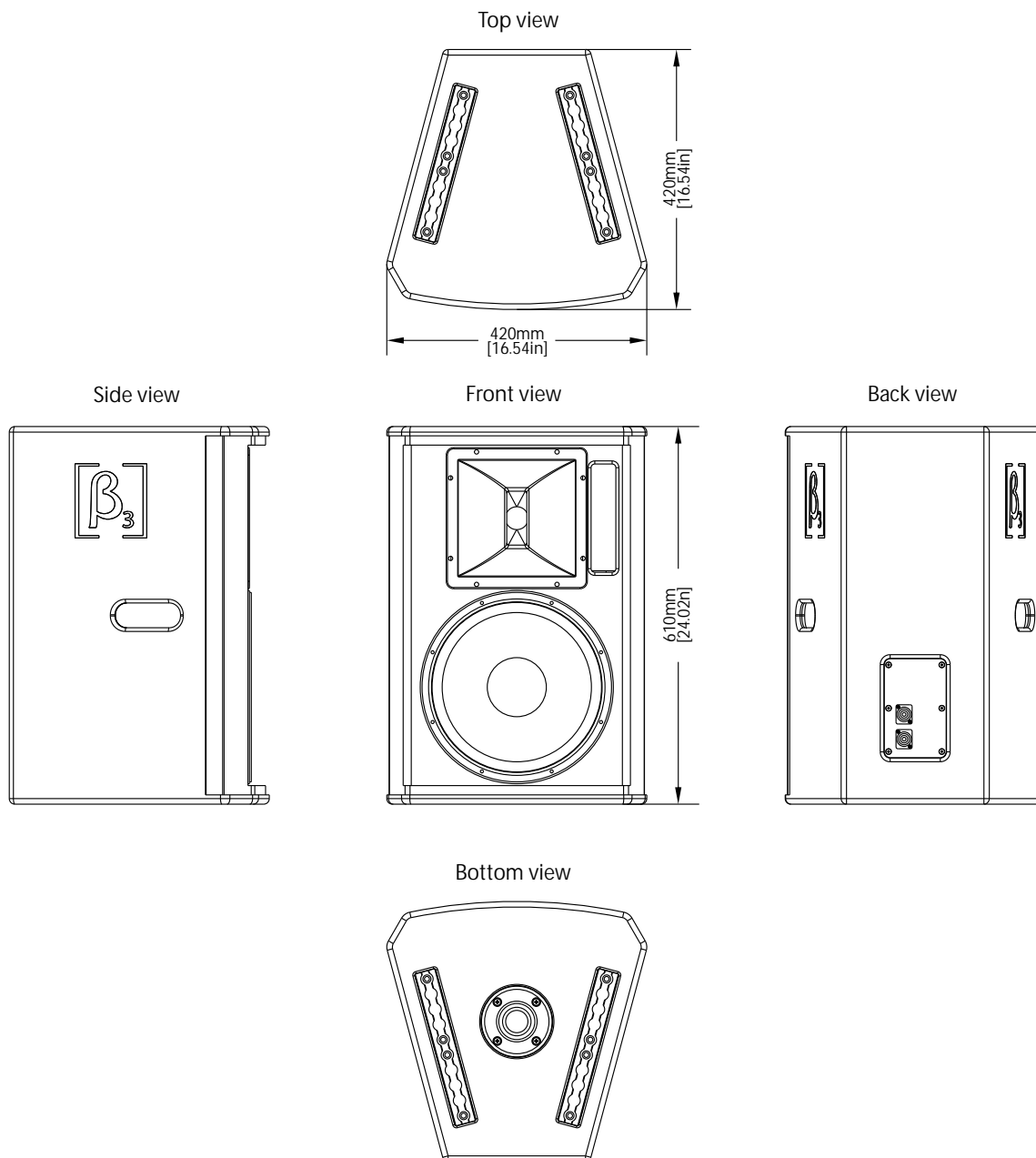
## Specification

Frequency response(-3dB):	55Hz-16kHz
Max.SPL(1m):	121dB/127dB(PEAK)
Dispersion(H × V):	60° × 40°
Transducer:	1 × 12" Woofer 1 × 3" Compression Driver
Connector:	6.35/XLR for input, XLR for output
Input:	One channel balanced input(line and MIC)
Input impedance(line):	20Kohm balanced input, 10Kohm unbalanced input
Input level:	0 dBV (0.775V rms, 1.0 V peak)Line-100Hz
Input overloading level:	Maximum input level 6 V peak
Wire connection:	pin 1: ground; pin2: signal +; pin3: signal -
Heat radiation:	Forced air-cooled drives
Power cable:	PowerCon, three pins
Safety voltage range:	220V+/-10% AC (IN 220V)
Power supply consumption power(static) :	19W
Amplifier power output:	460W
Cabinet:	Plywood,wedge shaped
Flying/ Mounting accessories :	Standard flying hardware
Handle:	2 × Wooden handles
Painting:	Cabinet coated by Polyurethane paint; grille is powder coated
Cabinet dimension (W x D x H):	420 × 420 × 610mm(16.5 × 16.5 × 24.0in)
Packing dimension (W x D x H):	530 × 530 × 730mm(20.9 × 20.9 × 28.7in)
Net weight:	29kg(63.8 lb)
Gross weight:	31kg(68.2 lb)

## Frequency response curve & Impedance curve



2D Dimension





Notes:



**Beta Three**