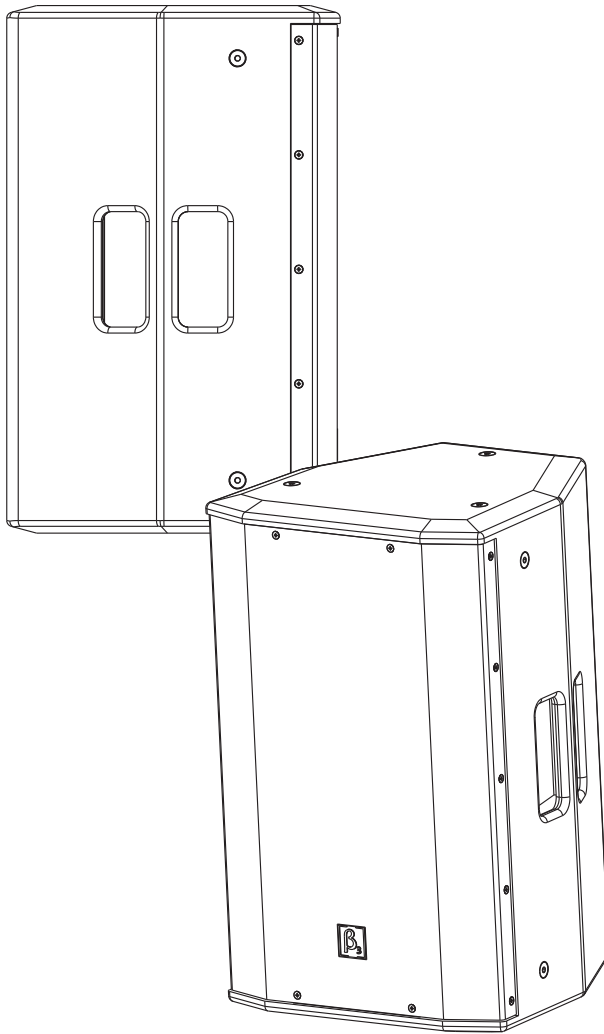




Beta Three



# TW12a

Two Way 12" Full Range  
Active Speaker

TW Series Pro Loudspeaker System

## User Manual





UM-TW12a-20180509 Ver B



# 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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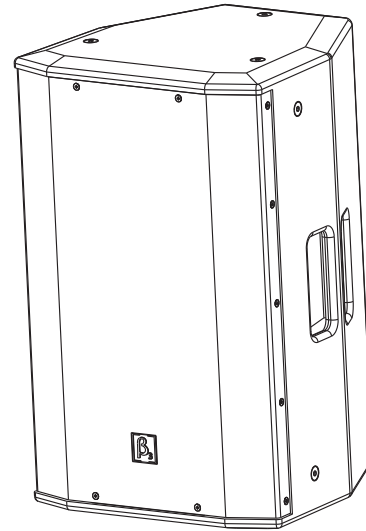
 Product information is subject to change without prior notification. Please visit [www.elderaudio.com](http://www.elderaudio.com) for latest updates.

## TW12a

Two Way 12" Full Range Active Speaker

### Features

- Compact lightweight design with unique appearance.
- New generation Class D amplifier, durable and reliable.
- Performance enhanced with built-in DSP.
- High output SPL and sensitivity.
- Suitable for use as a main system with or without sub speaker augmentation.
- Master volume control.
- Durable Polyurethane textured base paint.



### Description

β<sub>3</sub> TW12a is a full range active speaker in TW family. It has 12" Cloth edge woofers and 44mm compression driver. The compression driver is using a new material magnalium, the single 12" woofer has 44mm round copper wire voice coil which can delivery 250W power, the woofer symmetrical magnet circuit design reduce the impar HD effectively and enhance the LF sound quality.

TW12a is a dual-channel active speaker with internal crossover. One channel is class D amp circuit with big peak power handling, which is used for driving LF. The power is 1000W/8Ω. Another channel is using 7294 IC for driving HF, which has low distortion, big power and higher reliability.

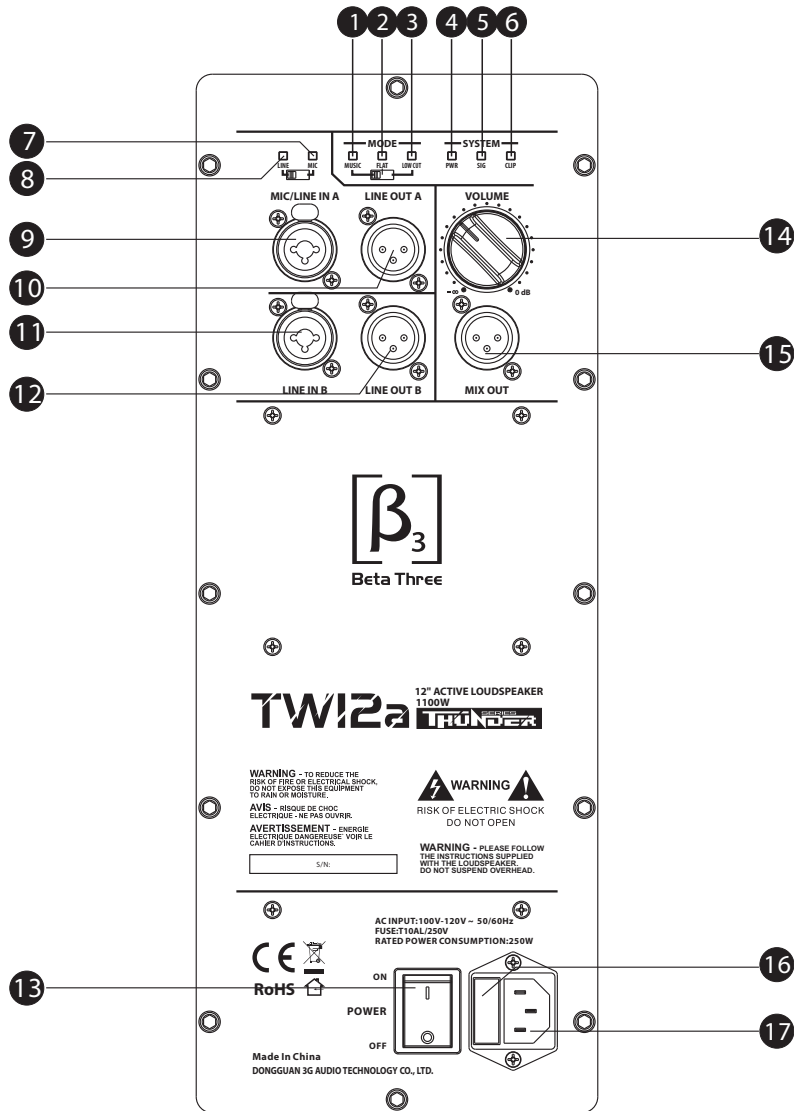
Cabinet is made of 15mm and 18mm plywood with advanced environmental protection by using Polyurethane-based painting which is very rigid. The cabinet strength reach to 4500N. Q235 grille is coated by powder to provide strong ultra-Weatherability, can be used outdoors for 5 years.

TW12a has the protection free design, which reduces the interference and enhance the sound quality. TW12a is mainly designed for conference room, multifunctional hall, auditorium, church, live performance.

### Applications

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

**Amplifier Module**



- |                                       |                                 |                                                                                               |
|---------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|
| 1. Music mode                         | 8. Line input signal indicator. | 15. MIX output.                                                                               |
| 2. Flat mode                          | 9. Line/microphone input A.     | 16. Protection fuse. Use only fuse of the correct amp rating.                                 |
| 3. Low cut mode                       | 10. Line/microphone output A.   | 17. Power supply input. Make sure that the voltage is set for your country's correct voltage. |
| 4. Power indicator                    | 11. Line input B.               |                                                                                               |
| 5. Signal indicator                   | 12. Line output B.              |                                                                                               |
| 6. Clip indicator                     | 13. Power <b>ON/OFF</b> switch. |                                                                                               |
| 7. Microphone input signal indicator. | 14. Volume control.             |                                                                                               |

**⚠ Attention** :Before changing the MODE switch, please power the speaker off to avoid possible damage.

## Installation Accessories(Optional)

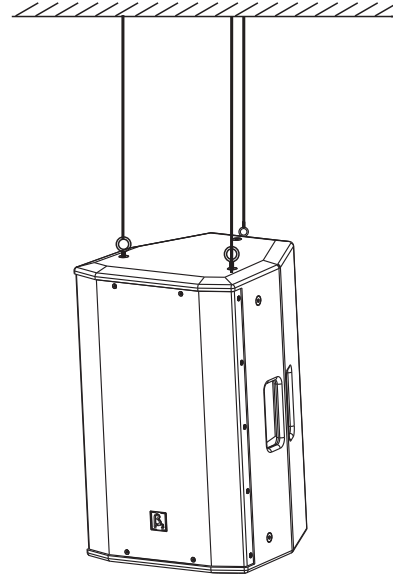
Twelve mounting points are very convenient and efficient for the different application with special brackets.

### 1. Speaker stand

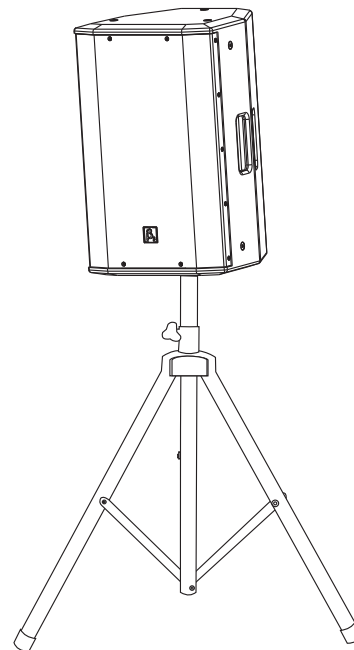


## Installation Reference

### 1. Ceiling



### 2.Support



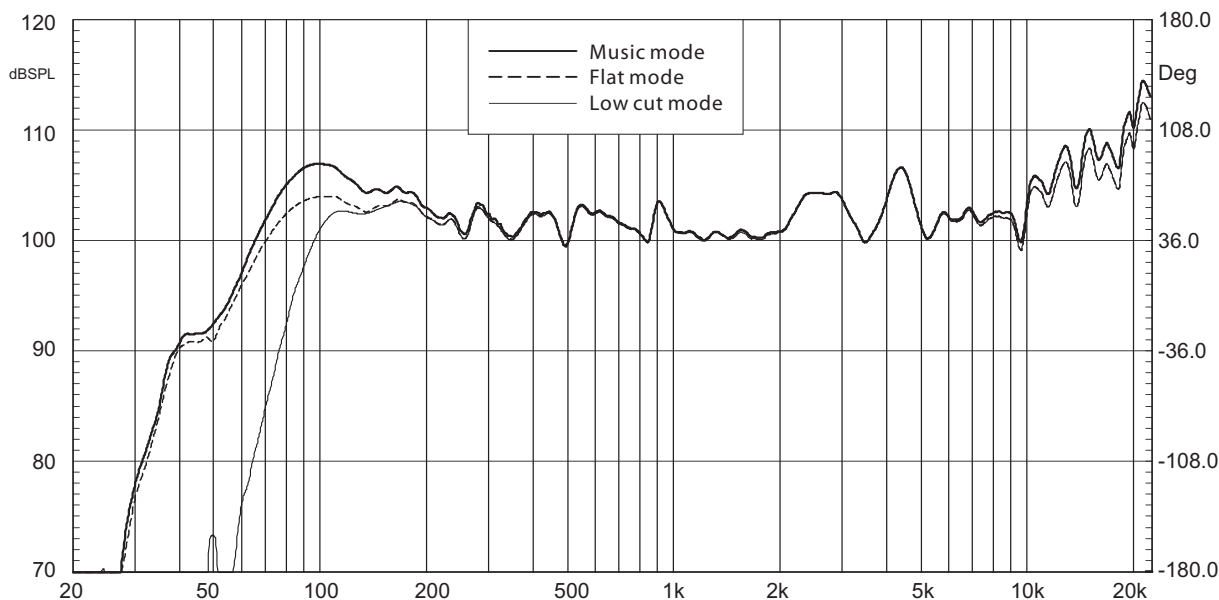
**Warning:** Make sure the mounting accessories safety factor not less than 5:1 or meet the local standard during installation .



**Specification**

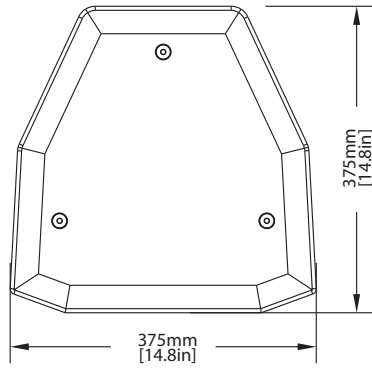
Frequency response(-3dB):	50Hz-20kHz
Max.SPL:	121dB
Dispersion(H×V):	110°×90°
Transducer:	1×12" Woofer 1×44mm Compression Driver
Rated impedance:	8 Ohms
Connector:	XLR for input, XLR for output
Input:	Channel one (Mic/Line) balanced input
Input impedance(line):	95Kohm balanced input, 2Kohm unbalanced input
Input level:	0 dBV (0.775V rms, 1.0 V peak)Line-100Hz
Input overloading level:	Maximum input level 8V peak
Wire connection:	pin 1: ground; pin2: signal +; pin3: signal -
Heat radiation:	Forced air-cooled drives
Power cable:	IEC 3 pin power connector
Safety voltage range:	AC 100V-120V~50/60Hz
Amplifier power output:	1100W
Cabinet:	Plywood
Mounting accessories:	12×M10 hanging point
Handle:	2×Wooden handles
Painting:	Cabinet coated by Polyurethane paint; grille is powder coated
Cabinet dimension(W×D×H):	375×375×600mm(14.8×14.8×23.6in)
Packing dimension(W×D×H):	465×465×720mm(18.3×18.3×28.4in)
Net weight:	21.0kg(46.2 lb)
Gross weight:	23.7kg(52.1 lb)

**Frequency response curve**

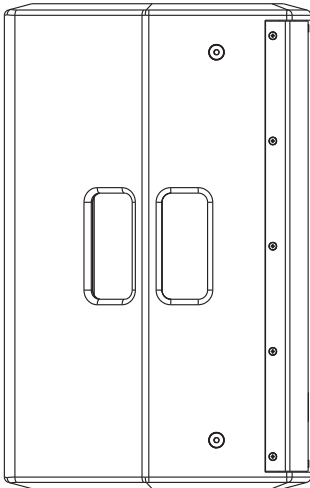


2D Dimension

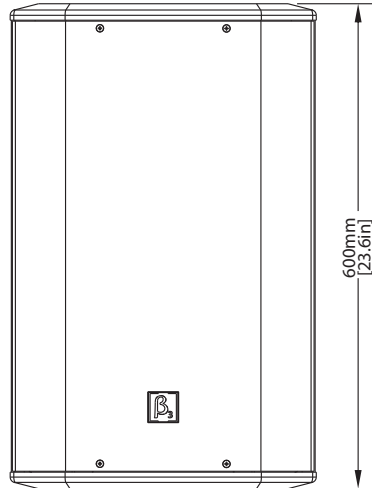
Top view



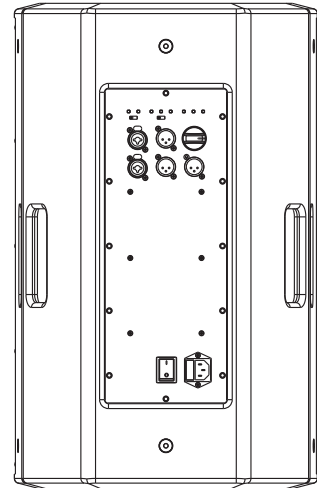
Side view



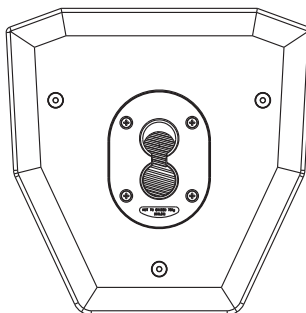
Front view



Back view



Bottom view





**Notes:**



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