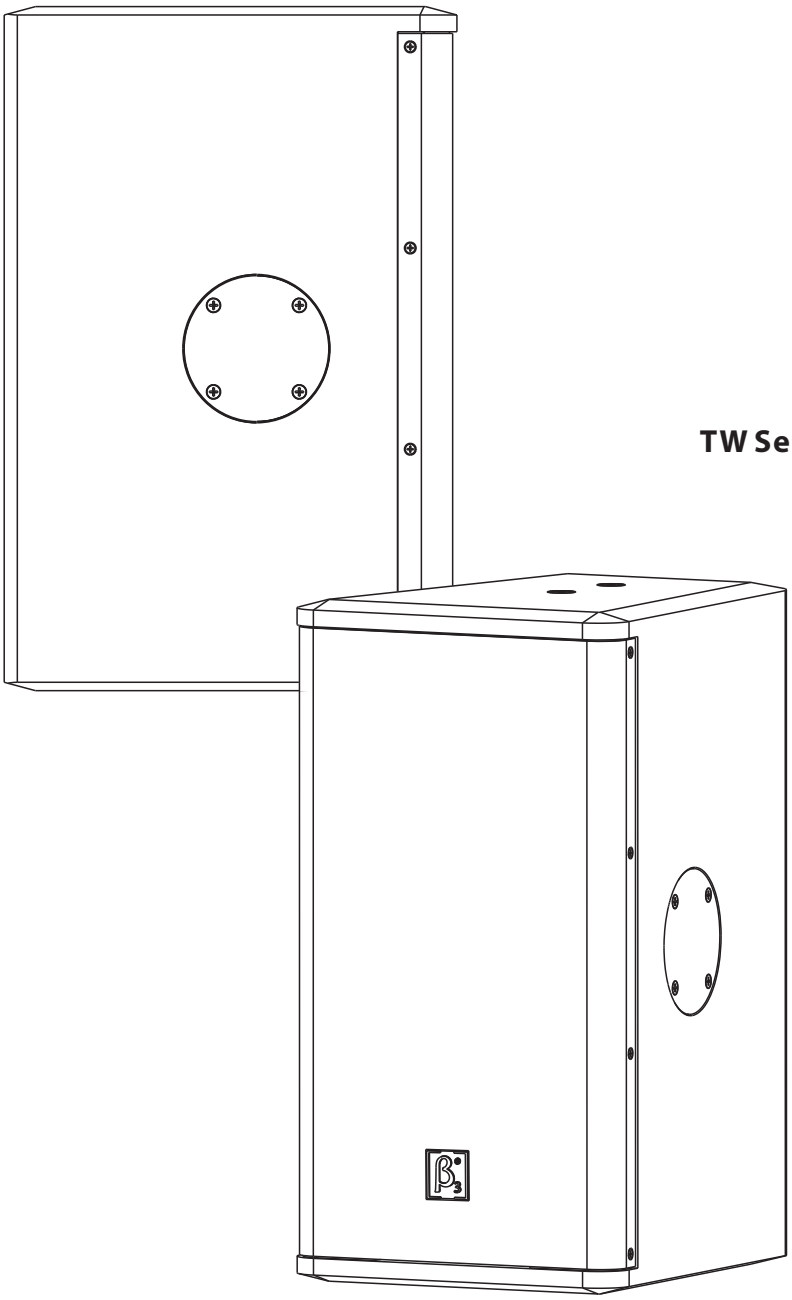
Beta Three

TW8

Two Way 8" Full Range
Passive Speaker

TW Series Pro Loudspeaker System

User Manual



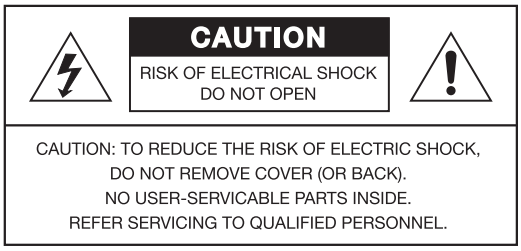
UM-TW8-20150509 ver A

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.***



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

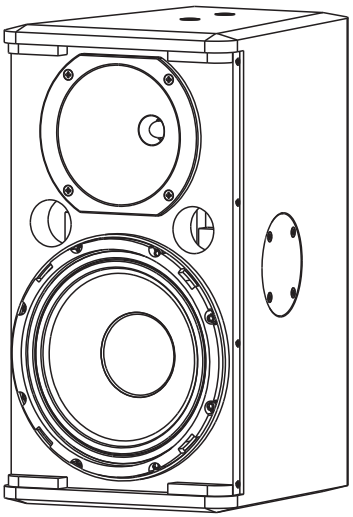
⚠ Product information may be updated without notification, please visit www.elderaudio.com for latest update.

TW8

Two Way 8" Full Range Passive Speaker

Features

- One 8" High Power LF Transducer.
- One 25mm HF Driver.
- Computer aided design to optimize frequency and phase response.
- Frequency Response 90Hz - 18kHz (-3dB).
- Sensitivity 93dB, MAX. SPL 106dB/112dB(PEAK).
- Rated Power 100W(RMS), 400W(PEAK).
- Durable Polyurethane textured base paint.



Description

β 3® TW8 is two way wide-dispersion full range speaker which adopts the new structure and patented horn design.

It integrates one 8" woofer and one 25mm compression driver. The voice coil in the woofer uses the round copperclad aluminium wire of inside and outside wrap technology,the TIL backbone enhances the heat dissipation of the voice coil and imprOves the power handling of the woofer too. Symmetrical magnet circuit design reduces the oddorder harmonic distortion to lower level. The 34mm flat voice coil in the compression driver develops the magnetic energy efficiently to both enhance the intensity of the voice coil and increase the power handling. The rated power reaches to 100W, Max. power reaches to 400W.

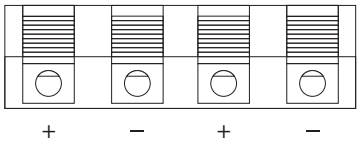
Cabinet is made of birch plywood with advanced environmental protection Polyurethane-based painting which is very rigid. The strength of cabinet itself reaches to 4500N. Each suspension point can bare 3000N. Q235 grille with powder coating provides strong ultra weather resistance, which can be used outdoors for 5 years.

Applications

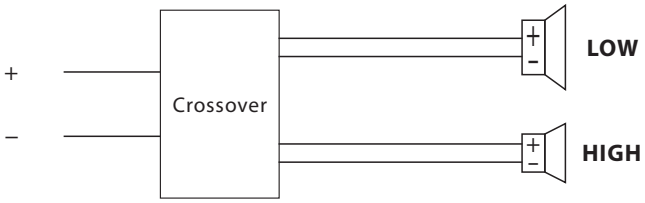
- churches/temples
- multifunction halls
- meeting rooms
- schools
- small auditoriums
- shopping malls
- transport terminals
- theme parks

The 4 way push terminal connectors are available for amplifier connections. Paralelled connector is very convenient for another speaker connection.

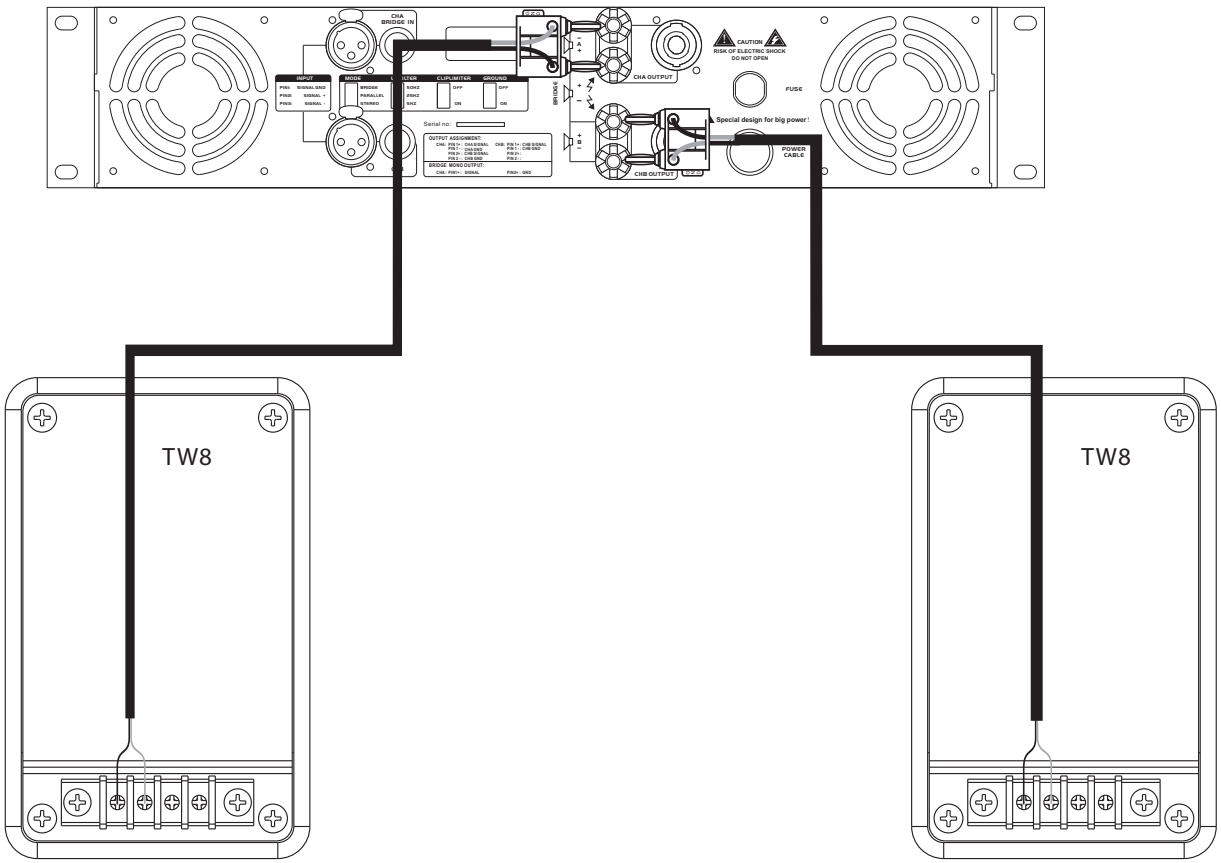
Push Terminals



1+ 1- INPUT



System Reference Diagram



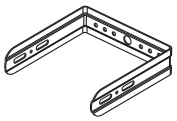
Attention: The impedance of connected speaker must match the impedance of amplifier output.

Attention: Make sure the polarity of speaker and amplifier correctly.

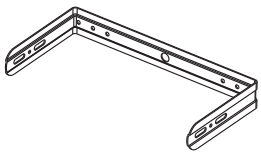
Installation Accessories(Optional)

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

1. U-Bracket(Vertical)

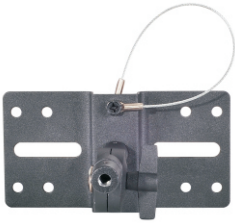


2. U-Bracket(Horizontal)



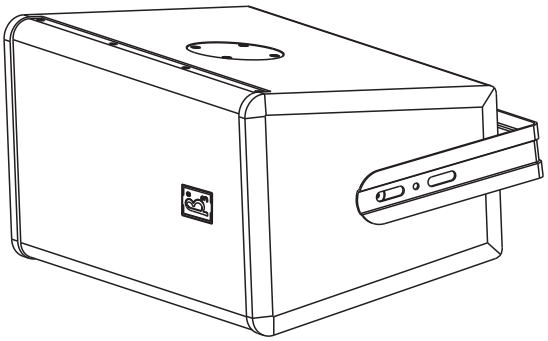
3.Lifting the base (when use, will take from the cabinet, in turn, can be installed in the cabinet to see lifting point.)

4.Wall bracket

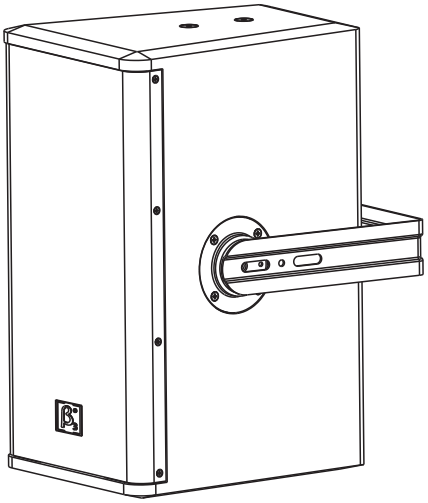


Installation Reference

1.Hanging A



2.Hanging B



Warning: Always ensure the mounting accessories safety factor is not less than 5:1 or that it meets the local standards.

Specifications

Product:	Passive Wooden Speaker
Transducer:	1x 8'' LF , 1x25mmHF
Frequency Response(-3dB)[1]:	90Hz-18kHz
Frequency Response(-10dB):	85Hz-18kHz
Sensitivity(1W@1m)[2]:	93dB
Maximum. SPL(1m)[3]:	106dB/112dB (PEAK)
Power[4]:	100W (RMS) 200W (MUSIC) 400W (PEAK)
Dispersion Angle(HxV):	80 ° x 70 °
Rated Impedance:	8 ohms
Cabinet:	12/15mm plywood construction
Installation:	Mounting L bracket included and optional mounting points provided.
Painting:	Cabinet coated by Polyurethane paint; grille is powder coated
Connector:	4-Push terminal
Dimension(WxDxH):	225×270×408mm (8.9×10.6×16.1in)
Packing Dimension(WxDxH):	535×345×495mm (21.1×13.6×19.5in)
Net Weight(Pc):	9.0kg(19.8 lb)
Gross Weight(Pair):	21.0kg(46.2 lb)
Optional Accessories:	Wall bracket,U-Bracket

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.

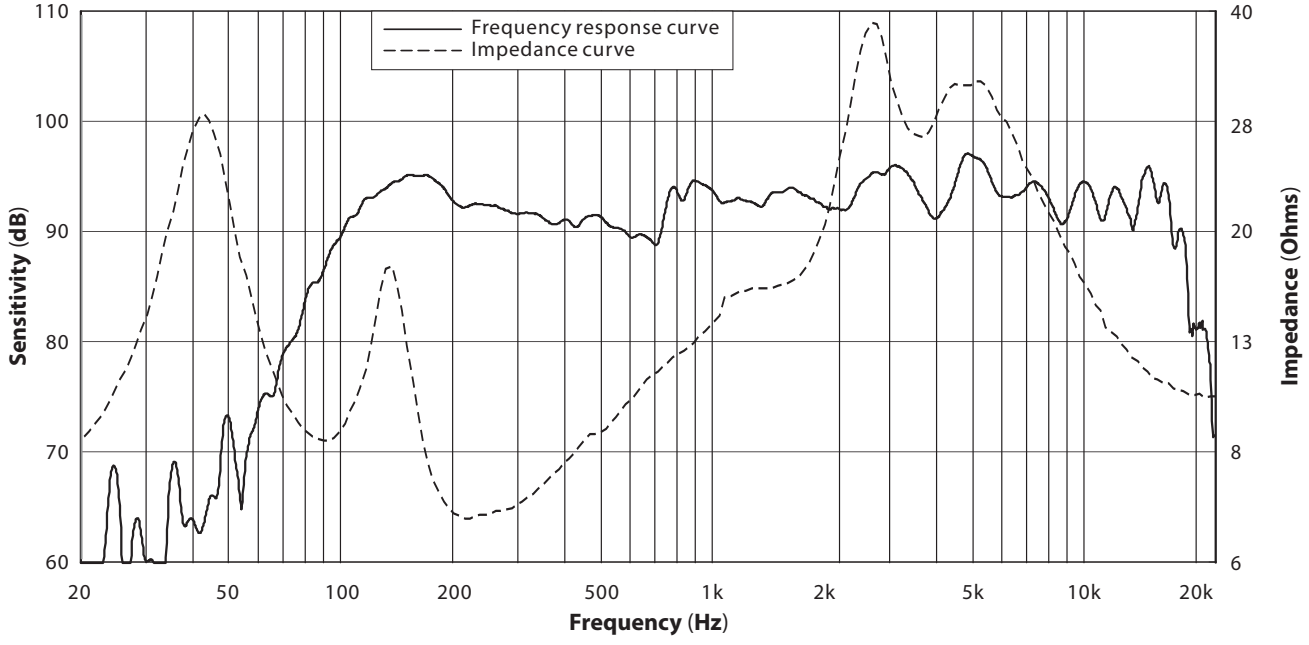
3. MAX.SPL

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 SPL1m away from the speaker.

4. Rated Power

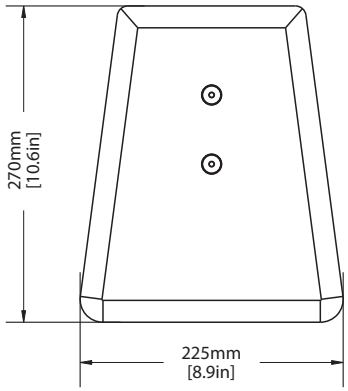
Use Pink noise to the IEC#268-5 standard to test the speaker, increase the signal for a continuous period of 100 hours, the rated power is the power when the speaker will show no visible or measurable damage.

Frequency response curve & Impedance curve

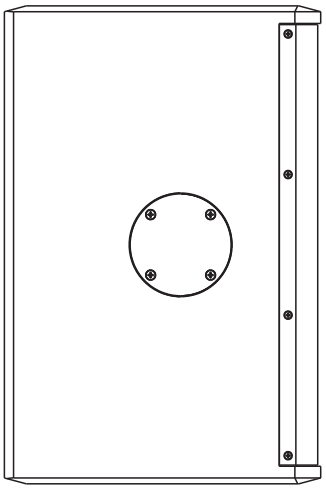


2D Dimension

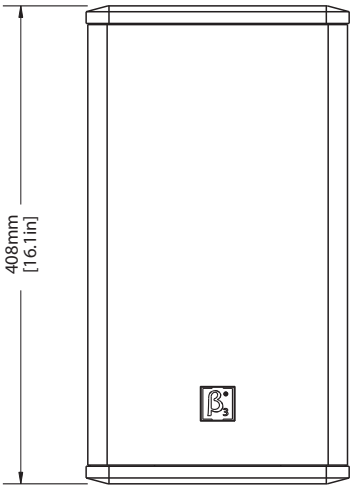
Top view



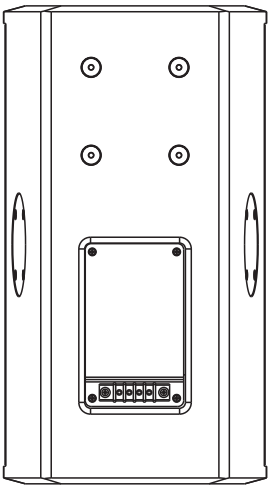
Side view



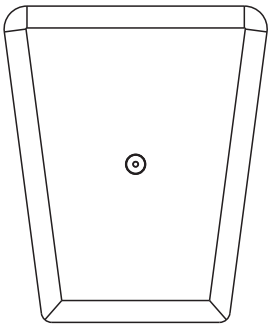
Front view



Back view



Bottom view



Notes:

Beta Three

www.beta3pro.com