

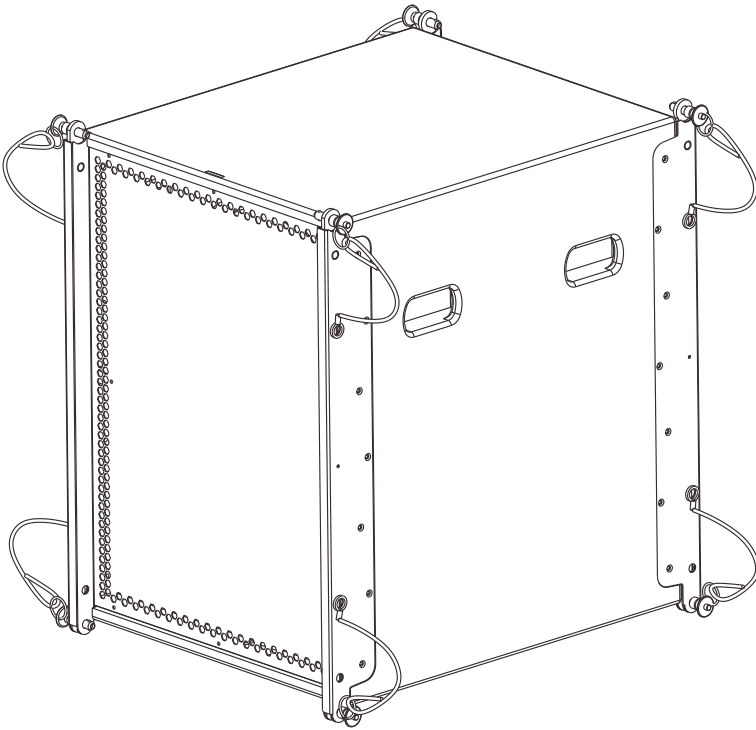


Beta Three

CL212B

CL Series Dual 12' LH
Medium Line Array System

User Manual





UM-CL212B-20100517 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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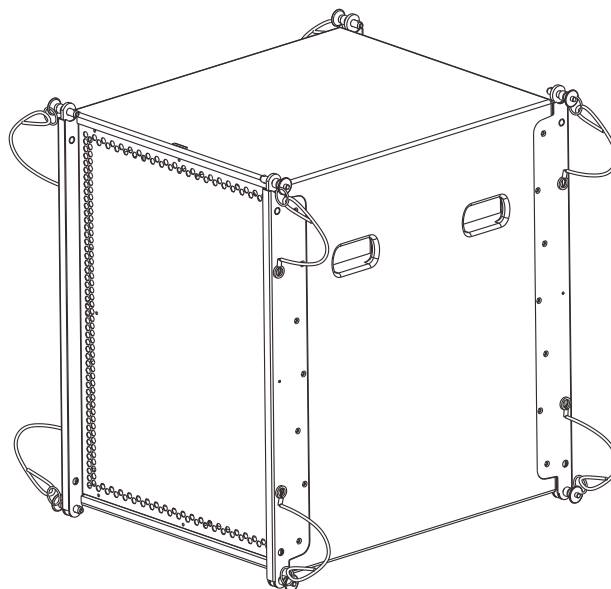
 Product information may be updated without notification, please visit www.elderaudio.com for the latest update.

CL212B

Double 12 LF Speaker

Main Features

- Double 12 LF drivers inverted low frequency speaker.
- Frequency Response 45 Hz 300 Hz (-3dB).
- Sensitivity 92 dB, Max Sound Level 122 dB.
- RMS Power 900W, Peak Power 3600w.
- The cabinet adopts new paints and advanced spraying techniques which greatly enhance the surface resistance.
- Special designed connection accessories and hangs to combine the application of CL110 and CL212B.Easy assembling .
- The phase reversal cabinet design greatly reduce the disturbance to low frequencies and thus enhance the sound quality.
- The sound produced by CL212B is clean powerful and elastic.



Product Description

3[®] CL212B is a low frequency speaker with brand new shape and structure design as well as advanced paint spraying techniques. It is combined of two 12' LF speaker. the 100mm flat aluminum and TIL material bracket enable full heat radiation. The RMS of the speaker can reach 900W and short term peak power can reach 3600W.

The design of parallel magnetic circuit can reduce the odd harmonic in the LF speaker to the fullest extent.

The cabinet of CL212B is made of 18mm thick plywood with stretching resistance up to 4500N. The wedge structure frees the cabinet from any nails. The paint on the surface has high resistance to abrasion. The inverted bass design which provides best sound quality is used in CL212B. Also the phase reversal tube is improved to reduce the wind speed. Thus sound quality is improved by reducing the disturbance to the low frequencies.

Thanks to the Q235 material and the powder spraying techniques, the grill of CL212B has high intensity and high salt mist resistance. In the atmosphere of 5% sodium hydroxide, it has salt mist resistance duration of 96 hours. In actual application it can keep itself rust free for 5 years. The inner side of the grill is padded with cottons to protect it from rains.

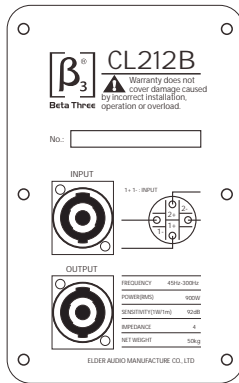
CL212B is mainly applied in meeting rooms, large multifunction halls, auditorium, churches and mobile performance. The sound characteristics of CL212B can be defined as clear full and without any compromises on the massiness.

Applications

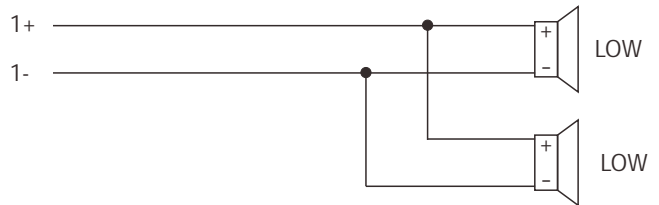
- Multi-function hall
- Auditorium
- Religion Place
- All kinds of living performance
- Assembly room

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

Speakon

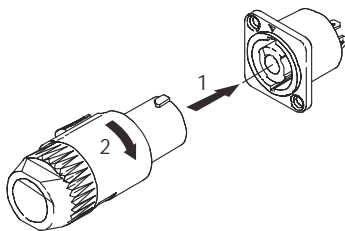


1 + 1- INPUT

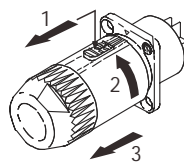


NL4 Wiring Connection

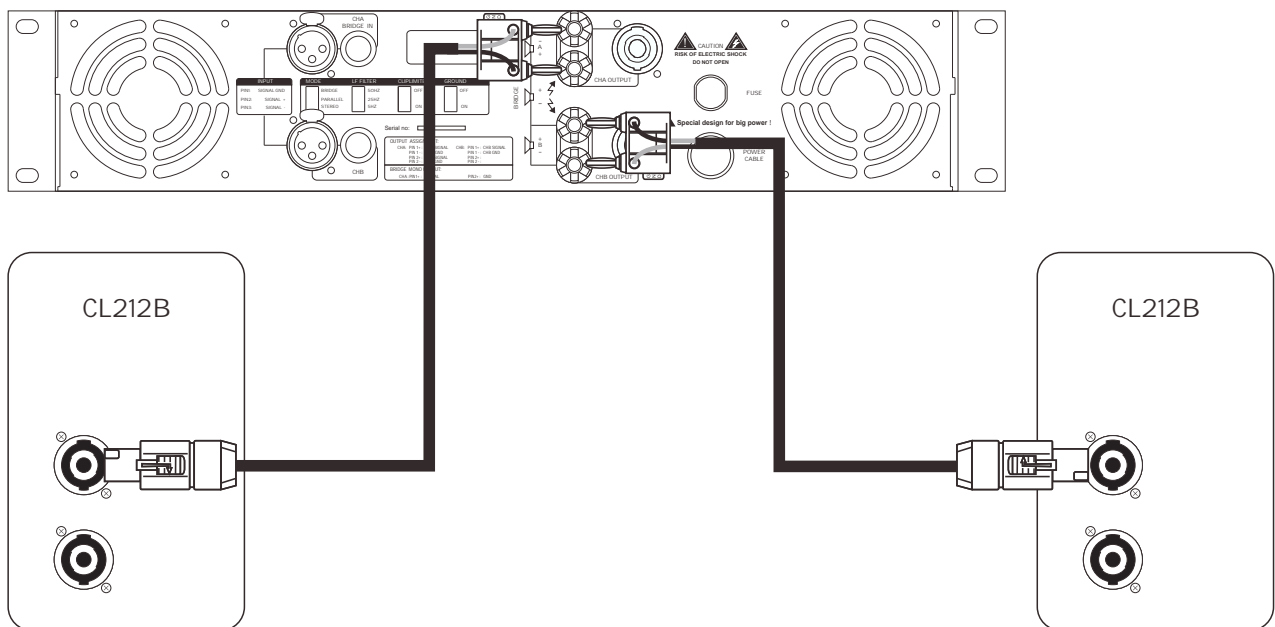
1. Connect



2. Disconnect



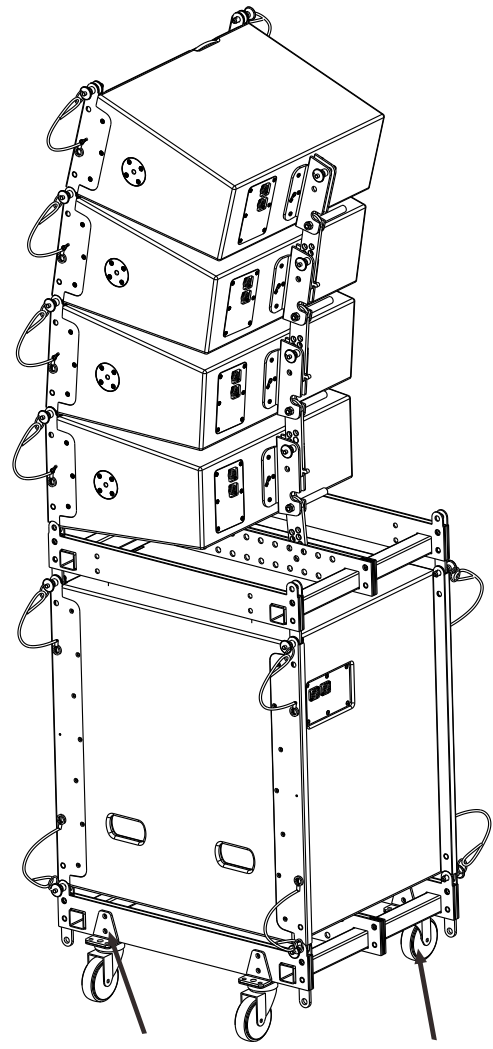
System Connection Reference



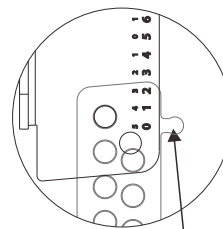
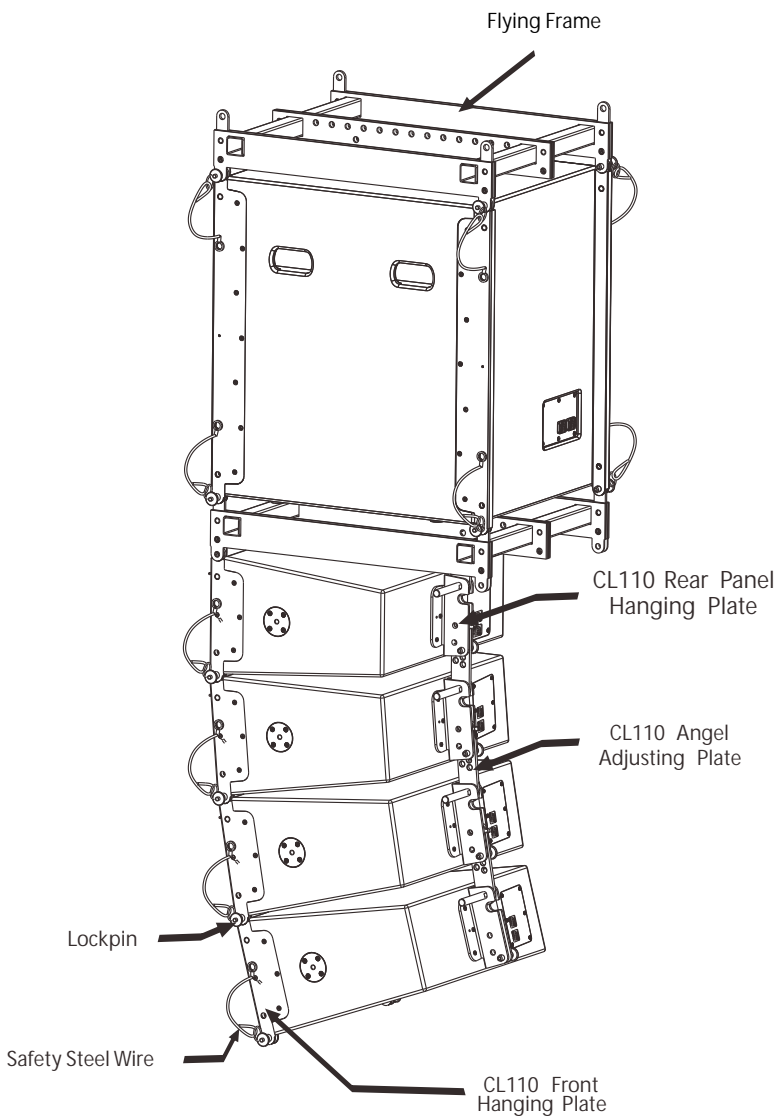
Warning: Please make sure the speaker impedance and polarity match the amplifiers.

Installation Guidance

- (1) CL212B has customized hanging wares for convenient and easy hanging and installation.
- (2) The hanging wares include CL212B hanging bracket, CL110 cabinet front and rear hanging ware and the lockpins.
- (3) The rear hanging ware is fixed on the cabinet for easy and fast field vertical angle adjustment between the speakers.
- (4) The hanging frame of CL212B is welding steel frame, which can hang multiple CL110. But optional accessories are provided according to actual requirements.



Wheel bracket(1-AZPJ-85)
4 inch wheel
4-YXPJ-112 with baking
4-YXPJ-113 without baking



The number rear hanging plate indicates the current angle. E.g. 1 means that the angle between 2 CL110 is 1.

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

Specifications

Product:	Passive Paint Wooden Full Range Speaker
LF Driver:	2 x 12" LF Drivers
Frequency Response(-3db): ¹	45Hz-300Hz
Frequency Response(-10db):	35Hz-600Hz
Sensitivity(1w@1m): ²	92dB
Maximum. Spl(1m): ³	122dB/128dB(PEAK)
Power: ⁴	900W (RMS) 1800W (MUSIC) 3600W (PEAK)
Rated Impedance:	4 ohms
Cabinet:	Wedge Cabinet, 18mm Plywood
Installation:	Special rigging brackets and connection accessories
Carry:	4 x Wooden Handles
Paint:	Polyurethane-based painting. Steel grille is coated by dots to provide strong ultra-Weatherability.
Connector:	NL4 x 2
Dimension(WXDXH):	540 x 680 x 713mm (21.3 x 26.8 x 28.1in)
Packing Dimension(WXDXH):	784 x 670 x 853mm (30.9 x 26.4 x 33.6in)
Net Weight:	50kg(110 lb)
Gross Weight:	55kg(121 lb)
Optional Accessories:	Flight Frame

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.

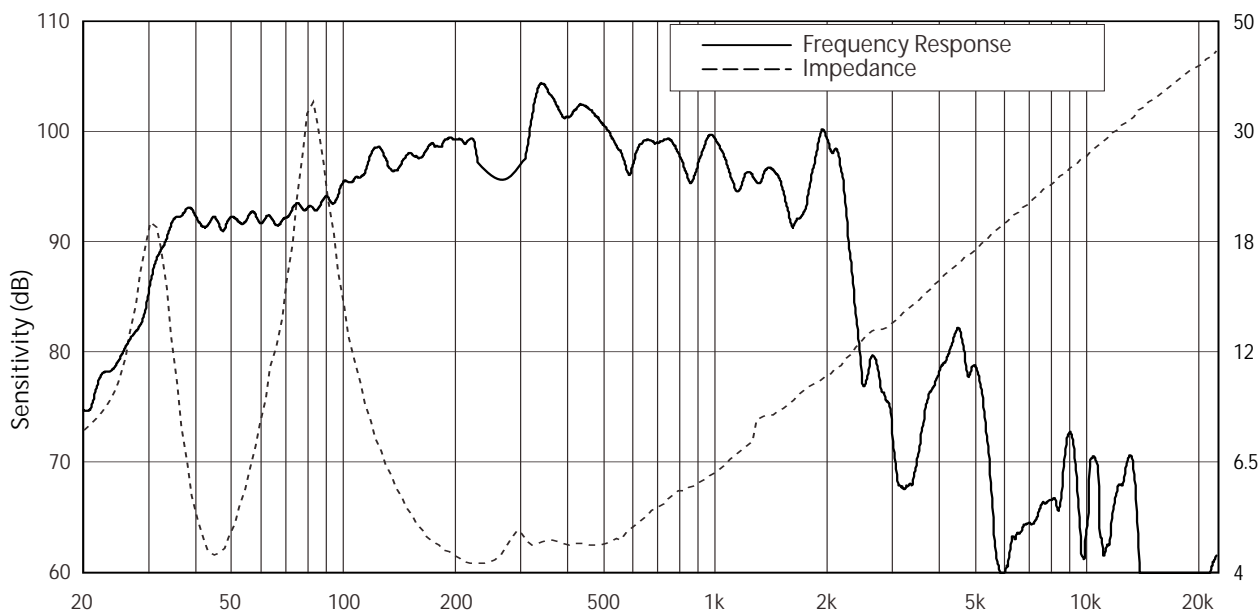
3. MAX.SPL

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.

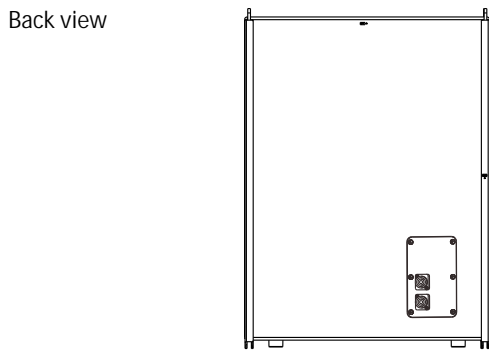
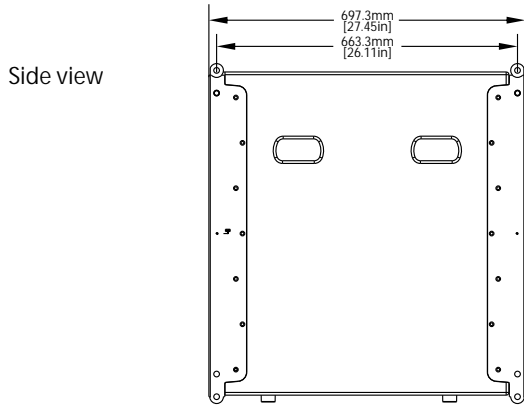
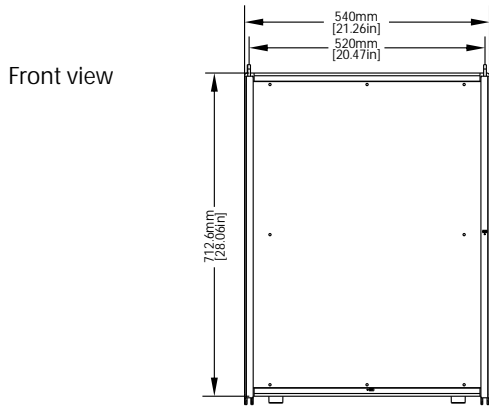
4. Rated Power

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.

Technical Specifications



Dimensions



Notes:



Beta Three