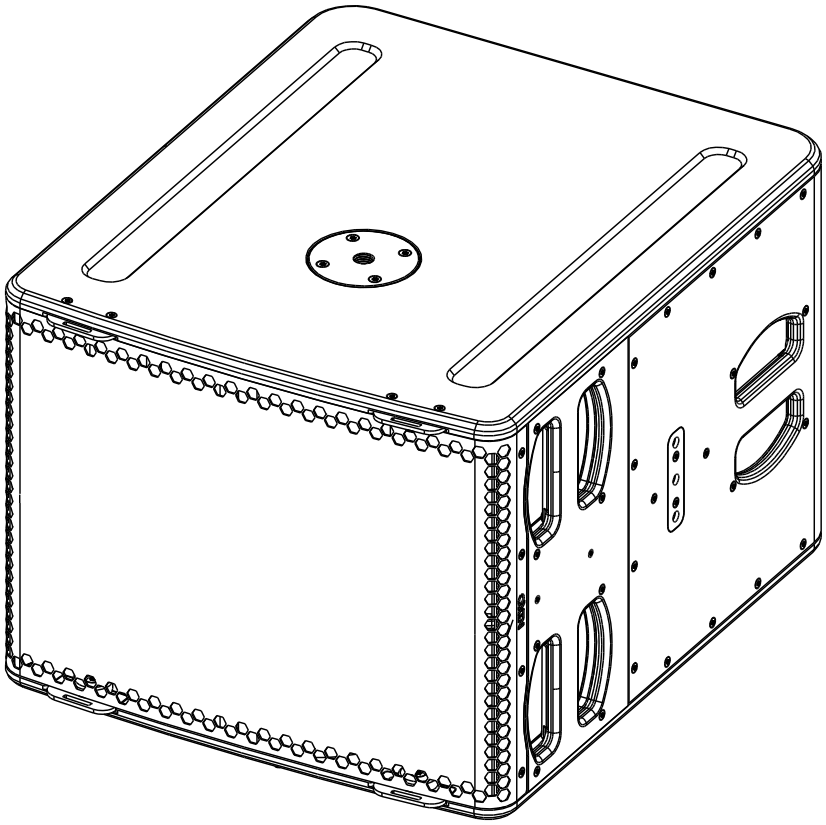
DP3950-02b-DI

L15



User manual

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EU Conformity declaration	
We,	**NEXO SA** **ZA DU PRE DE LA DAME JEANNE** **60128 PLAILLY – France**
Declare under our sole responsibility that the product	**Loudspeaker**
Type	**L15**
Serial number	**On the product**
Is in conformity with the provisions of the following directive including all applicable amendments:	**2014/35/UE (Low Voltage Directive)**
Applied rules and standards:	**EN 13155, EN 62368**
Plailly, June 12th, 2019	**Joseph CARCOPINO, R&D Director**

WARNINGS

PRECAUTIONS

Do not open the speaker, do not try to disassemble it neither to modify it in any way. The system doesn't include any user-repairable part.

If the system seems to be malfunctioning or damaged, stop using it at once and have it repaired by a NEXO qualified technician.

Do not expose the system directly to the sun or to the rain, do not immerse it into fluids, do not place objects filled with liquid on the system. If a liquid gets into the system, please have it inspected by a NEXO qualified technician.

When flying outdoor systems ensure that the system is not exposed to excessive wind or snow loads and is protected from rainfall.

In case of wind greater than 8 on Beaufort scale (72km/h – 45mph), a touring system has to be landed or an additional securing has to be implanted.

For fixed installations, wind loading has to be taken into account in accordance to the national standards

The connection should be performed by qualified technician, by ensuring that power is off.

Operating temperature with temperate climate: 0°C to +40°C (+32°F to +104); -20°C à +60°C (-4°F to +140°F) for storage.

SAFETY INFORMATIONS

Read this manual before using the speaker.

Keep this manual available for further reference.

Observe all warnings and cautions.

Please check the NEXO Web site **nexo-sa.com** to get the most up-to-date version of this manual.

Ensure you are aware of the safety rules applying to rigging, stacking or installing on tripod or speaker stand. Failure to observe these rules may expose persons to potential wounds or even death.

Only use the system with accessories specified by NEXO.

Please always consult a NEXO-accredited technician if the installation needs architectural works and observe following precautions:

Mounting Precautions:

- Please select screws and mounting location supporting 4 times the system weight.
- Do not expose the system to excessive dust, vibrations, to extreme cold or hot temperatures, to reduce the risk of damaging components.
- Do not place the system in an unstable position: it could fall accidentally.
- If the system is used on a tripod, please ensure the tripod's specifications are adapted and that its height does not exceed 1.40m/55". Do not move the tripod with the system in position.

Connection and Powering Precautions:

- Unplug connected cables before moving the system.
- Power off the system before connecting the system.
- When switching on the installation, the amplifier must be powered last; when switching the installation off, shut off the amplifier first.
- If you work by cold temperatures, progressively raise the level to nominal value during the first minutes of use, to allow the system components to stabilize.

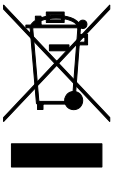
Please check regularly the system condition.

HIGH SOUND PRESSURE LEVELS

Exposure to very high sound pressure levels may cause permanent hearing losses. Degrees of hearing losses may be different from one person to another, but almost everybody will be affected if exposed to high sound pressure levels during a long period of time. The OSHA (Occupational Safety and Health Administration) American Agency specified the following maximal exposures:

Number of Hours	Sound Pressure Level (dBA), Slow Response
8	90
6	92
4	95
3	97
2	100
1 ½	102
1	105
½	110
¼ or less	115

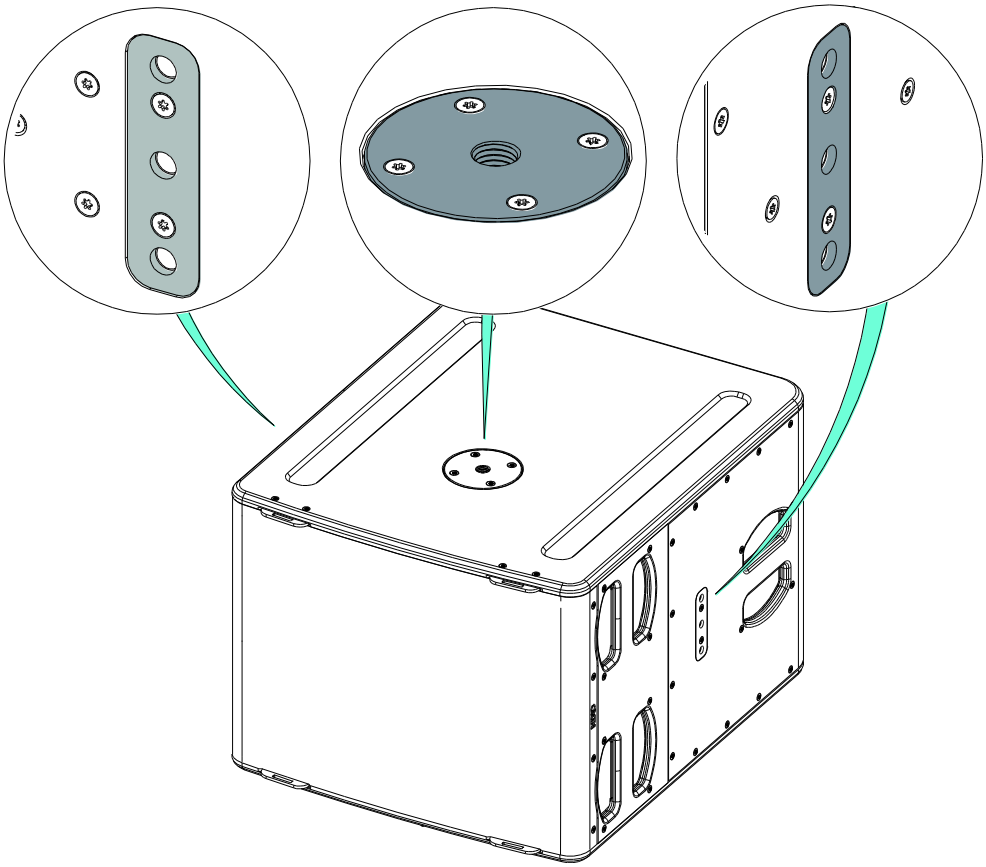
WASTE OF ELECTRIC OR ELECTRONIC EQUIPMENT



This symbol on the product or its packaging indicates that this product must not be treated as household waste. Instead, it is your responsibility to hand it over to a designated collection point for the recycling of waste electrical and electronic equipment. By ensuring your waste equipment is recycled, you will help prevent potential negative consequences for the environment and human health, which could appear if this product was not recycled. Recycling helps spare natural resources. For more information about the recycling of this product, please contact your local city office, your household waste disposal service or your reseller.

EQUIPMENT

3 locations for rigging accessories, 1 on the top for speaker stand and one per side.



Assembly with pole stand or speaker stand

Fix the pole stand on the connector plate (M20) of the Sub.

Mount the main cabinet on the pole stand / speaker stand (diameter of 35mm),

IMPORTANT

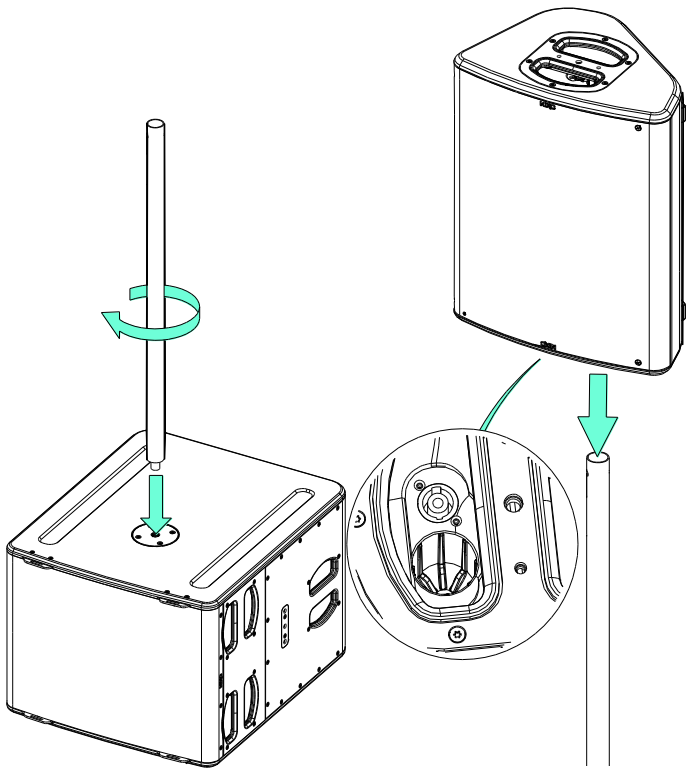
Speaker stand must be rated for the weight of the main cabinet.

Speaker stand must always be installed on a horizontal surface.

Stand height and footprint must be defined to prevent assembly from collapsing.

Ensure that audience is not allowed within a safety area which radius is equal or higher than assembly height.

Test steadiness of the assembly by pushing in all directions.



DESCRIPTION

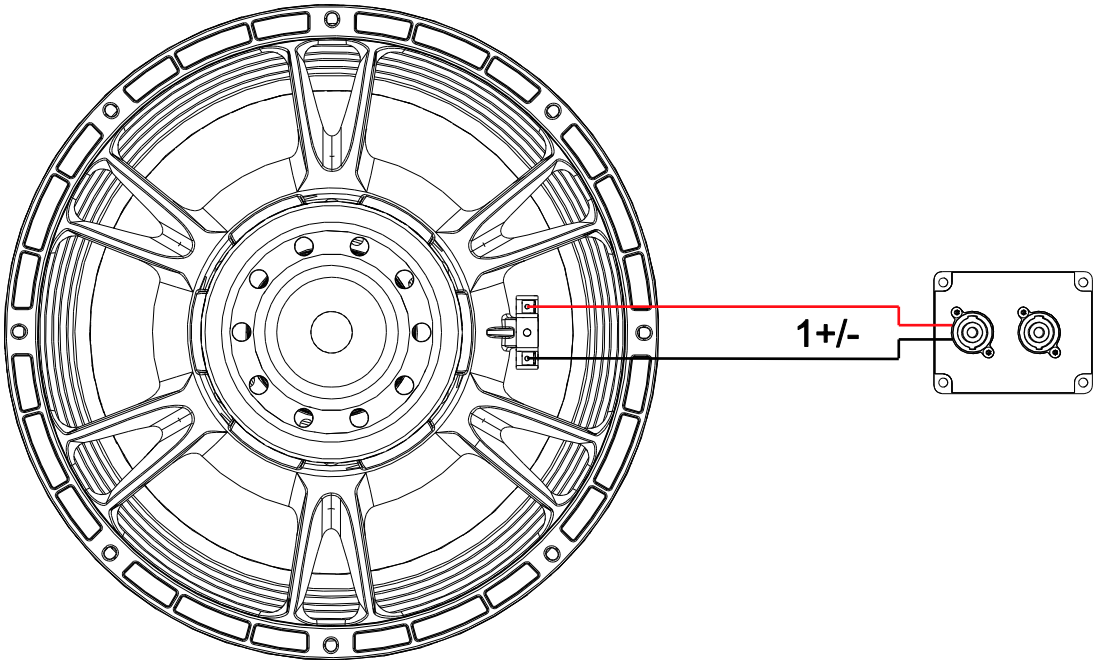
→ The L15 is a compact and powerful subwoofer, ideally complementing P8/10/12 speakers.

→ Versions:

- L15: black
- L15-PW: white

→ The L15 subwoofer is equipped with two Speakon NL4 connectors, with parallel-wired pins,

→ L15 uses the 1+/1- pins, (2+/2- through).



→ Amplification

- The L15 subwoofer must be used with a NEXO processor to handle EQ, phase alignment, crossover and excursion/thermal protection for the system loudspeaker.
- The following table shows the number of P8/1012 speakers and L15 subwoofers usable with each solution.

	DTD + DTDAMP4X1.3	NXAMP4X1mk2	NXAMP4X2mk2	NXAMP4X4mk2
P8	Up to 2 per channel	Up to 2 per channel	Up to 4 per channel	Up to 4 per channel
P10	Up to 2 per channel	1 per channel	Up to 4 per channel	Up to 4 per channel
L15	1 per channel	1 per channel	Up to 2 per channel	Up to 2 per channel

	NXAMP4X1mk2 (BRIDGED)	NXAMP4X2mk2	NXAMP4X4mk2
P12	Up to 2 per channel	Up to 2 per channel	Up to 4 per channel
L15	1 per channel	Up to 2 per channel	Up to 2 per channel

PRESET

Please consult nexo-sa.com for NEXO TD Controllers firmware information.

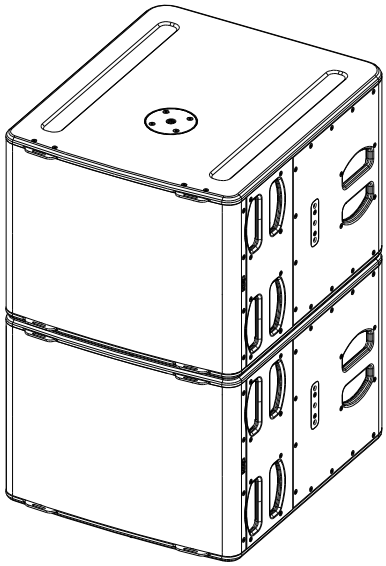
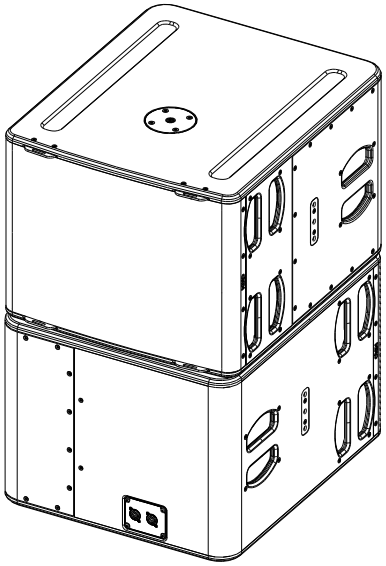
There are two setting range for surrounding speaker L15:

→ “OMNI” Setups; For a traditional use of the subwoofer in omnidirectional radiation (require at least one subwoofer and a channel of amplifier).

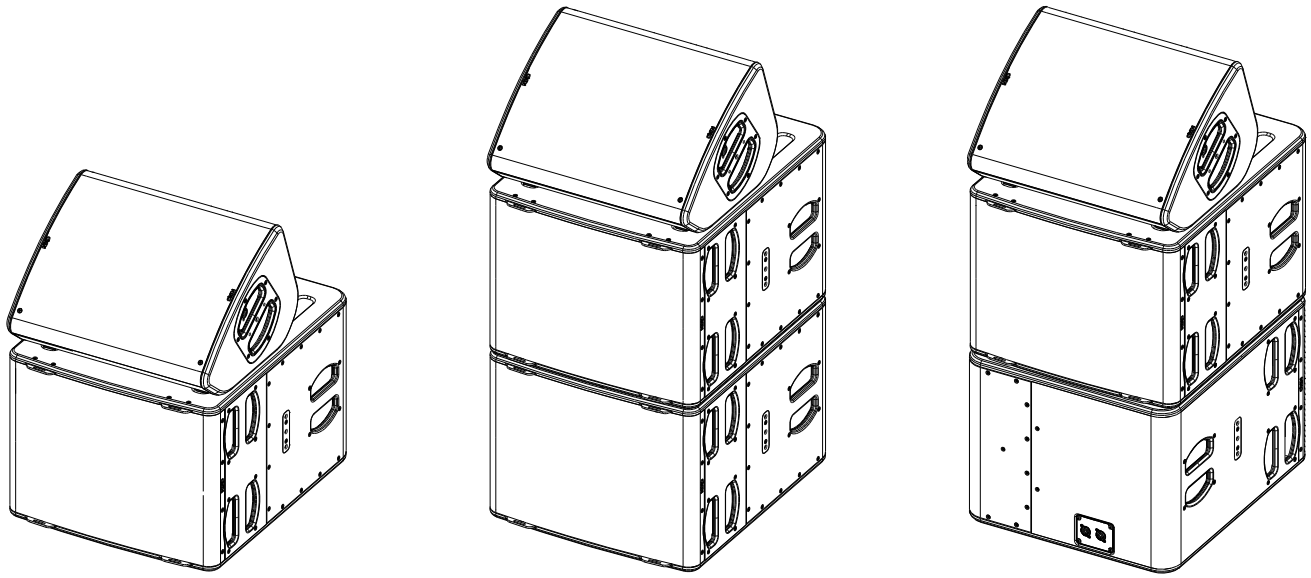
- Omnidirectional Main setup, with low-pass at 85 or 120 Hz.
- Omnidirectional Monitor setup, with low-pass at 85 or 120 Hz.

→ “CARDIO” Setups; For a directional use (cardioid) of subwoofers (require at least two subwoofers and two channels of amplifier).

- Cardioid back and front setups, with low-pass at 85 or 120 Hz.
  - Setup « FR » (Front) for the subwoofer pointed at the audience.
  - Setup « BA » (Back) for the subwoofer turned around.
- The ideal ratio for a directional use is 2x L15 in CARDIO FRONT mode on top of 1x Reversed L15 in CARDIO BACK mode. From 1:1 to 3:1 ratio can be used.

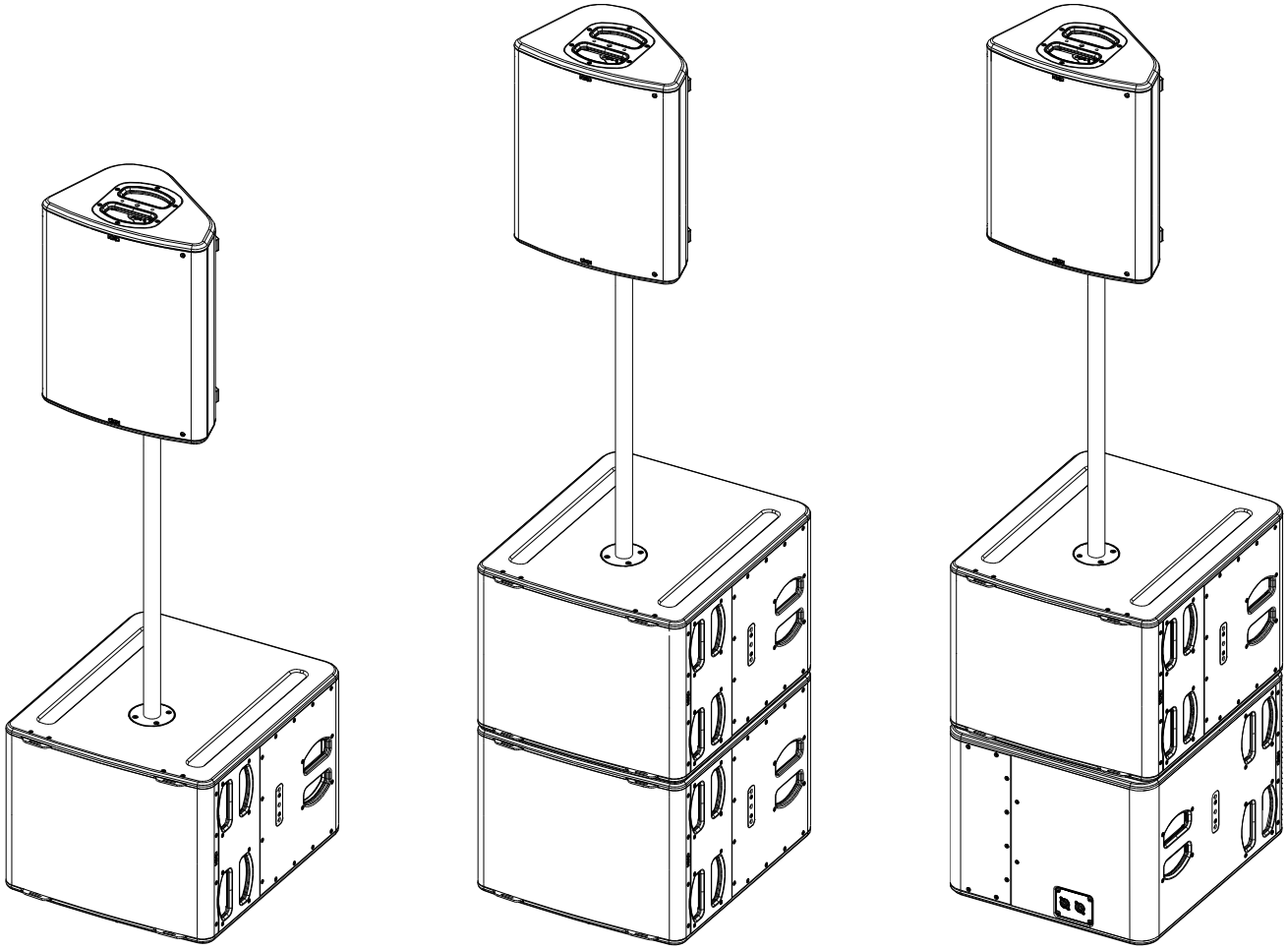
	
OMNI Assembly	CARDIO Assembly

With P8/10/12 in stage monitor



Stage monitor applications with Subs (OMNI or CARDIO modes)

With P8/10/12 in front of house



Front of house applications with Subs (OMNI or CARDIO modes)

ACCESSORIES

WARNINGS

All L15 accessories are specifically rated in agreement with structural computations.

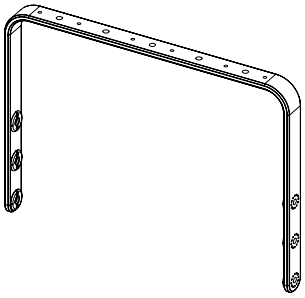
Never use other accessories – including push-pins – when assembling L15 cabinets than the ones provided by NEXO: NEXO will decline responsibility over the entire L15 accessory range if any component is purchased from different supplier.

All L15 accessories have been designed so that cabinet are arrayed vertically.

PROHIBITED: L15 below L15 or P8/10/12 below L15 without dedicated accessory

LNU-HBRK15 (LNT-HBRK15)

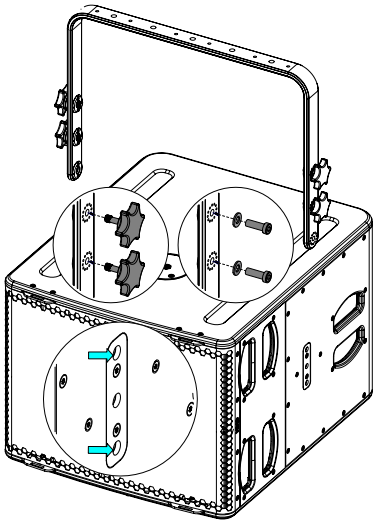
Horizontal Cradle, use with L15, CLADAPT.

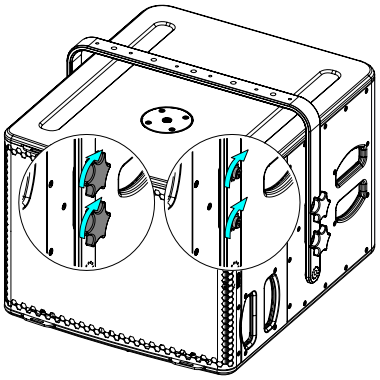


Place HBRK15 on L15, use only fasteners provided.

Tight properly.

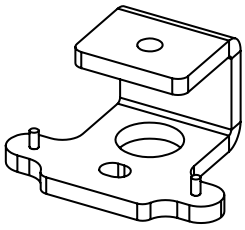
Refer to the Product Data Sheet.





VNI-CLADAPT (PNI-CLADAPT)

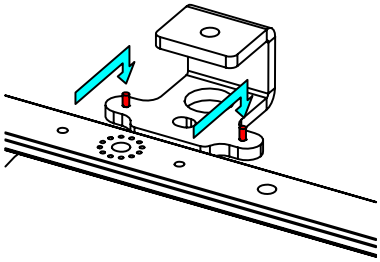
Ceiling adapter, use with LNU-HBRK15.

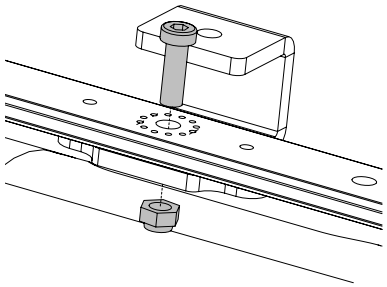


Screw CLADAPT to the ceiling (fasteners not provided).

Place the assembly on CLADAPT, use the 2 guides. Tight with the fasteners provided with CLADAPT.

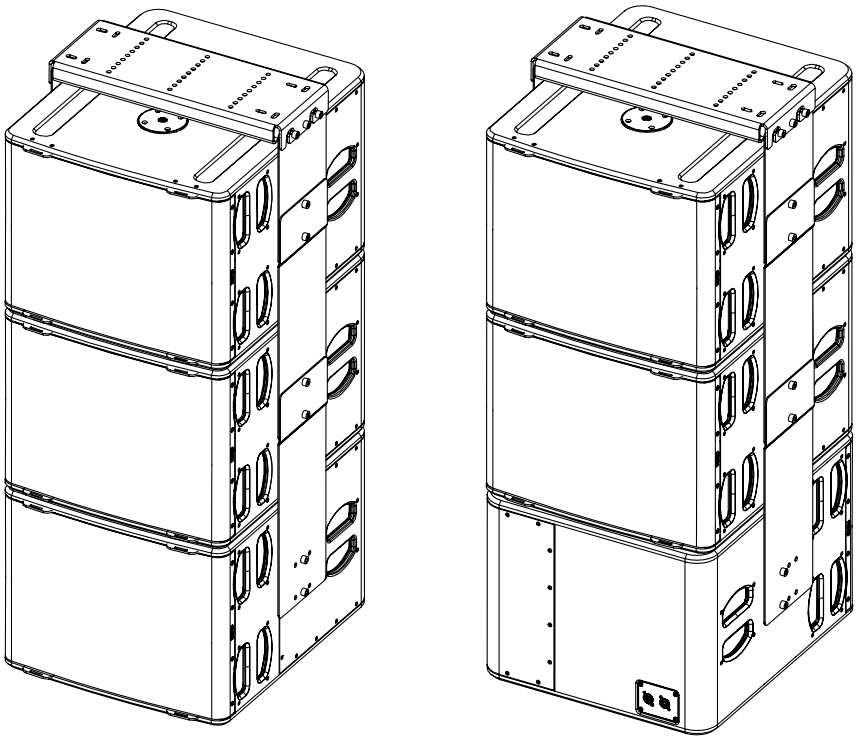
Refer to the Product Data Sheet.





LNI-3L15

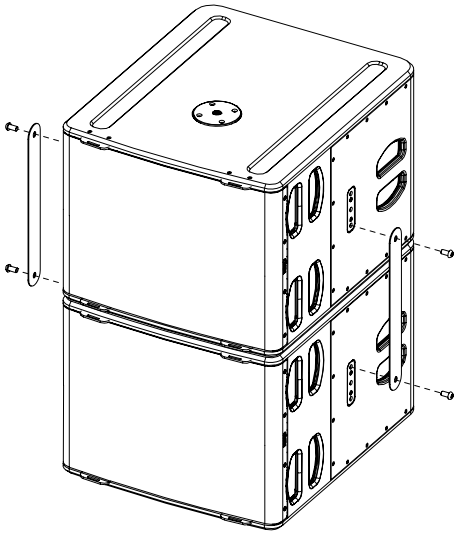
L15 Rigging system (up to 3; Cardio or Omni)



Refer to the Product Data Sheet.

VNI-CPL01

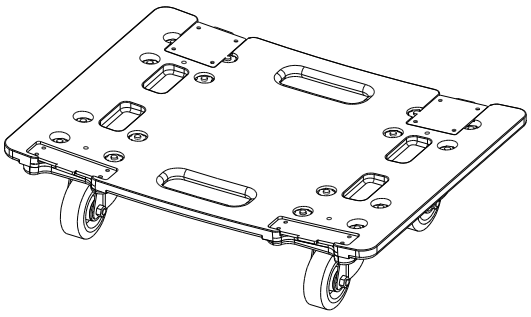
Coupling Bar for 2 or 3 L15



Refer to the Product Data Sheet.

LNT-WB15

Wheelboard



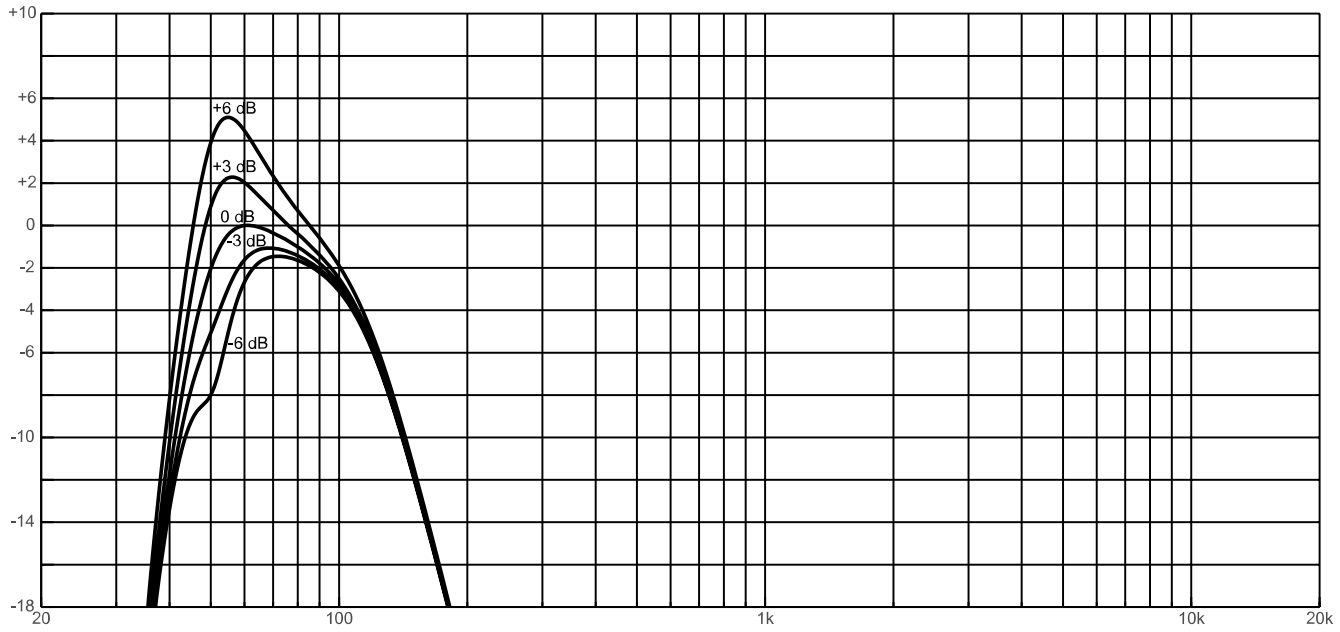
Refer to the Product Data Sheet.

LNT-COV15: COVER FOR L15 ON WHEELBOARD

LNT-2CASE15: FLIGHT CASE FOR 2X L15

ARRAY EQ

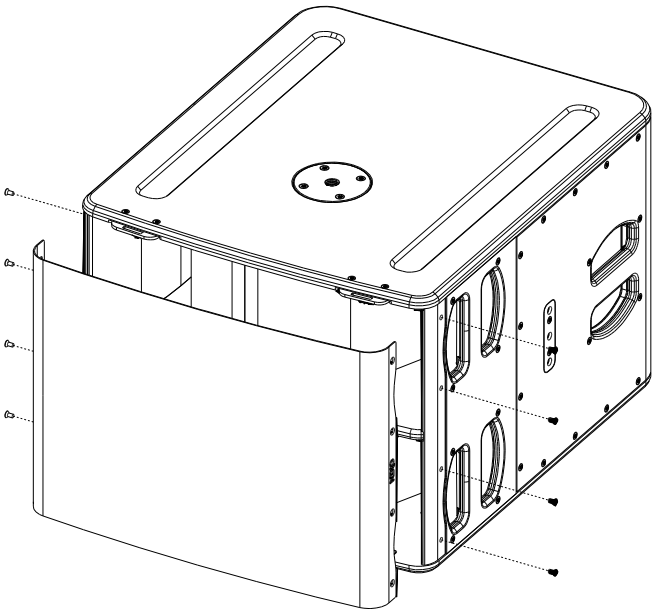
The ArrayEQ allows to adjust the system frequency response in its lower range (see curves below, with different ArrayEq values):



MAINTENANCE

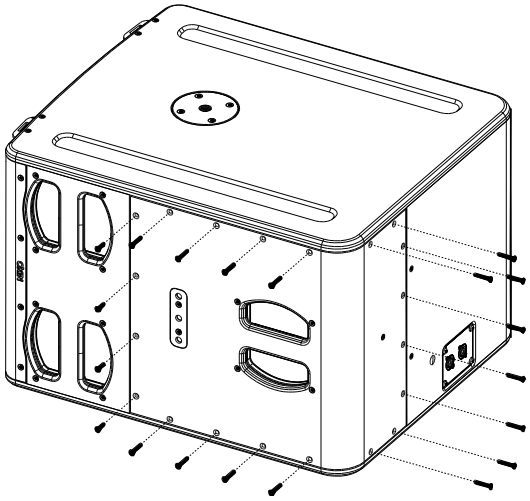
Grille Changing:

Remove 8 screws, tightening torque: 3.5 Nm (Thread Locker: Loctite 242)

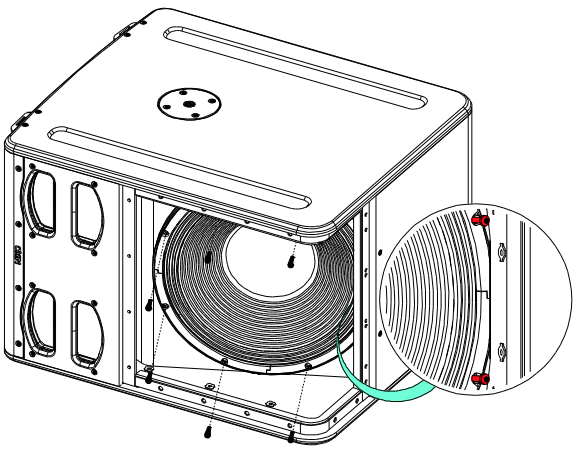


15'' Driver

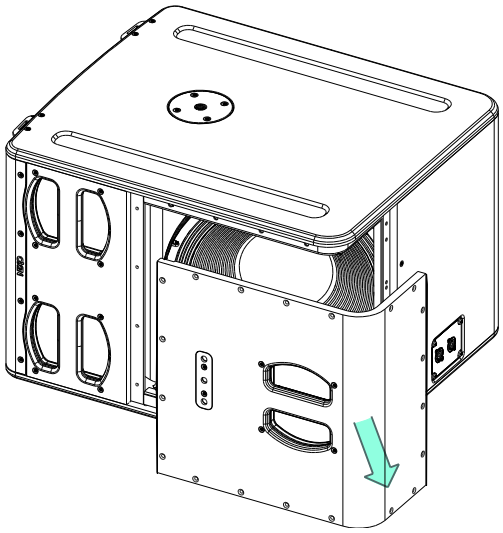
Remove 20 screws



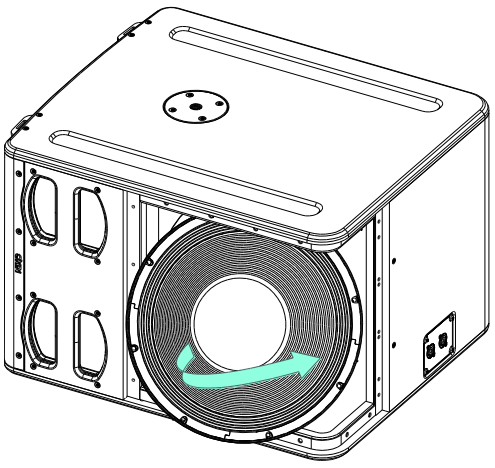
Remove 8 screws.



Remove the trap

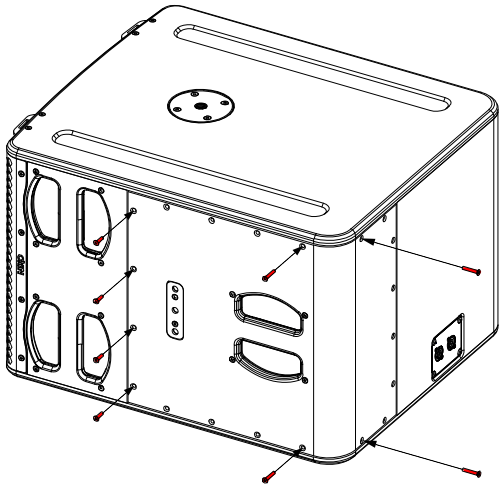


Remove the driver.
Tightening torque: 3.5 Nm (Thread Locker: Loctite 242)

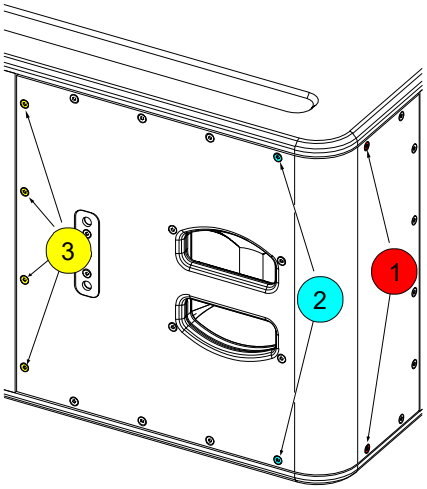


Place 8 screws.

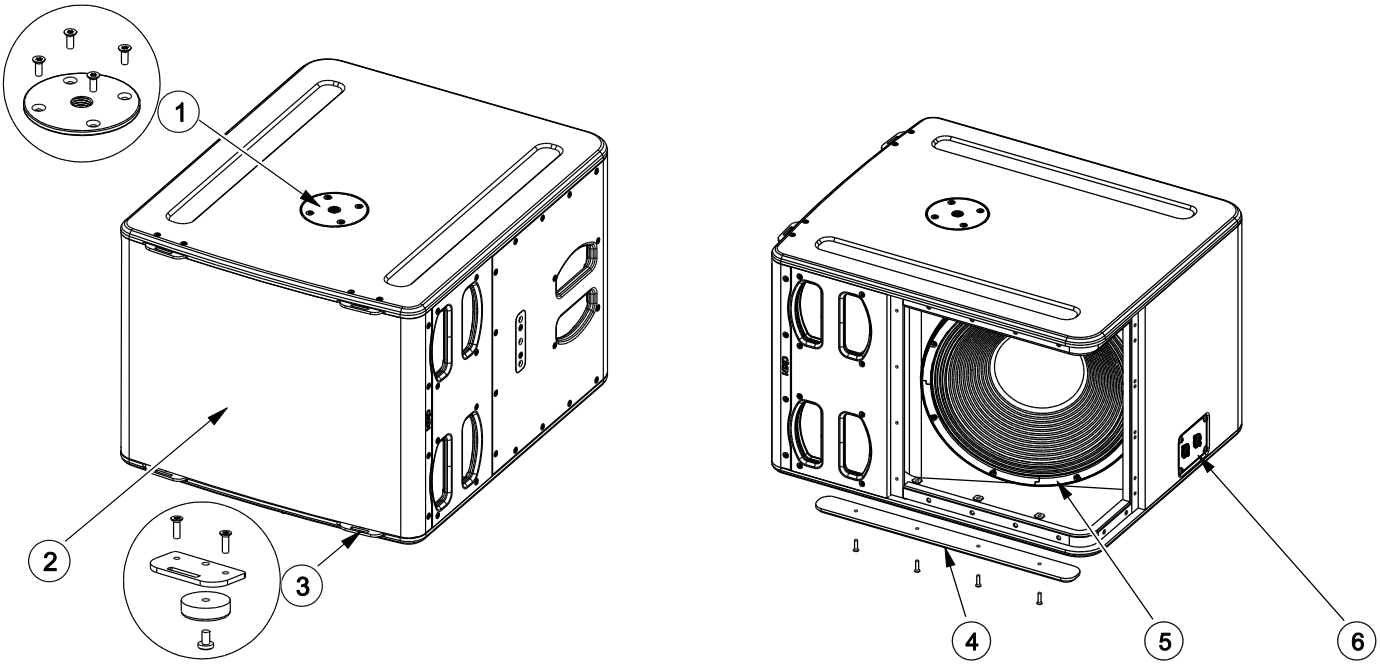
Tightening torque: 3.0 Nm (Thread Locker: Loctite 242)



Follow the sequence below to tight the screw.Place and tight the 12 others screws.



Spare parts



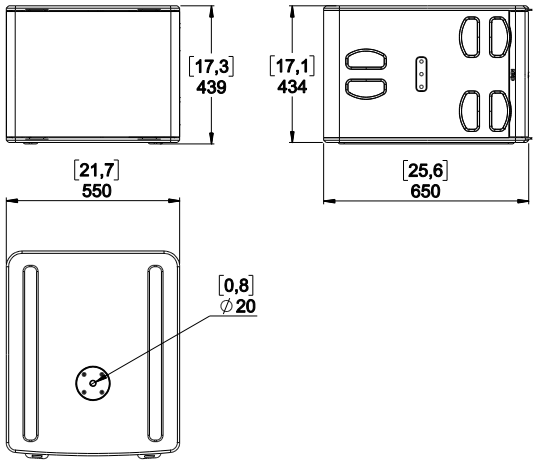
MARK	QUANTITY	REFERENCE	DESIGNATION
1	1	05DOUILM20N	Connector Plate M20 Black (with fasteners)
	1	05DOUILM20W	Connector Plate M20 White (with fasteners)
2	1	05L15UA	Complete grille Black (with fasteners)
	1	05L15UA-PW	Complete grille White (with fasteners)
3	4	05AMPLAVER02	Wheelboard attachment Black (with fasteners)
	4	05AMPLAVER02-PW	Wheelboard attachment White (with fasteners)
4	2	05PATIN01	Rubber Skid Black (with fasteners)
	2	05PATIN01-PW	Rubber Skid White (with fasteners)
5	1	05HPB15-4	15'' Driver (with fasteners)
	1	05HPB15-4R/K	Recone kit (with fasteners)
6	1	05CNX01	Connection plate Black without lexan (with fasteners)
	1	05CNX01-PW	Connection plate White without lexan (with fasteners)
6a	1	05LEXCNX-L15	Lexan CNX L15 Black
	1	05LEXCNX-L15PW	Lexan CNX L15 White
6b	2	05CNXNL4MDV-1	Speakon NL4 MDV1

TECHNICAL SPECIFICATIONS

L15 WITH NEXO ELECTRONICS

Model	L15
Frequency range (±6dB)	40Hz – 120Hz
Peak SPL Level (1m)	139 dB Peak
Operating voltage	55Vrms (150Vpeak)
Crossover Frequency	85Hz; 120Hz
Nominal Impedance	4Ω

SPECIFICATIONS

Model	L15
Components	1x 15'' – 4 ohms – Long excursion – Neodymium driver
Material	Custom made bent plywood of Baltic birch and poplar
Finish	Black or white structural paint
Front finish	Steel front grille
Fittings	Handles on each side Threated inserts on each side for connection of mounting accessories Stand fitting M20
Connector	2x NL4, 4 poles connectors
Weight	35 kg / 77 lb
Dimensions	

USER NOTES

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