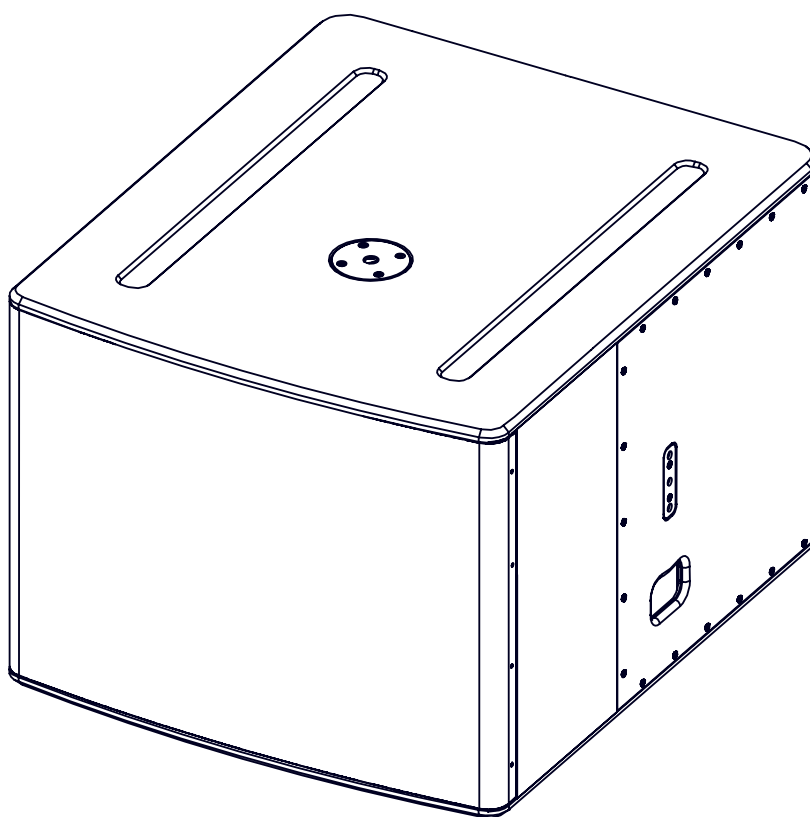


L20-I



User manual



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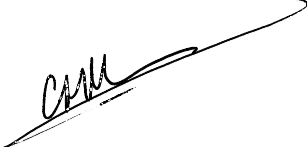
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| EU Conformity declaration | |
|--|--|
| We, | NEXO SA |
| | ZA DU PRE DE LA DAME JEANNE |
| | 60128 PLAILLY – France |
| Declare under our sole responsibility that the product | Loudspeaker |
| Type | L20 |
| Serial number | On the product |
| Is in conformity with the provisions of the following directive including all applicable amendments: | 2014/35/UE (Low Voltage Directive) |
| Applied rules and standards: | EN 12100, EN 13155, EN 62368 |
| Plailly, September, 2023 | 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 INFORMATION

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 |

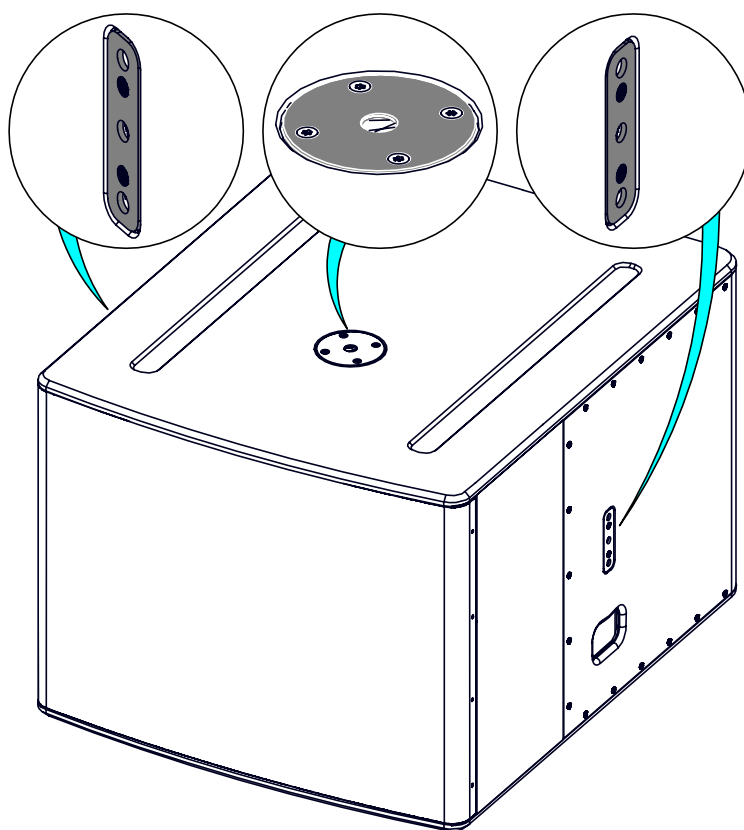
WASTE OF ELECTRIC OR ELECTRONIC EQUIPMENT



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 hanging, 1 on the top for speaker stand and on both side.



Assembly on distance rod or speaker stand

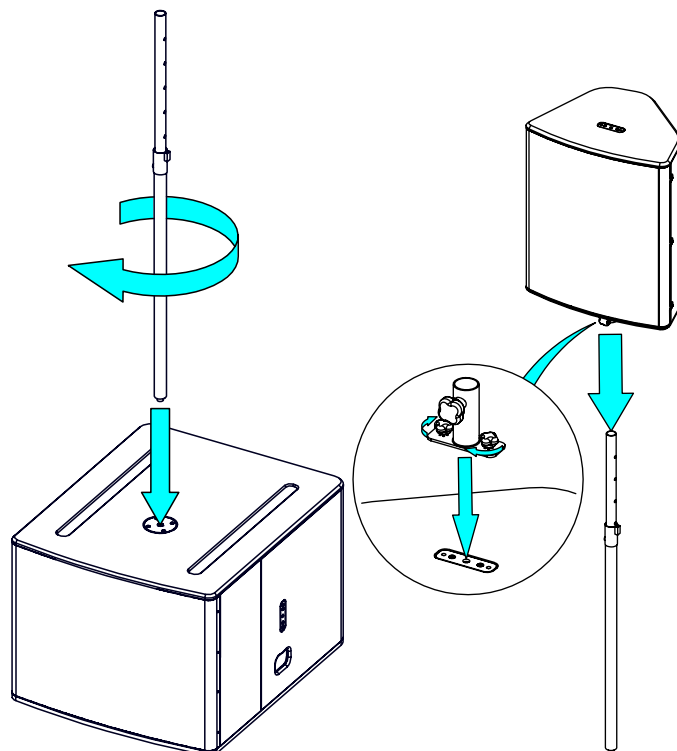
Place distance rod on the connector plate (M20) of the Sub.
Place the main cabinet on the distance rod / monitor stand
(diameter of 35mm),

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.

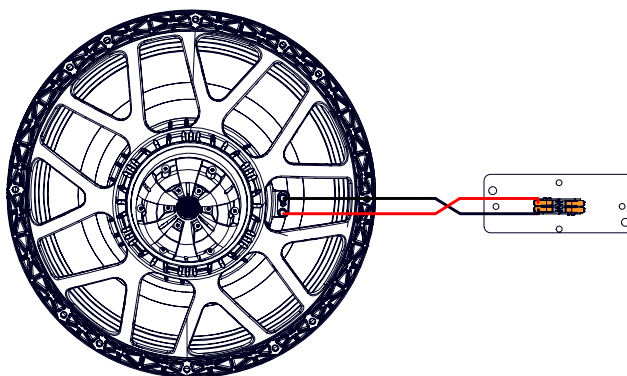
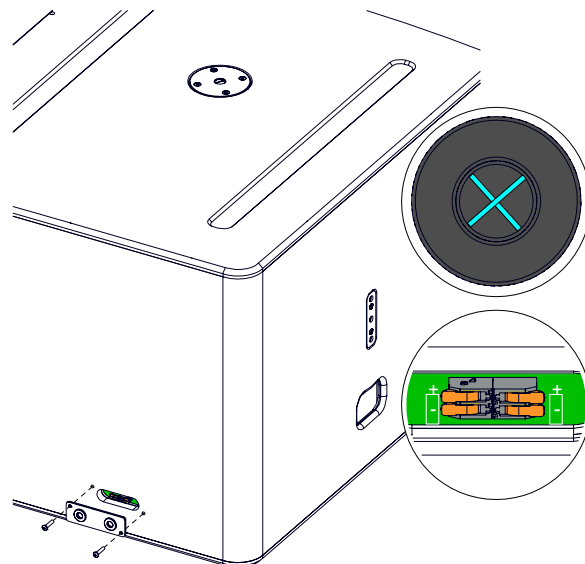


DESCRIPTION

- The L20 is a compact and powerful subwoofer, ideally complementing PLUS serie speakers
- Versions :
 - L20-I : black
 - L20-IPW : white
- L20-I is equipped with fast connectors

To wire L20-I, slit the membrane of the grommet crosswise.
 Pass the cable through.
 Make the connection to the fast connectors.
 Permissible cables from 0.2 mm² to 4 mm² (12 to 24 AWG).
 Place the IPCOV.

IP55: Be careful to place the IPCOV correctly.



- Amplification
 - The L20 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 L18 or L20 subwoofers usable with each solution.

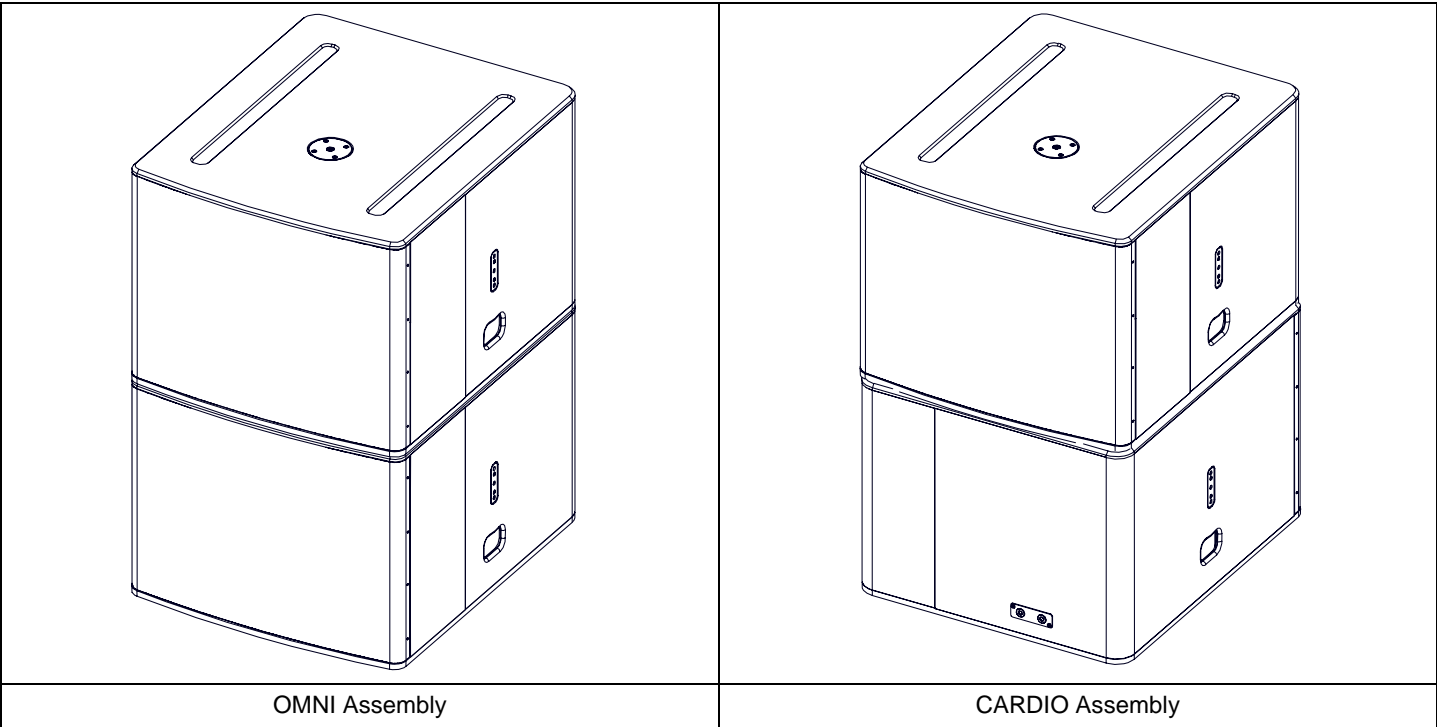
| | NXAMP4X2mk2 | NXAMP4X1mk2 (BRIDGED) | NXAMP4X4mk2 |
|-----|----------------|-----------------------|---------------------|
| P18 | 1 per channel | Up to 2 per channel | Up to 3 per channel |
| L18 | 1 per channel | 1 per channel | Up to 2 per channel |
| L20 | Not authorized | 1 per channel | Up to 2 per channel |

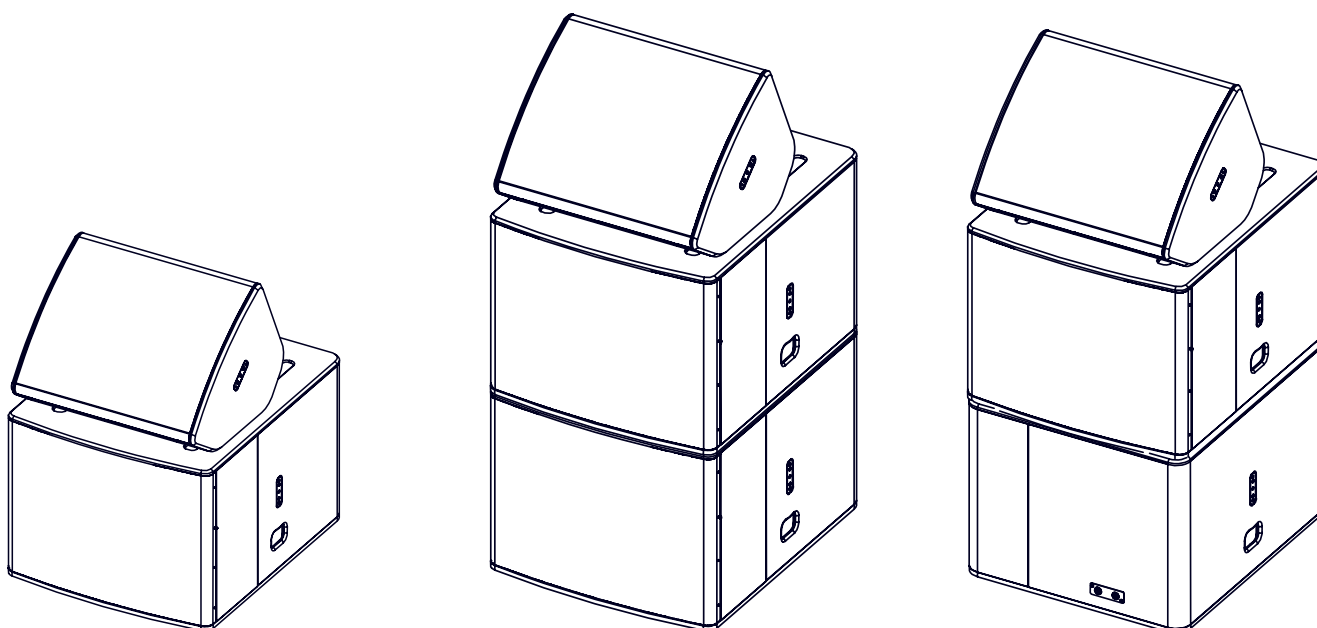
PRESET

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

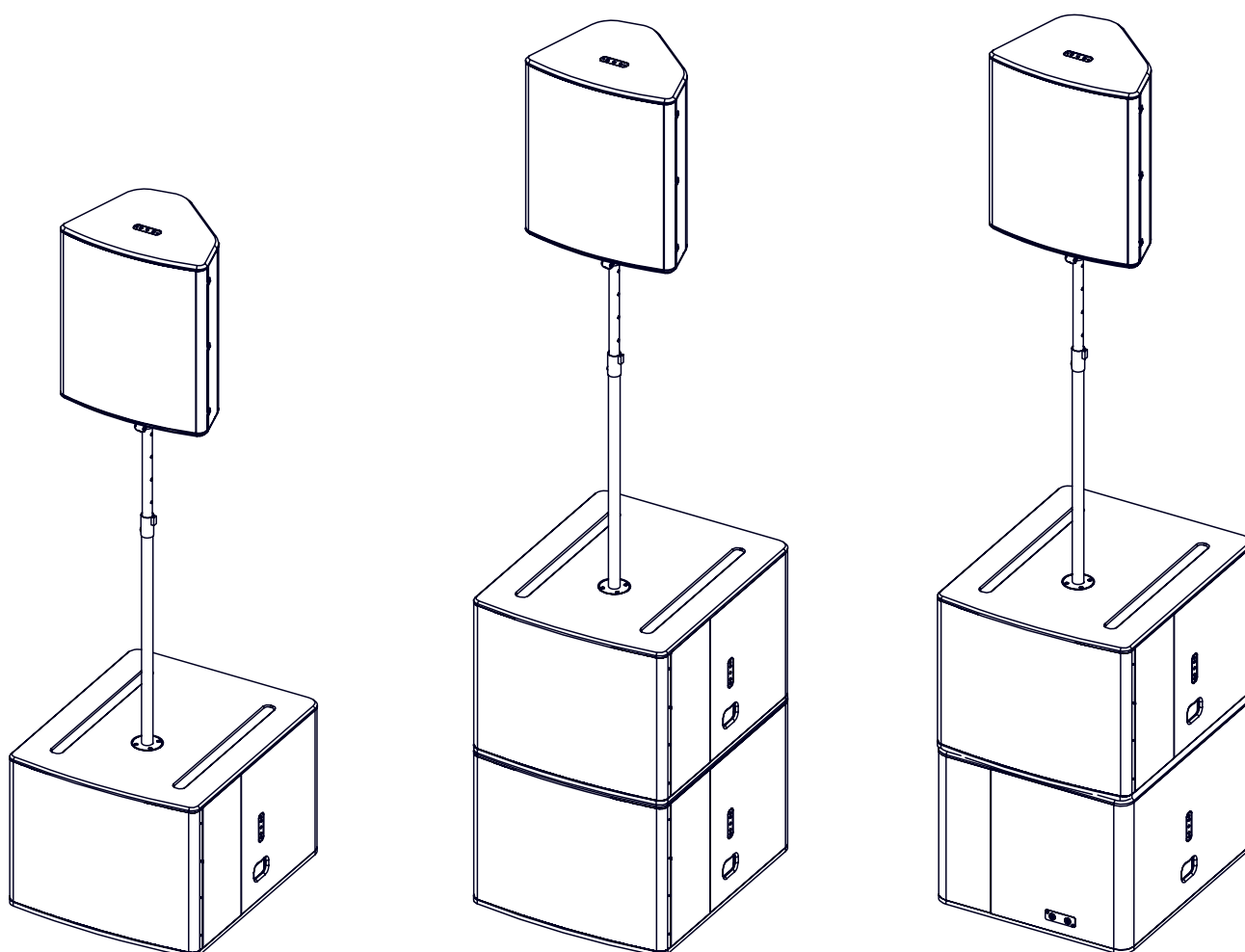
There are two setting range for surrounding speaker L20:

- “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 60, 85 or 120 Hz.
 - Omnidirectional Monitor setup, with low-pass at 60, 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 60, 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 L20 in CARDIO FRONT mode on top of 1x Reversed L20 in CARDIO BACK mode. From 1:1 to 3:1 ratio can be used.



With P18 in stage monitor

Stage monitor applications with Subs (OMNI or CARDIO modes)

With P18 in front of house

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

ACCESSORIES

WARNINGS

All L20 accessories are specifically rated in agreement with structural computations.

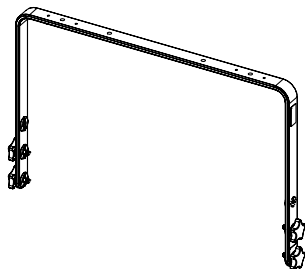
Never use other accessories – including push-pins – when assembling L20 cabinets than the ones provided by NEXO: NEXO will decline responsibility over the entire L20 accessory range if any component is purchased from different supplier.

All L20 accessories have been designed so that cabinet are arrayed vertically.

PROHIBITED: L20 below L20 or PLUS serie below L20 without dedicated accessory

LNU-HBRK20

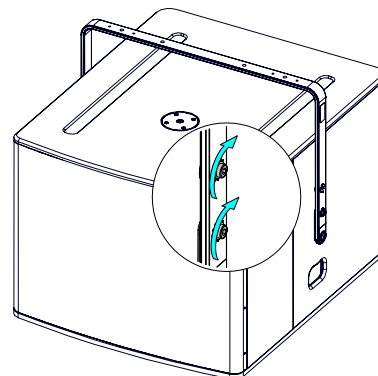
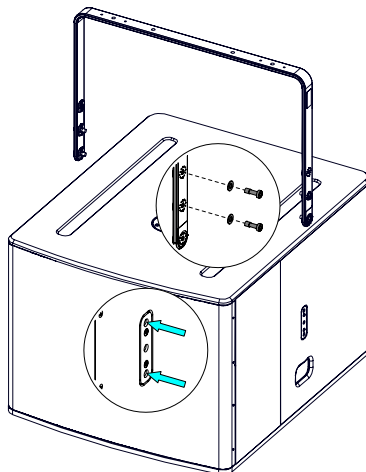
Horizontal Cradle, use with L20 CLADAPT.



Place HBRK20 on L20, use only fasteners provided.

Tight properly.

Refer to the Product Data Sheet.



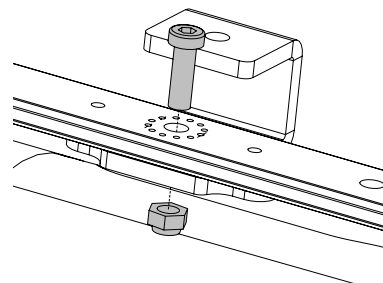
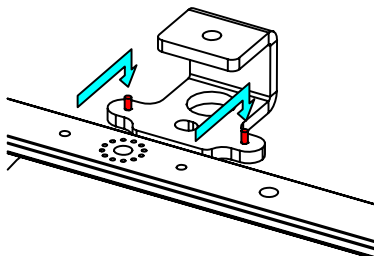
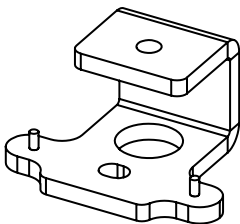
VNI-CLADAPT (PNI-CLADAPT)

Ceiling adapter, use with LNU-HBRK20.

Screw CLADAPT to the ceiling (fasteners not provided).

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

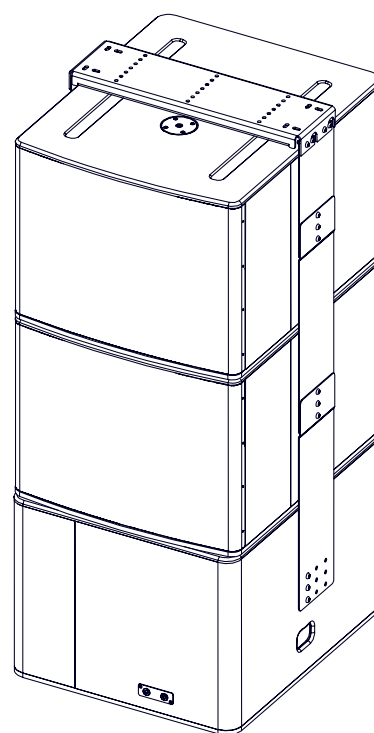
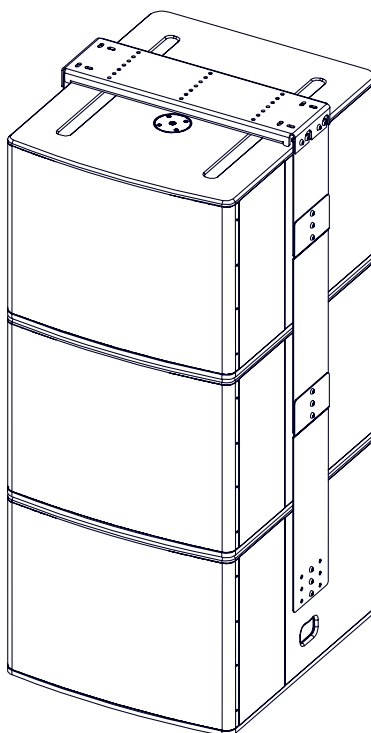
Refer to the Product Data Sheet.



LNI-3L20

L20 Rigging system (up to 3; Cardio or Omni)

Refer to the Product Data Sheet.

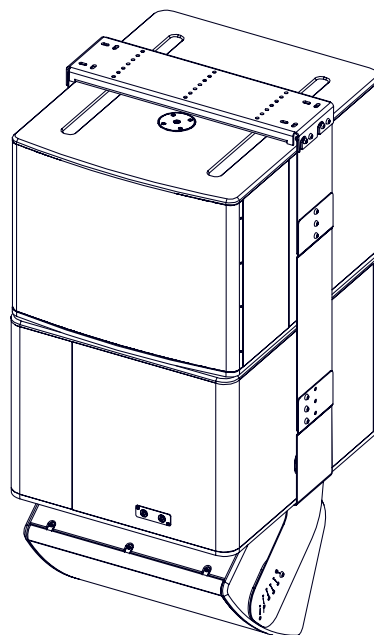
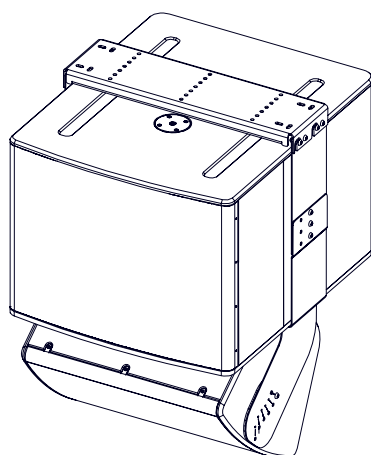


PNI-P18TOL20
PNI-P18TO2L20

P18 Under 1x L20

P18 Under 2x L20 (Omni or Cardio)

Refer to the Product Data Sheet

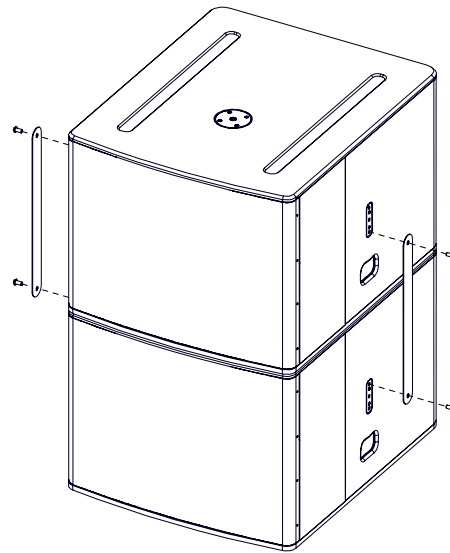


ACCESSORIES

VNI-CPL03

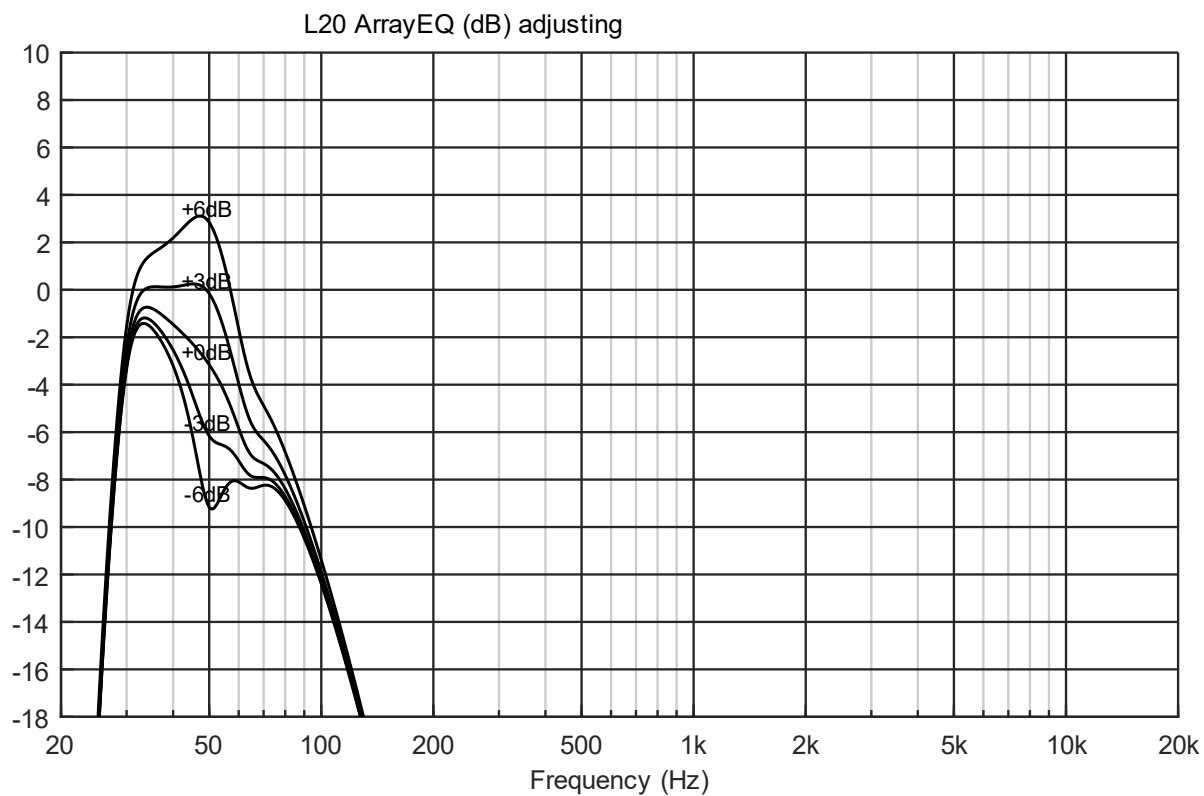
Coupling Bar for 2 or 3 L20

Refer to the Product Data Sheet.



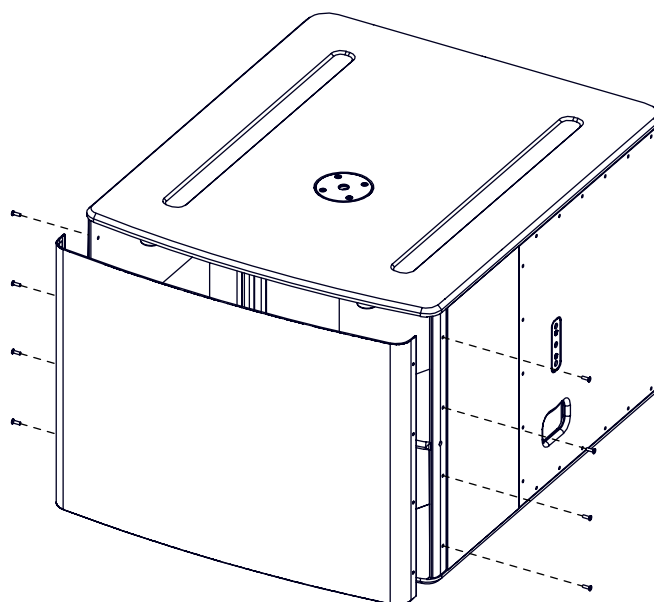
ARRAY EQ

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



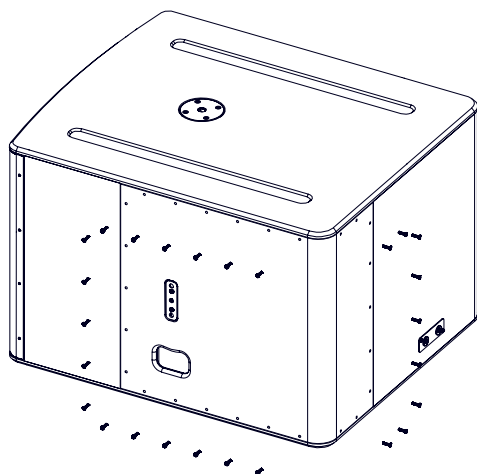
MAINTENANCE

Grille Changing: Remove 8 screws

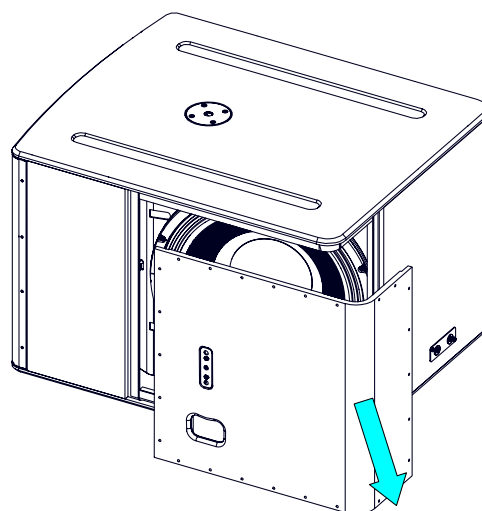


21'' Driver

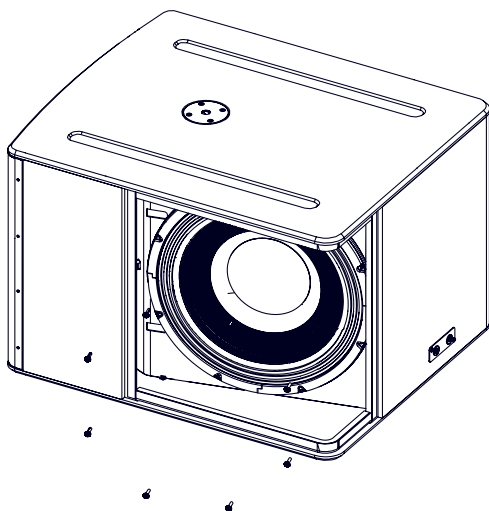
Remove 26 screws



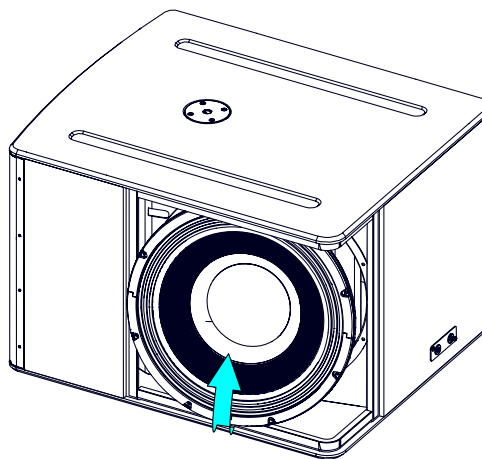
Remove the trap



Remove 8 screws.

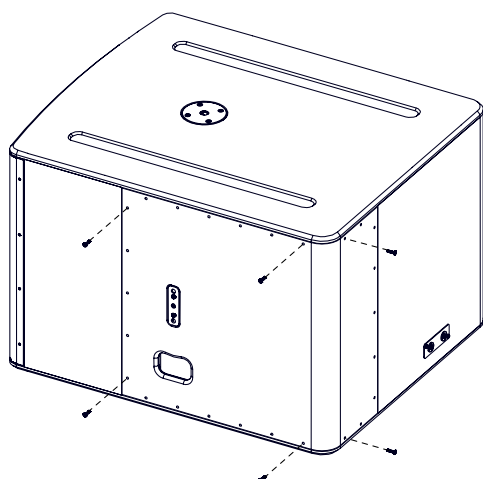


Remove the driver.

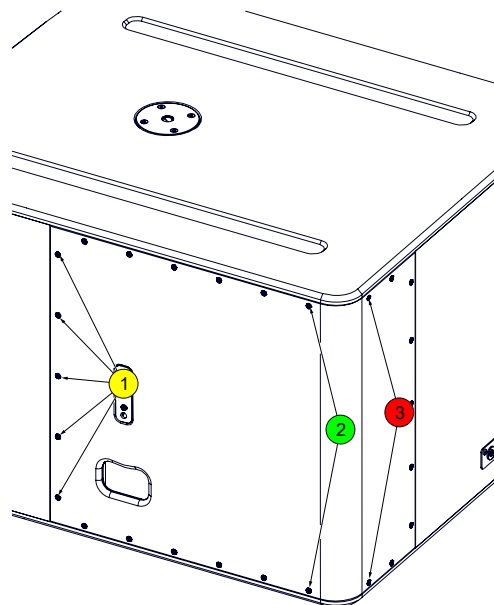


Place 6 screws.

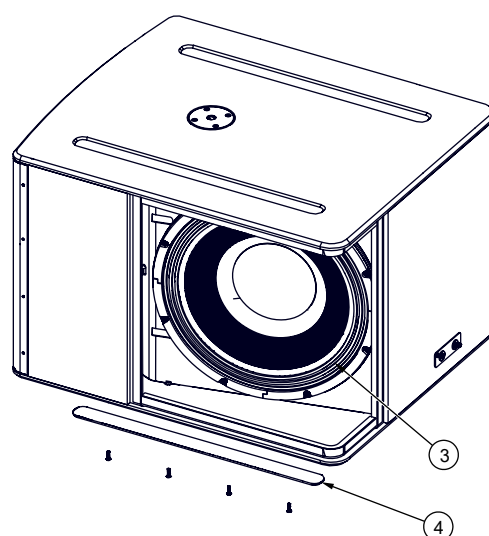
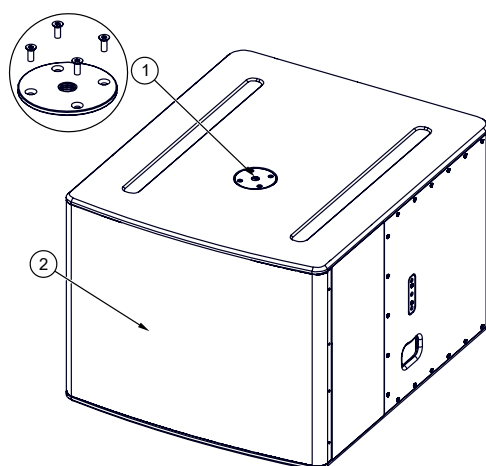
Tightening torque: 3.0 Nm (Thread Locker: Loctite 242)



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 | 05L20UA-I | Complete grille Installation Black (with fasteners) |
| | 1 | 05L20UA-IPW | Complete grille Installation White (with fasteners) |
| 3 | 1 | 05HPB20-4 | HP 20" BASS NEODYNIUM 4 Ohms QUAD 4.5" VOICE COIL |
| | 1 | 05HPB20-4R/K | HPB20-4 RECONE KIT |
| 4 | 2 | 05PATIN01 | Rubber Skid Black (with fasteners) |
| | 2 | 05PATIN01-PW | Rubber Skid White (with fasteners) |

TECHNICAL SPECIFICATIONS

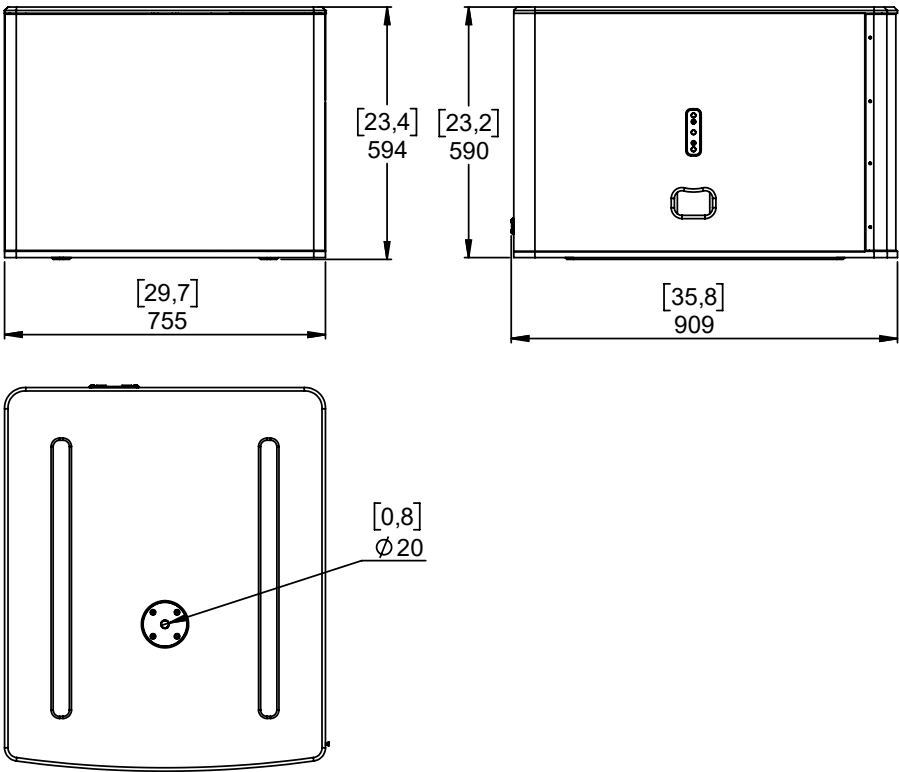
L20 WITH NEXO ELECTRONICS

| | |
|------------------------|---------------------|
| Model | L20 |
| Frequency range (±6dB) | 28Hz – 120Hz |
| Peak SPL Level (1m) | 141 dB Peak |
| Operating voltage | 80 Vrms (180 Vpeak) |
| Crossover Frequency | 60 Hz; 85Hz; 120Hz |
| Nominal Impedance | 4Ω |

SPECIFICATIONS

| | |
|--------------|--|
| Model | L20 |
| Components | 1x 20" – 4 ohms – Long excursion – Neodymium driver |
| Material | Baltic birch / Poplar plywood |
| Finish | Black or white structural paint |
| Front finish | Steel front grille with acoustic cloth |
| Fittings | Handles on both sides. Threated inserts on both sides for connection of mounting accessories Stand fitting M20 |
| Connector | Fast connectors |
| Weight | 59 kg / 130 lb |

Dimensions



USER NOTES

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