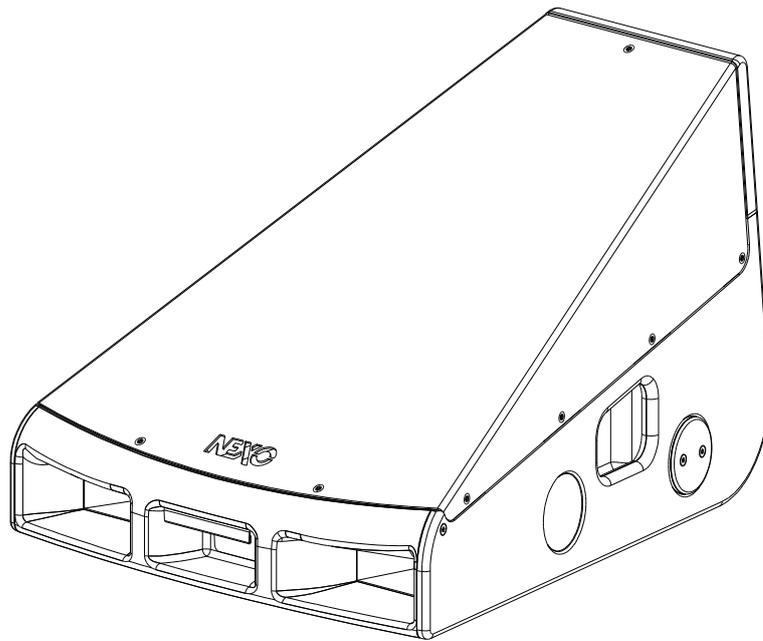


# 45N12

## Line Monitor



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 **45N12**

Serial number **On the product**

Is in conformity with the provisions of the following directive **2006/95/CE (Low Voltage Directive)**  
 including all applicable amendments:

Applied rules and standards: **EN 12100, EN 60065**

Plailly, February 08<sup>th</sup>, 2015 **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.

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](http://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:**

- 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.

**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

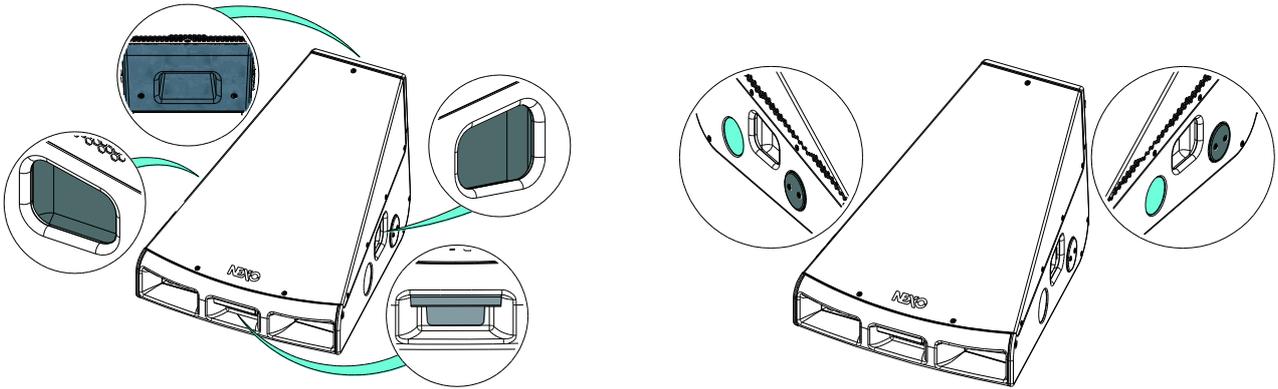
**WASTE OF ELECTRIC OR ELECTRONIC EQUIPMENT**



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

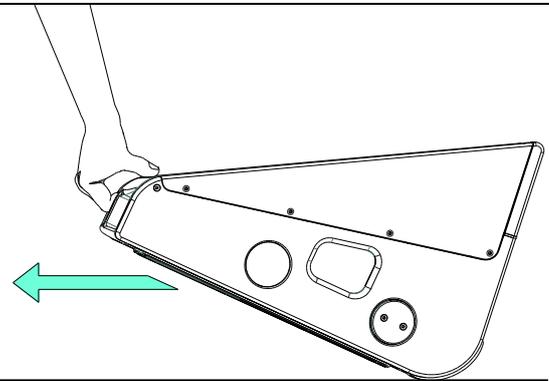
### Handles - Magnets



### Handling 45N12

#### Moving cabinet

In order to move 45°N-12 quickly on stage:  
 Lift the cabinet with the front handle  
 Slide it on the rounded rear skids  
 Drop it at its new position.

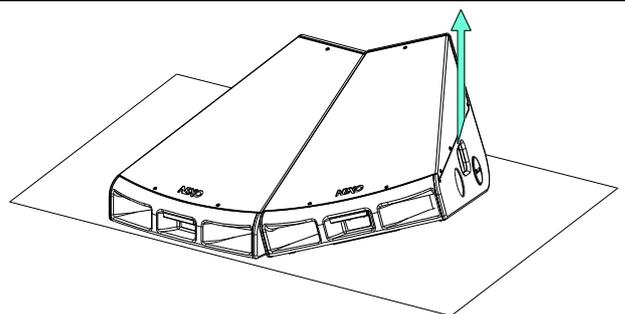
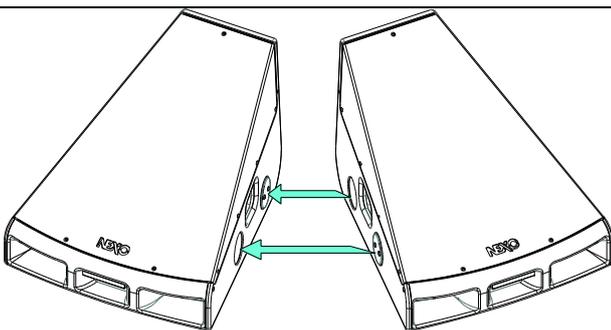


#### Locking / Unlocking cabinet

An integrated magnetic locking system allows connecting multiple monitors together with no requirement for additional parts.

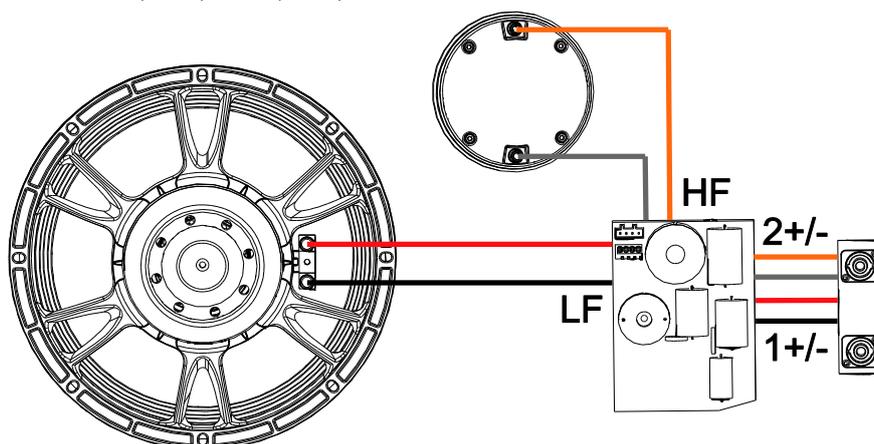
Locking is achieved by simply adjusting cabinets side by side.

To unlock cabinets, simply lift one of the side handles: cabinets will unlock with almost no effort.



**DESCRIPTION**

- The 45N12 is a monitor which brings all the benefits of line-array technology to the stage;
- HF dispersion:
  - Horizontal 30° - Scalable 30° steps when arrayed
  - Diagonal (Coupling Plane) 22.5° - Scalable 22.5° steps when arrayed
  - Vertical 60° (Asymmetrical -45° / + 15°)
- The speaker is equipped with two NL4 connectors, the 4 pins of the 2 sockets are connected in parallel within the enclosure.
  - PASSIVE MODE : 2+/-
  - ACTIVE MODE : LF (1+/-) – HF (2+/-)



- Amplification
  - The 45N12 cabinet MUST be used with a NEXO processor to handle EQ, phase alignment, crossover and excursion/thermal protection for the system loudspeakers.
  - The following table shows the number of 45N12 usable with each solution.

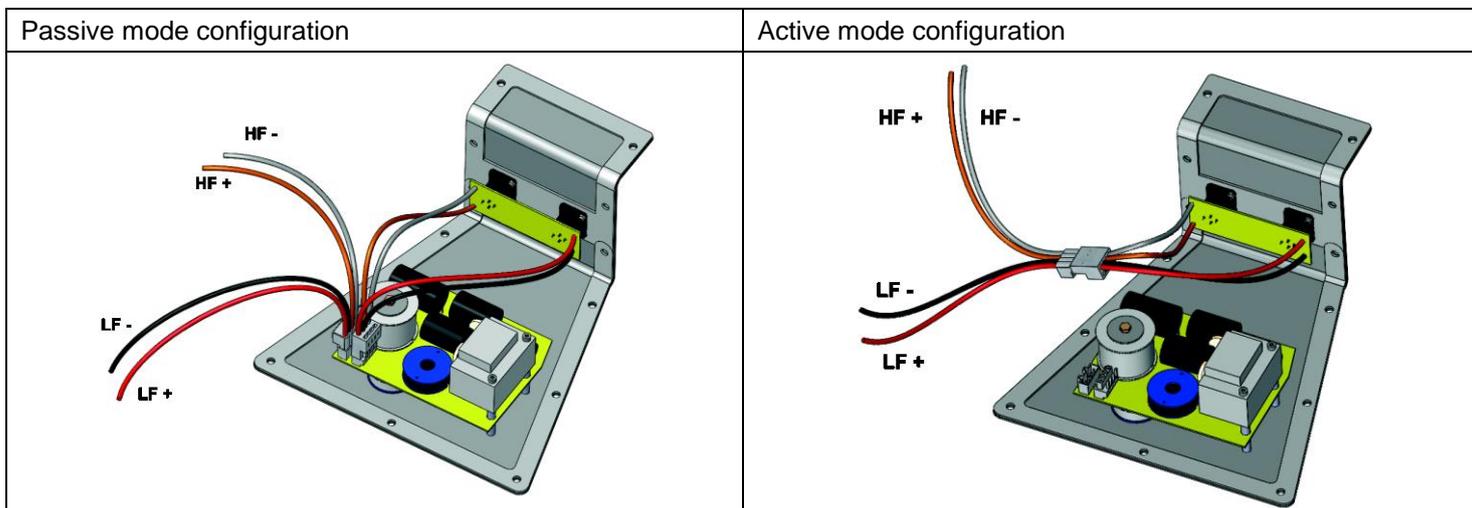
	NXAMP4X1 (BRIDGED)	NXAMP4X2	NXAMP4X4
45N12	Up to 2 per channel	Up to 3 per channel	Up to 4 per channel

- Configuring 45N12 for Passive or Active Mode

**IMPORTANT 45N12 are factory configured in active mode**

In order to change active or passive configuration:

- Remove the TORX screws that hold the rear/bottom metal panel;
- Remove the rear/bottom metal panel to access passive network WAGO connectors.
- In Passive Mode, CNX WAGO connector should be inserted in “Passive In”, and loudspeakers WAGO connectors should be inserted in connector “Passive Out”.
- In Active Mode, CNX WAGO Connector should be directly connected to loudspeakers WAGO connectors (passive filter is then bypassed).



**PRESET**

Please consult [nexo-sa.com](http://nexo-sa.com) for NEXO TD Controllers firmware information.

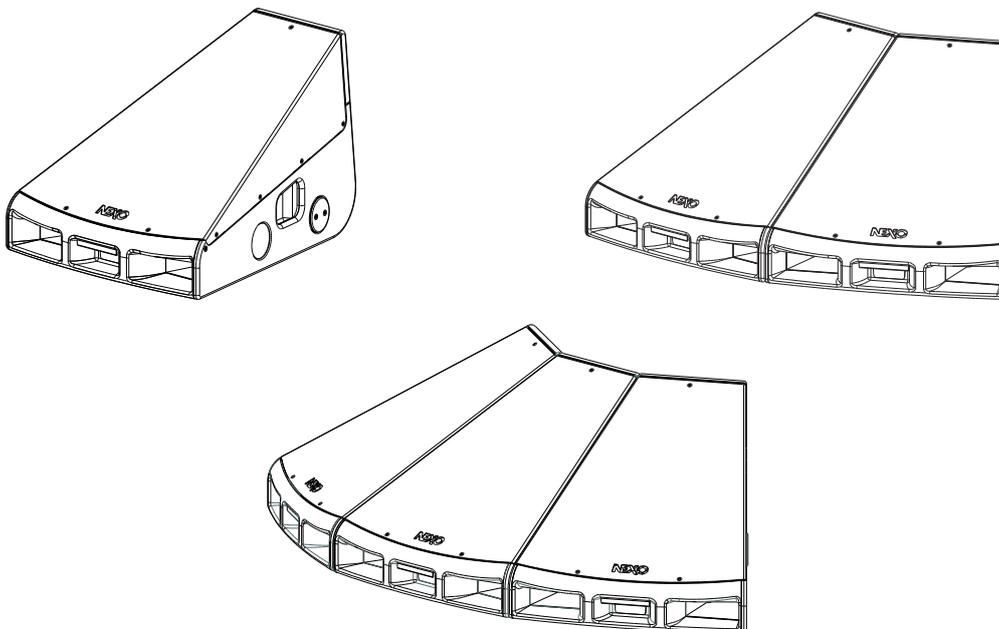
For the 45N12, the following setups are available

→ Passive mode

- 45N12 1 Box, with high-pass at 60, 85 or 120 Hz.
- 45N12 2 Boxes, with high-pass at 60, 85 or 120 Hz.
- 45N12 3 Boxes, with high-pass at 60, 85 or 120 Hz.

→ Active mode

- 45N12 HF 1 Box, with high-pass at 60, 85 or 120 Hz.
- 45N12 HF 2 Boxes, with high-pass at 60, 85 or 120 Hz.
- 45N12 HF 3 Boxes, with high-pass at 60, 85 or 120 Hz.
  
- 45N12 LF 1 Box, with high-pass at 60, 85 or 120 Hz.
- 45N12 LF 2 Boxes, with high-pass at 60, 85 or 120 Hz.
- 45N12 LF 3 Boxes, with high-pass at 60, 85 or 120 Hz.



## CROSSOVER FREQUENCY

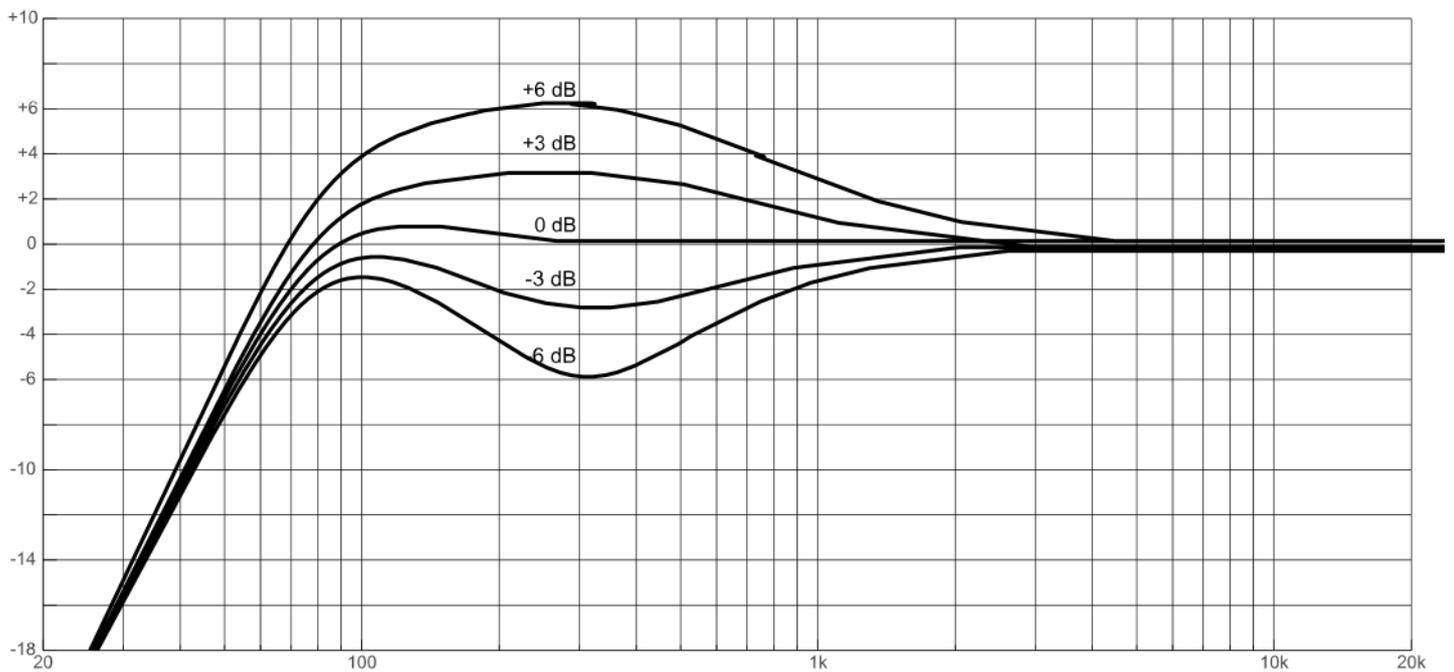
- 60 Hz: Full range application
- 85 Hz: Use with a NEXO subwoofer.
- 120 Hz: Use with a NEXO subwoofer.

## ACCESSORY

45T-CASE12: FLIGHT CASE FOR 2X 45N12

## ARRAY EQ

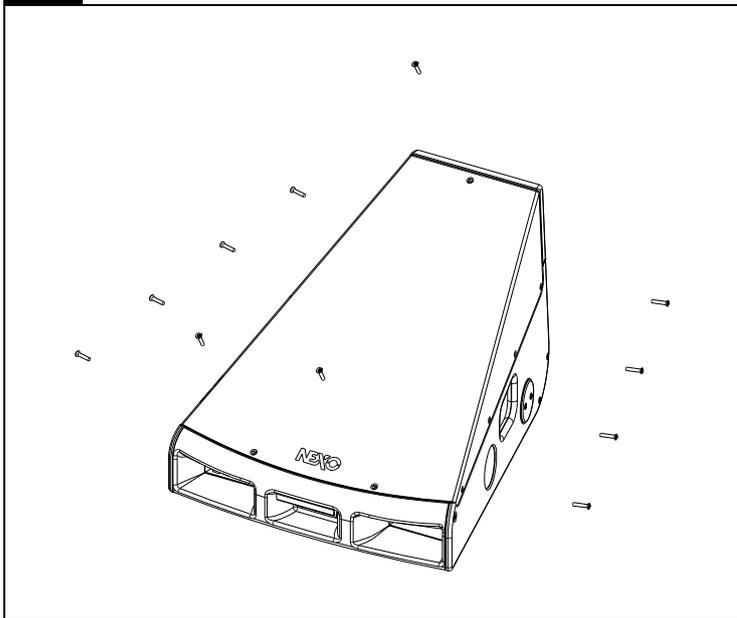
The ArrayEQ allows to adjust the system frequency response in its lower range  
(see curves below, with different ArrayEQ values):



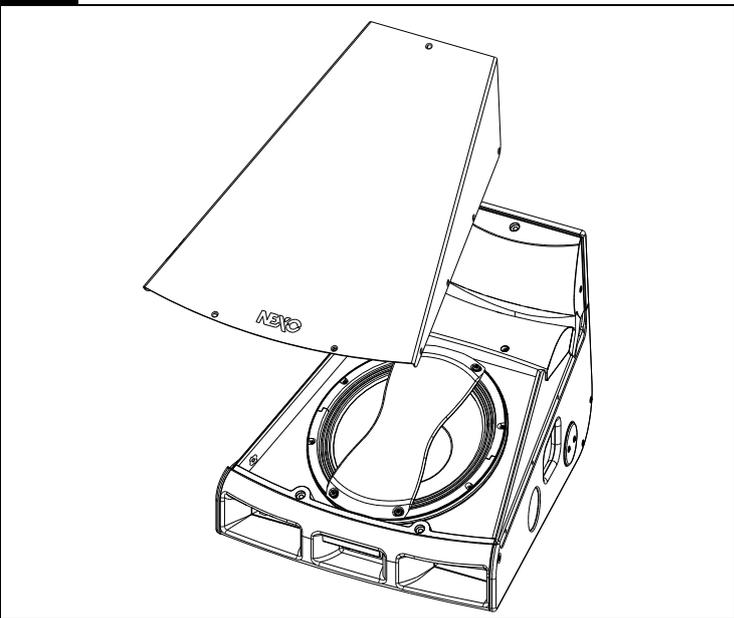
**MAINTENANCE**

**12" Access**

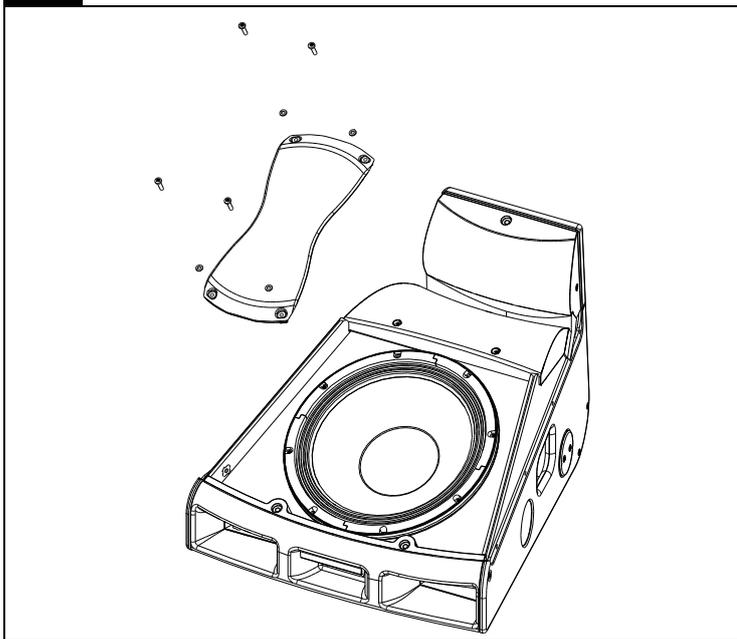
**1** Remove 11 screws (Tx25), 4 on each side and 3 on the front.



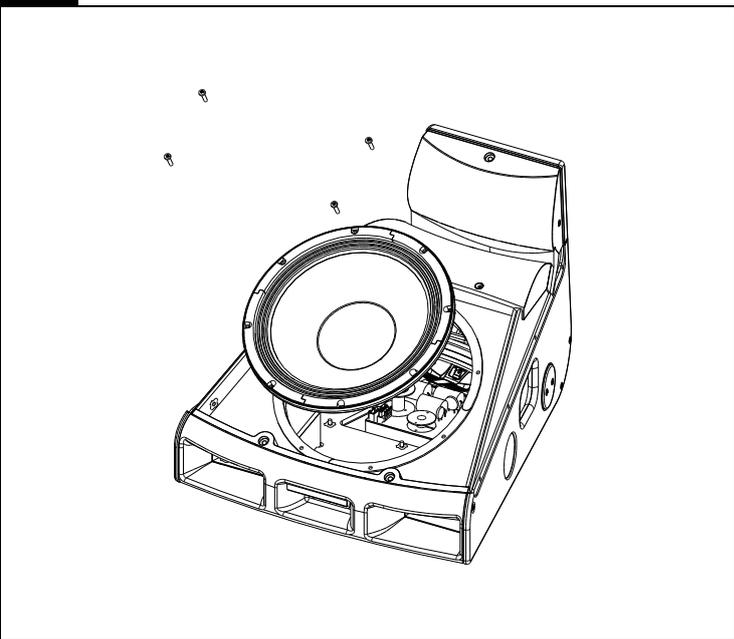
**2** Remove the grille.



**3** Remove the 4 screws (Tx25) and washer to remove the PMP.

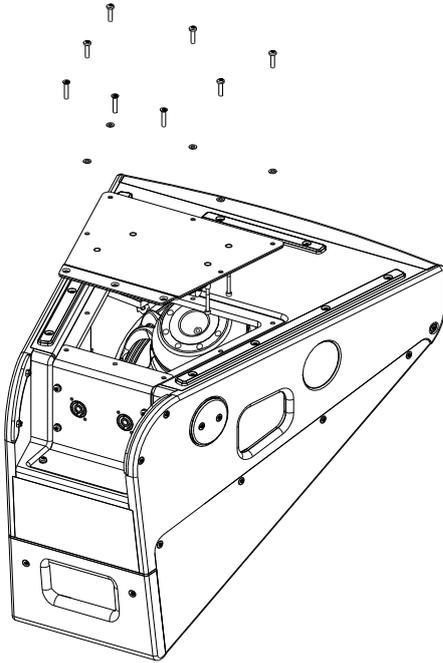


**4** Remove the 4 screws (Tx25) to access 12".

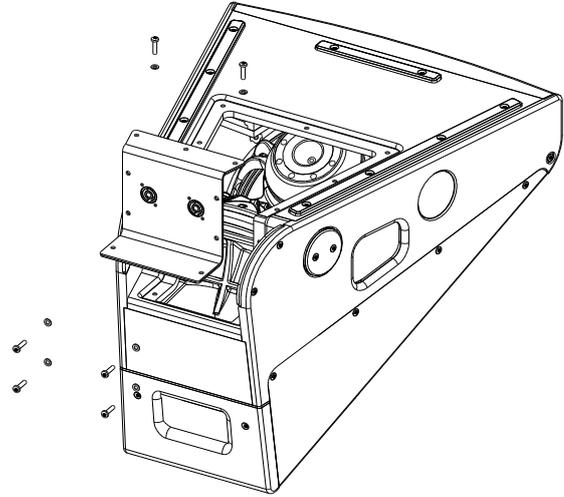


**HF Access**

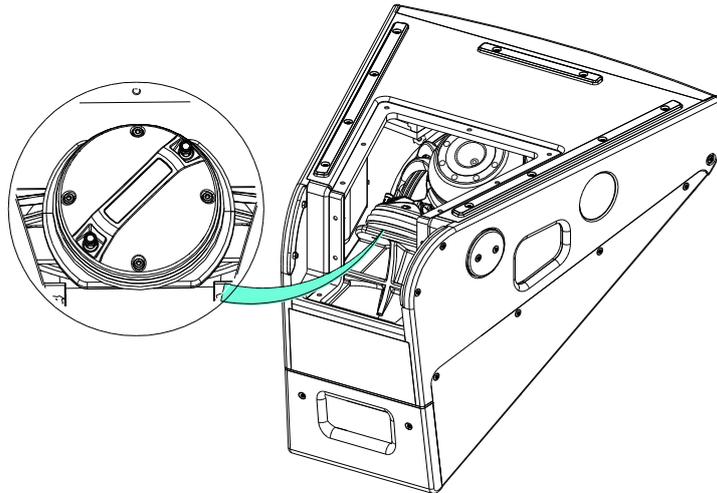
**1** Remove the passive filter plate, 8 screws (Tx25).



**2** Remove the CNX plate, 6 screws (Tx25).



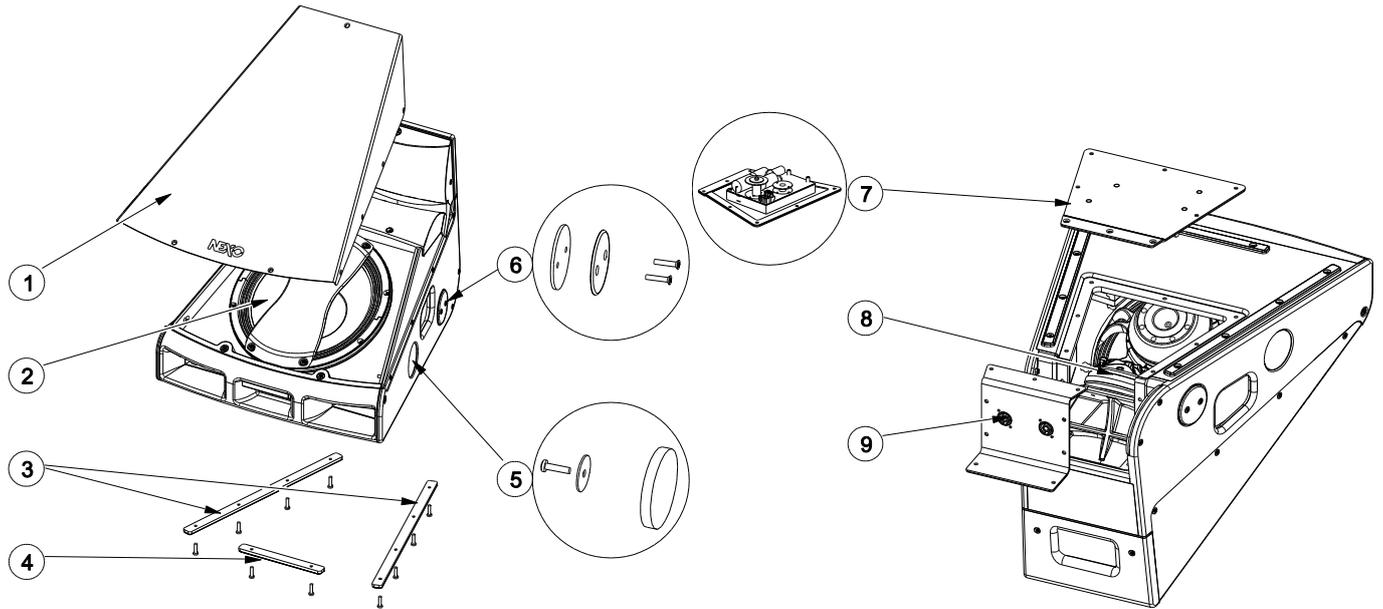
**3** You can access the HF driver to change the diaphragm.



**LF:** red (+) / black (-)

**HF:** orange (+) / grey (-)

Spare parts



MARK	QUANTITY	REFERENCE	DESIGNATION
1	1	0545N12-A	45N12 complete grille black (with screws)
	1	0545N12-APW	45N12 complete grille white (with screws)
2	1	05HPB12ND8	12" driver
	1	05HPB12ND8R/K	Recone kit HPB12ND8
3	2	05PATIN-A2	45N12 Long skid (with screws)
4	1	05PATIN-A1	45N12 Short skid (with screws)
5	2	05AIMANT66	Magnet D66 black (with screws)
6	2	05AMRD66	Magnet washer D66 black (with screws)
	2	05AMRD66-PW	Magnet washer D66 white (with screws)
7	1	0545N12-FPC	Passive filter black (with plate and screws)
8	1	05HPADE914-16	HF driver complete (with screws)
	1	05NH91-16R/K	HF diaphragm HPADE914-16
9	1	0545N12-FPA	Rear plate CNX black complete

**TECHNICAL SPECIFICATIONS**

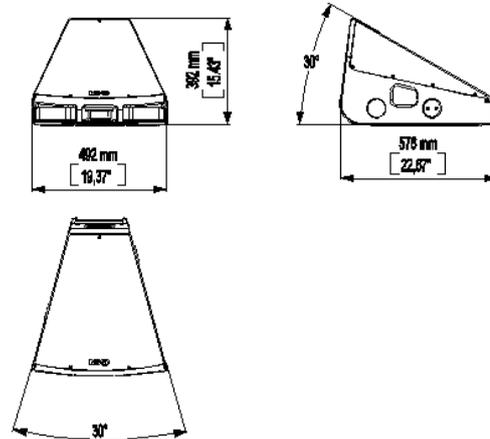
**45N12 WITH NEXO ELECTRONICS**

<b>Model</b>	<b>45N12</b>
Frequency range (±6dB)	50Hz – 20kHz
Peak SPL Level (1m)	140dB
Operating voltage	50Vrms (180Vpeak)
HF Dispersion	60° Vertical (Asymmetrical -45° / +15°) 30° Horizontal- Scalable 30° steps when arrayed 22.5° Diagonal (Coupling Plane) - Scalable 22.5° steps when arrayed
Crossover Frequency	LF-HF: 1kHz Passive
Nominal Impedance	Active mode (8Ω LF - 16Ω HF) – Passive mode 8Ω

**SPECIFICATIONS**

<b>Model</b>	<b>45N12</b>
<b>Components</b>	LF: 1x12" - 8Ω; HF: 1x3" - 16Ω – Neodymium driver
<b>Material</b>	Baltic birch plywood
<b>Finish</b>	Black or white structural paint
<b>Front finish</b>	Steel front grille + back foam (black) / back mesh (white)
<b>Fittings</b>	4 handles (2 side metal recessed, 2 front and rear molded)
<b>Connector</b>	4x NL4, 4 connectors
<b>Weight</b>	24 kg – 53 lb

**Dimensions**



**USER NOTES**



**NEXO S.A.**

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**NEXO**