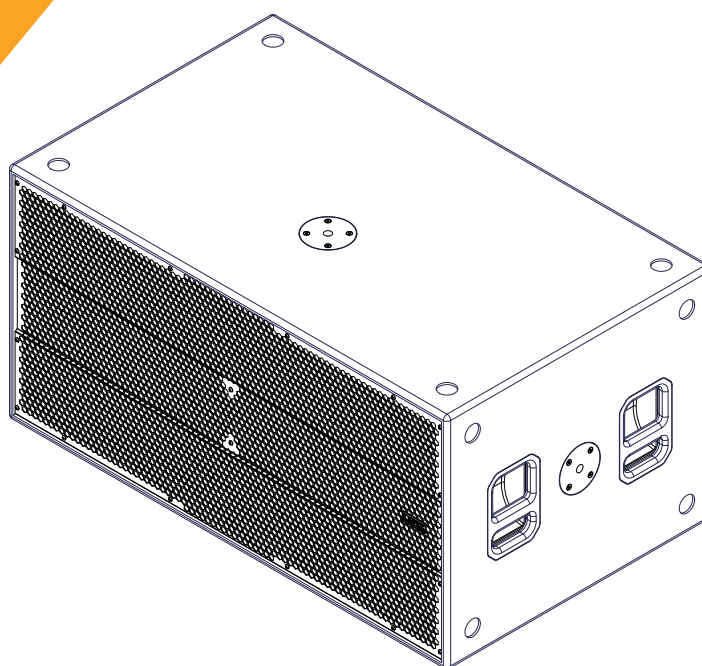


LAIA-218SP

USER MANUAL



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WELCOME

Before working with the LAIA series we recommend that you read this manual. In its pages you will find instructions for use, programming examples and practical advice that will be of great help.

For the maximum optimization of any sound system a first class digital processor with different processing options is required. This LAIA series become a working tool of great value, providing the user with the best solutions in the market with the highest level of accuracy and a host of features for the professional.

We hope that as a user you will be completely satisfied. We are sure that the LAIA series will meet your expectations and make it easier for you to get the most out of your system.

IMPORTANT SAFETY INSTRUCTIONS

Before starting to use this device, please read this instruction manual carefully.
Keep these instructions in the place where the equipment will be used and with easy access to them.



• Electrical appliance

The exclamation mark within a triangle identifies the presence of electricity. Use the system carefully without wet hands or feet. Avoid installing the speaker in wet or excessively humid places. Do not place material that contains liquid on or near the unit. Avoid dripping or splashing water or any liquid over the unit. Regularly check the condition of the cables and make sure these are not being walked on or pinched. Connect the speaker to bipolar, earthed mains. The mains plug must be connected to the appropriate protection (fuse or breaker). Connection to any other type of mains could result in an electrical shock and violate local electrical codes.
CAUTION: DO NOT CONNECT OR DISCONNECT AC POWER CONNECTORS UNDER LOAD.



• Heavy equipment

Apply back protection when using the system. Avoid loading and unloading at heights.



• Electrical shock risk

The diagonal mark within a triangle identifies the presence of dangerous voltage. Do not open or manipulate the inside of the box. These parts are not to be adjusted by the user. For maintenance and/or repair please go to an authorized service centre. In order to reduce the risk of electric shock, disconnect from AC before plugging or unplugging Audio signal cables. Reconnect to AC only if all signal connections are made and secured. Never manipulate the ground type plug provided. The AC mains plugs should always remain accessible for operation. Unplug the loudspeaker during storms or when it's being used for a long time.



• Hearing damage risk

These systems can reproduce large quantities of sound pressure which can damage hearing. Take precautions if you are going to be near them for extended amounts of time and do not get too close.



• Hanging / Flying

Do not hang the cabinets from the handles or from any other part other than the designated hanging point. When flying this system please observe the technical and "Rainbow" software data carefully. Never exceed the maximum safe working loads or ignore the instructions included within this manual. Use only flying accessories provided by Lynx Pro Audio S.L. Rigging must be always carried out by professionals.



• Delicate Material

Please ensure no foreign object or water enters the speaker. Clean the unit only with dry cloths. Do not use solvents.



• Overheating / Fire risk

To reduce the risk of speaker's over heating, avoid direct contact with sunlight. Avoid placing the unit close to heat inducing objects such as radiators. Do not cover the equipment in use and do not block any ventilation openings. Do not expose to open flames, such as lighted candles, close or on top of the unit.



• Electromagnetic and interference emissions

Avoid placing objects which through electromagnetic waves can damage the unit, such as mobile phones, lap tops, magnetic strip cards etc.

This system complies with normatives

EN 55103-1 (1)

EN 55103-2 (2)

(1) This device may not cause harmful interferences.

(2) This device may receive interference including interferences that may cause undesired working.



• IMPORTANT NOTE

This equipment must be used in accordance with these instructions and by trained professional personnel only. This equipment should not be used in places with extreme tropical climates. Don't expose this device to extreme humidity and or temperature values.

1. INTRODUCTION

This manual describes the recommended installation procedure for the **LAIA-218SP**. Special care has been taken in the design of this first-class range, delivering superior sound quality and performance for both touring and fixed installations.

The **LAIA-218SP** is a passive loudspeaker system designed to offer maximum flexibility in different system configurations.

When combined with Lynx Pro Audio GTX power amplifiers and LUKA processors, the LAIA-218SP benefits from dedicated factory presets, optimized DSP processing, and advanced system management capabilities to achieve maximum acoustic performance.

The dedicated presets include optimized EQ, crossover and protection, ensuring the correct operation of the loudspeaker in both normal or cardioid. These settings have been carefully developed to provide accurate frequency response, controlled directivity, and consistent performance across different system setups.

INSTALLATION GUIDE

- **Indoor use only**

We recommend using this speaker indoors only. Exposure to moisture or liquids can damage the components and may result in unsafe operation. **Avoid extrem weather conditions.**

- **Speaker cable safety**

- Use only appropriate speaker cables with the correct gauge and connectors for the application.
- Ensure that speaker cables are protected from damage, crushing, or excessive tension.
- Do not place the speaker, cables, or any objects on top of the cables.
- Make sure all connections between the speaker and amplifier are secure before operation.

- **Amplifier compatibility**

- Ensure that the amplifier used is compatible with the speaker specifications, including impedance and power handling.
- Using an unsuitable amplifier may damage the speaker components or create unsafe operating conditions.
- Always follow the amplifier manufacturer's recommendations regarding output power and connection methods.

- **Mounting options**

- The LAIA-218SP can only be installed using the dedicated SV-LAIA28 mounting accessory.
- Flown installation: Up to 12 LAIA-218SP cabinets can be flown using the SV-LAIA28 accessory.
- Ground stacking: Up to 6 LAIA-218SP cabinets can be stacked on the floor using the SV-LAIA28 accessory
- Subwoofer mounting: LAIA-218SP cabinets can be installed on top of a LAIA-218P subwoofer in both vertical or horizontal configuration. For safe rigging, use ST-SVCLS/M20.

- **Safety checks before installaion**

Give your speaker a safety check before mounting it. Make sure the stand, brackets, and anything else it attaches to are in good shape and all the pieces are there. Damaged or missing parts can cause the speaker to become unstable and fall.

- **Overhead installation**

- **Strong Support:** Choose mounting hardware or suspension systems that are specifically designed to handle the weight and size of your speakers.
- **Secure Suspension:** If using a tripod or hanging system, make sure the speaker is well-balanced and securely fastened to prevent it from falling, tipping over, or being accidentally bumped.
- **Double-Check Fasteners:** Before letting the music flow, take a moment to confirm that all fasteners at the suspension points are tightened properly.

- **Incorrect installation**

Improper assembly or the use of unsuitable mounting equipment can result in an unstable and dangerous installation that could cause injury.

- **Seek professional assistance**

If in doubt, consult a professional to install the equipment. Ensure that national safety regulations for the installation and use of the speaker are followed.

- **Overhead installation safety**

Refer to the speaker's installation instructions for approved overhead mounting procedures. Overhead installation should only be performed by qualified personnel and may require two or more people depending on the installation conditions.

USER GUIDE

- This cabinet creates a magnetic field that can interfere with other electronic devices like TVs, phones, and radios nearby. The same can happen if the speaker is too close to other appliances. If you notice any problems, turn off the speaker and move it away from potentially affected devices.
- The rubber feet of the speaker may leave marks on certain surfaces. If necessary, use an appropriate protective layer between the speaker and the supporting surface.
- This appliance should not be used by persons (including children) with reduced physical, sensory or mental abilities or lack of experience and/or knowledge, unless they are supervised by a person responsible for their safety or have received instructions from that person on how to use the appliance.
- Never leave this appliance unattended when in use.
- In case of malfunction, stop using the appliance immediately. Do not attempt to repair it yourself. Contact your dealer or an authorized service center.
- For best performance, avoid using the appliance in the following conditions:
 - **Direct sunlight, dusty or dirty areas:** These can damage the appliance or shorten its lifespan.
 - **Strong vibrations or bumps:** This can disrupt the appliance's operation and potentially cause damage.
 - **Extreme temperatures (below 2°C or above 45°C):** This can affect the appliance's performance and efficiency.
 - **Very dry or humid environments (ideally keep between 35% and 80% humidity):** This can impact the appliance's function or shorten its lifespan.
- Never use the appliance near flames, flammable or explosive materials, or hot surfaces. Otherwise, you risk causing a fire.
- Ensure that the amplifier used with this speaker is compatible with its technical specifications, including impedance and power handling. Using an unsuitable amplifier may damage the speaker or create unsafe operating conditions.
- Always use appropriate speaker cables and connectors. Ensure that all connections are correctly made and securely fastened before operating the system.
- Do not stick stickers, decals or other similar objects on this instrument. You could damage the finish of the instrument by removing them.
- To ensure safe operation, avoid placing liquids or objects near the appliance. If a spill happens, unplug it quickly and contact after-sales service.
- The speaker is not designed to withstand direct exposure to rain, water, or extreme weather conditions. If used outdoors, ensure adequate protection against environmental factors.
- Exposure to high sound pressure levels may cause permanent hearing damage. Always use hearing protection when operating the system at high levels.

Maintenance

- Never attempt to disassemble, repair, or modify the speaker yourself. Unauthorized modifications or repairs may void the warranty and could result in damage, malfunction, or unsafe operation. Contact an authorized service center for any repair or maintenance work.
- Before performing any maintenance or cleaning, disconnect the speaker from the amplifier and ensure that all signal cables are removed.
- If the speaker cable, connector, or any external accessory is damaged, it must be replaced with a suitable component specified by the manufacturer or supplied through an authorized service center.
- Never immerse the speaker in water or any other liquid. Clean the enclosure only with a soft, slightly damp cloth. Do not use aggressive cleaning products or solvents, as they may damage the finish.

2. TECHNICAL SPECIFICATIONS

LAIA- 218SP

High-output passive subwoofer equipped with 2 x 18 “speakers (4” coil). 142 dB peak.



Key features

- Extraordinary high power output and sonic linearity
- Ergonomic design in premium birch plywood & finished in polyurea
- Stackable standard and/or cardioid configuration

Applications

- Fixed installations
- Houses of worship
- Touring
- Clubs
- Theatres
- Live PA

General description & specifications

The LAIA-218SP is a high-output passive subwoofer engineered to provide a robust low-frequency extension for a wide variety of indoor and outdoor applications. Designed as the primary low-frequency reinforcement for the LAIA series line array systems, this dual 18-inch enclosure focuses on acoustic pressure, thermal stability, and long-term reliability in demanding environments.

The system incorporates two high-performance 18-inch transducers featuring 4-inch voice coils and a double silicone spider system with optimized flexibility. To ensure linear performance under high-stress conditions, the drivers include a ventilated voice coil space for reduced power compression and an aluminum demodulator ring to maintain extremely low distortion levels. Both sides of the cones are treated for water protection, ensuring consistent mechanical behavior in diverse weather conditions.

The LAIA-218SP enclosure is meticulously designed to prevent internal interference between the two high-output drivers. The cabinet is divided into two completely independent chambers, a structural choice that improves rigidity and ensures that each transducer operates within its own acoustic volume. This internal

separation enhances transient response and prevents unwanted resonances, resulting in a more defined and punchy low-end reproduction.

Depending on the configuration, the system is amplified with the GTX Series, 4-channel, extremely high power level amplifiers with outstanding, high efficiency.

They come equipped with a quality FIR-DSP with high performance 96kHz DSP processing and a large IPS display with a touch panel user interface.

Advanced Audio Power Control Management has been implemented in the design of the GTX series. This enables the user to configure the division of power between the channels via the DSP enabling them to obtain maximum power through just one single channel if desired.

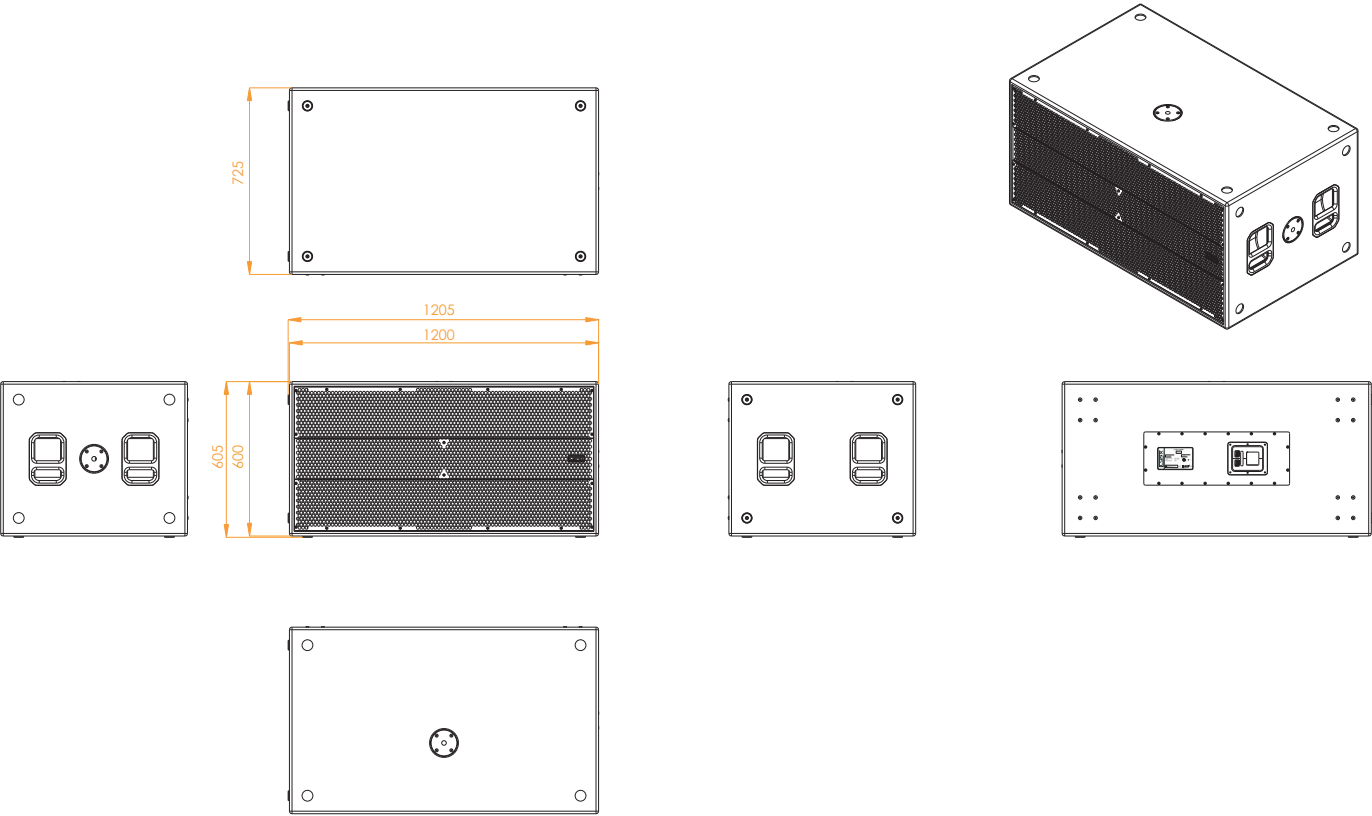
The enclosure is made from premium grade birch plywood and finished with a polyurea coating for longer durability & weather protection. It also has a number of dedicated accessories available.

LAIA- 218SP

Technical Data

Components	
• LF:	2 x 18", 4" voice coil
Frequency range	30 Hz - 120 Hz (-10 dB)
Frequency response	35 Hz - 100 Hz (± 3dB)
Sensitivity	96 dB
Max SPL	136 dB / 142 dB Peak
Coverage	Omnidirectional
Power	3000 W (6000 W program, 12000 W peak)
Impedance	4 Ω
Configuration	Bass-reflex direct radiation enclosure
Finish	Polyurea coating, high grade resistant paint
Material	18 mm Premium birch plywood
Dimensions	605 x 1205 x 725 mm (H x W x D)
Weight	96 Kg (211.64 lbs)

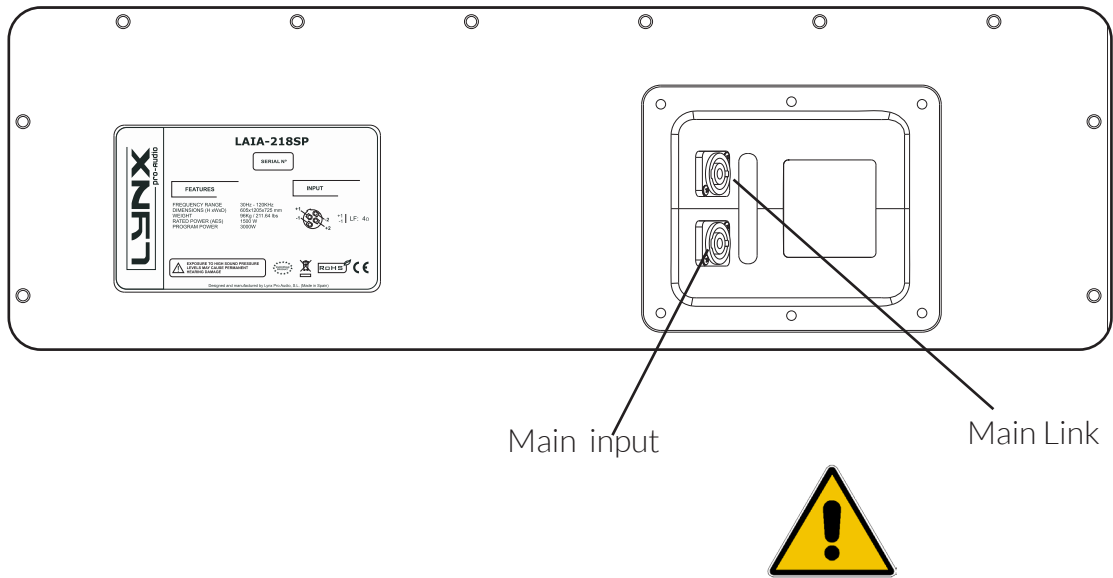
Dimensions



3. SYSTEM OVERVIEW

LAIA BACK PANEL

This is the back pannel of the LAIA-218SP subs, including the connectors.



CONNECTORS AND CONNECTIONS

Normative

LAIA-218SP cabinets meet the following standards:

EN 55032:2012	Electromagnetic compatibility of multimedia equipment. Emission requirements.
EN 55103-2:2009	Electromagnetic compatibility. Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.
EN 60065:2014	Audio, video and similar electronic apparatus. Safety requirements.
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

LAIA-218SP cabinets are in conformity with the following EC directives:

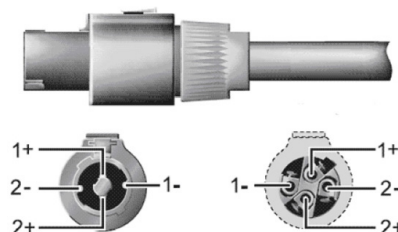
Low Voltage Directive	2014/35/UE
Electromagnetic Compatibility EMC	2014/30/UE
RoHS Directive	2011/65/UE
RAEE (WEEE)	2012/19/UE

2.2 Connectors

LAIA-218SP cabinets have a connection panel at the rear of the cabinet. This consists of 2 internally bridged Neutrik NL4-MP connectors which apply no process to the signal.

Note: If pins +-2 are not used they will still be internally bridged.

The following table indicates which pins are used for all the models, with passive and bi-amplified modes.

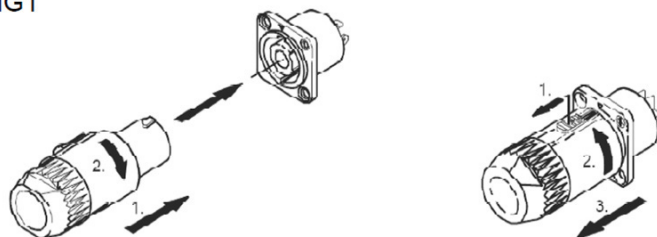


Mode	Connector	Speakon connections	per box	Impedance	Rated power	Program power
Passive	NL4	± 1 input/link	2	4 ohms	3000 W AES	6000 W

CONNECTORS AND CONNECTIONS

To connect the speakon follow the instructions in fig. 1

FIG1



Insert the male speakon in its corresponding hole and turn right until it clicks. This fixes it safely and strongly and helps stop it being pulled out by mistake. At the other end of the cable connect in the same way to the amplifier channel.

Recommendations

Always ensure cables are in good condition. Know the recommended cable length and thickness according to the cabinet and quantity you are installing. An incorrect connection can affect the functioning of the system or even damage it. Cable thickness will vary according to cabinet impedance, quantity and distance. This is especially important when connecting Subwoofers.

As a guide, please see the following table which outlines the thickness depending on the power and length of cable.

Maximum recommended cable length for low impedance systems						
Wire section	AWG number	Cable resistance in 100 meters	Maximum recommended lenght (in pieces)			
			2 Ω	4 Ω	8 Ω	16 Ω
13.3 mm	6	0.25 ohm	24	57	122	253
6.63 mm	8	0.49 ohm	12	28	61	126
5.26 mm	10	0.62 ohm	10	23	48	100
3.31 mm	12	0.99 ohm	6	14	30	63
2.08 mm	14	1.57 ohm	4	9	19	40
1.31 mm	16	2.49 ohm	2	6	12	25
0.82 mm	18	3.98 ohm	2	4	8	16
0.52 mm	20	6.28 ohm	1	2	5	10
0.33 mm	22	9.89 ohm	1	1	3	6

Bear in mind Ohm ratings on the amplifiers used to power the cabinets. For example, 2 ohm amplifier configurations are not recommended due to the excessive power from the amp output.

Never connect more cabinets than recommended in parallel. With parallel connections, the total impedance can be calculated by dividing the impedance of 1 cabinet by the number connected.

4. RECOMMENDED AMPLIFICATION

To ensure the best performance, reliability, and protection of the LAIA-218SP system, it is strongly recommended to use Lynx Pro Audio amplifiers and factory-optimized presets.

The recommended amplification provides:

- Optimal power delivery and system performance.
- Correct loudspeaker protection through dedicated DSP processing.
- Accurate frequency response and phase alignment. Maximum reliability during operation.

The use of non-recommended amplifiers or third-party processing may affect the performance of the system and can result in damage to the loudspeaker components.

The use of Lynx Pro Audio recommended amplification and DSP presets is required to ensure the correct operation of the system. Damage caused by the use of unsuitable amplification, incorrect settings, or third-party processing is not covered by the warranty.

For safe operation and optimal performance, a maximum of one LAIA-218SP cabinet can be connected to a single amplifier channel (GTX Series). Always ensure that the total connected impedance remains within the amplifier's operating range. Please refer to the GTX Series amplifier manual for detailed information regarding amplifier configuration, DSP settings, and operation.

Recommended Amplifiers for LAIA-218SP:

- GTX-10K (Bridge mode)
- GTX-20K

The following amplifier models do not feature onboard DSP. An external LUKA processor is mandatory to provide loudspeaker processing and protection.

- MP2-9000
- MP4-10000 (Bridge Mode)

Operation				
Model	Setup	Channels Used	Boxes Per Channel	Total Load Impedance
LAIA-218SP	Passive	1 or 2 bridged	1	4 Ω

5. PRESET LIST

Preset	Display Name	Additional Info
01	X80Hz	Standard subwoofer configuration to be used with the LAIA28P
02	X60Hz	60Hz LPF crossover point. To use as infra sub with systems that can go down to this crossover point.
03	X100Hz	100Hz crossover point. To use with systems that need a higher frequency relief.
04	Card. 2 Units X80Hz	Rear sub CARDIOID preset to be used in 2 units stack with X80Hz preset. Cardioid sub is located on bottom, aiming the stage.
05	Card. 2 Units X60Hz	Rear sub CARDIOID preset to be used in 2 units stack with X60Hz preset. Cardioid sub is located on bottom, aiming the stage.
06	Card. 2 Units X100Hz	Rear sub CARDIOID preset to be used in 2 units stack with X100Hz preset. Cardioid sub is located on bottom, aiming the stage.
07	Card. 3 Units X80Hz	Rear sub CARDIOID preset to be used in 3 units stack with X80Hz preset. Cardioid sub is located on bottom, aiming the stage.
08	Card. 3 Units X60Hz	Rear sub CARDIOID preset to be used in 3 units stack with X60Hz preset. Cardioid sub is located on bottom, aiming the stage.
09	Card. 3 Units X100Hz	Rear sub CARDIOID preset to be used in 3 units stack with X100Hz preset. Cardioid sub is located on bottom, aiming the stage.

The factory presets are designed to simplify the setup process and provide an excellent starting point. However, they **should not be considered a complete plug-and-play solution**.

To achieve the best performance, line array systems require **careful planning and proper system tuning**. We strongly recommend using **Rainbow 3D software** during the planning stage to define the optimum array configuration, cabinet angles, and audience coverage before installation.

After deployment, the system should be measured and tuned to ensure proper phase alignment and optimum sound quality. Since every venue has different acoustic characteristics, specific equalization and time alignment adjustments are required for each installation.

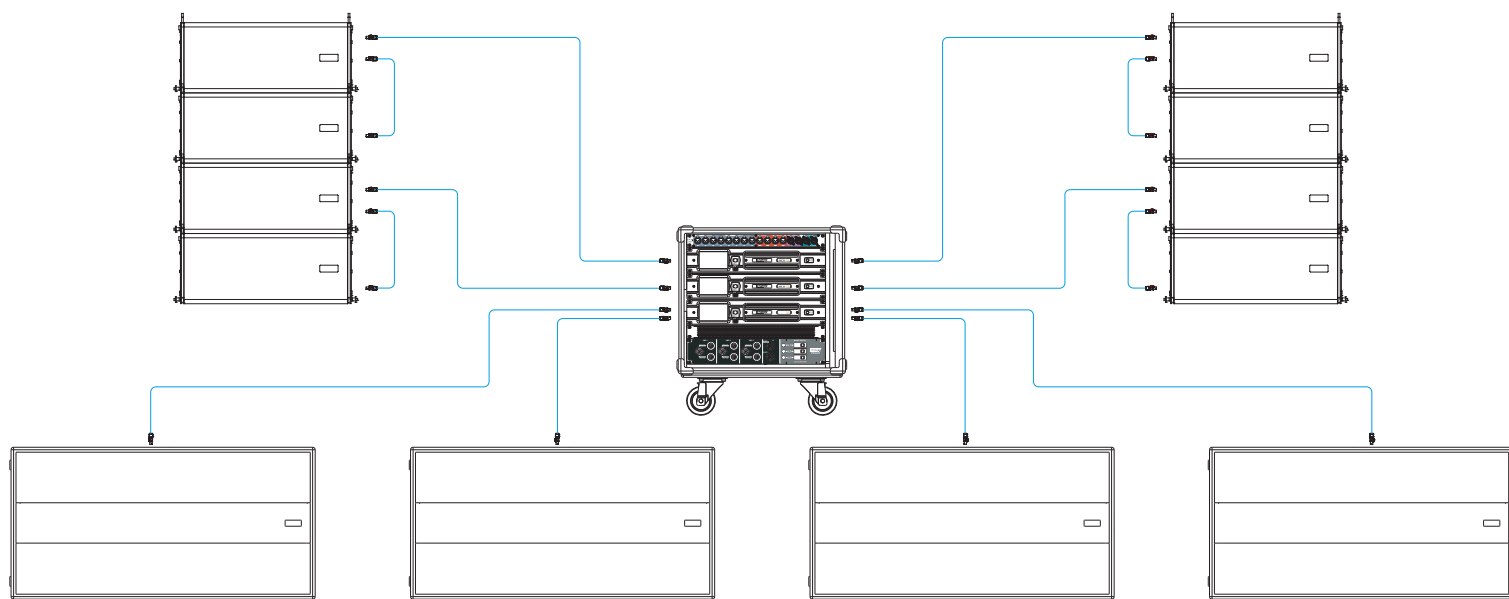
For the best results, we recommend using **professional audio measurement software with Real-Time Analyzer (RTA) and transfer function capabilities**. A properly planned and tuned system will deliver maximum performance and consistent coverage.

6. SYSTEM CONFIGURATION EXAMPLES

The following examples show typical line array system configurations for different applications. They are intended as general guidelines and should be adapted to the specific requirements of each venue.

8 LAIA-28P + 4 LAIA-218SP

For the tops, in passive mode, one GTX-10K, GTX-14K, or GTX-20K amplifier is required. In bi-amp mode, two amplifiers are required. For the LAIA-218SP, we need an additional GTX-20K.

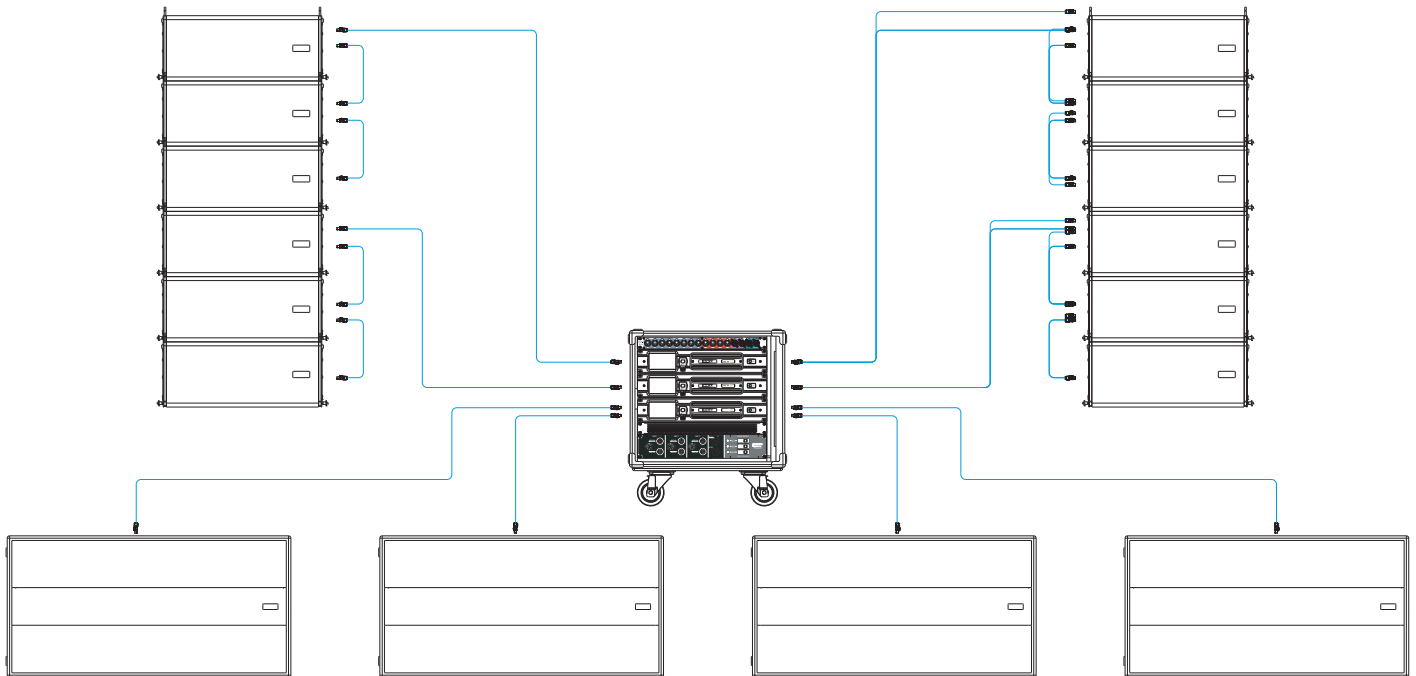


REQUIRED ACCESORIES

- 2 x SV-LAIA28 Flying/Stack Frames
- 2 x CA-LAIA28 Transport dolly
- 2 x CA-LAIA218S Transport dolly or 4 x GR-18WKIT
- 2 x FD-4LAIA28 Nylon cover
- 2 x FD-2LAIA218S Nylon cover
- 1 x SDU-01 Signal Distribution Unit
- 1 x SPDU-01 Speaker Distribution Unit
- 1 x GTX-10K/GTX14K (or 2 units for bi-amp mode)
- 1 x GTX-20K

12 LAIA-28P + 4 LAIA-218SP

For the tops, in passive mode, one GTX-10K, GTX-14K, or GTX-20K amplifier is required. In bi-amp mode, two amplifiers are required. For the LAIA-218SP, we need an additional GTX-20K.

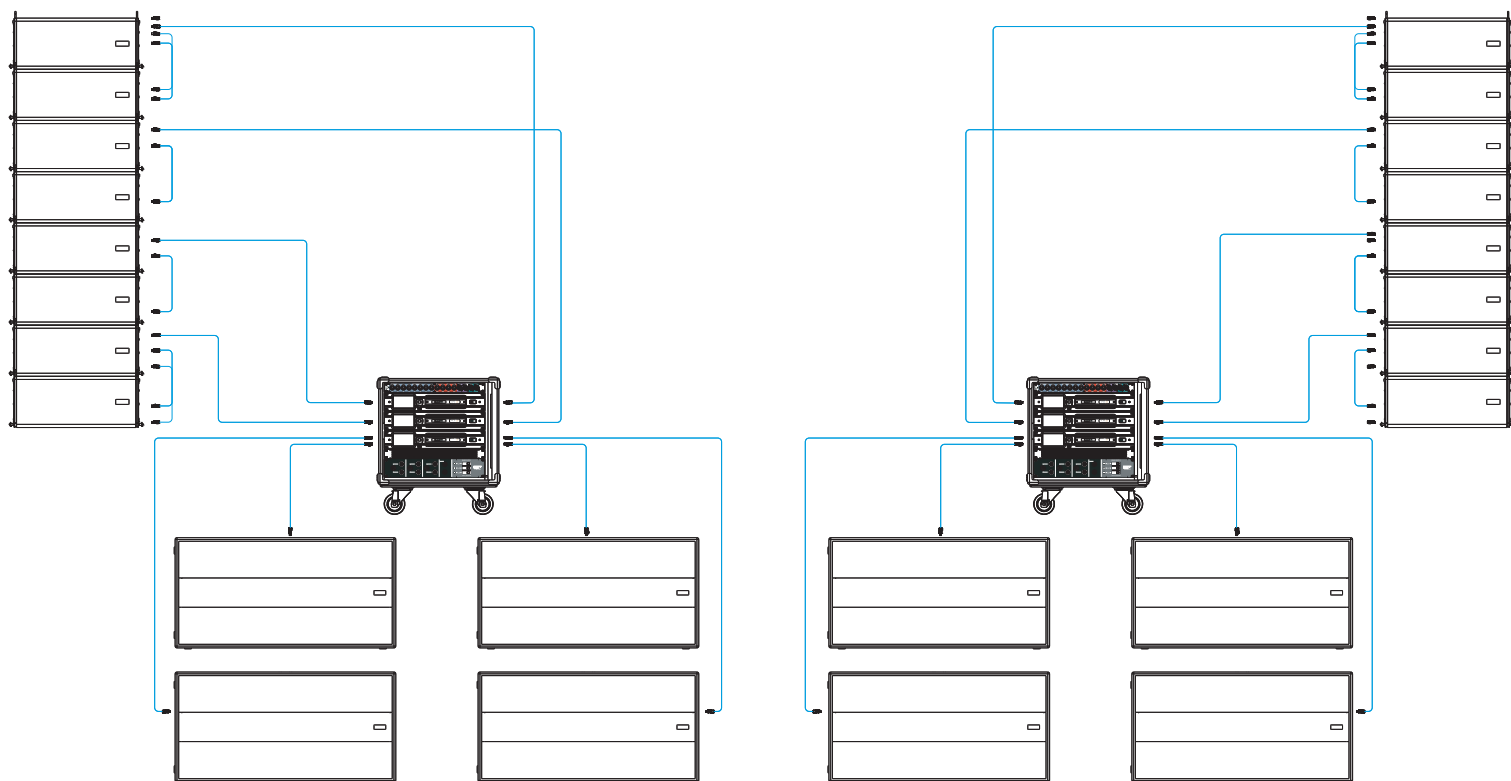


REQUIRED ACCESORIES

- 2 x SV-LAIA28 Flying/Stack Frames
- 3 x CA-LAIA28 Transport dolly
- 2 x CA-LAIA218S Transport dolly or 4 x GR-18WKIT
- 3 x FD-4LAIA28 Nylon cover
- 4 x FD-2LAIA218S Nylon cover
- 1 x SDU-01 Signal Distribution Unit
- 1 x SPDU-01 Speaker Distribution Unit
- 1 x GTX-10K/GTX14K (or 2 units for bi-amp mode)
- 1 x GTX-20K

16 LAIA-28P + 8 LAIA-218SP

For the tops, in passive mode, two GTX-10K, GTX-14K, or GTX-20K amplifiers are required. In bi-amp mode, four amplifiers are required. For the LAIA-218SP, we need two additional GTX-20K.

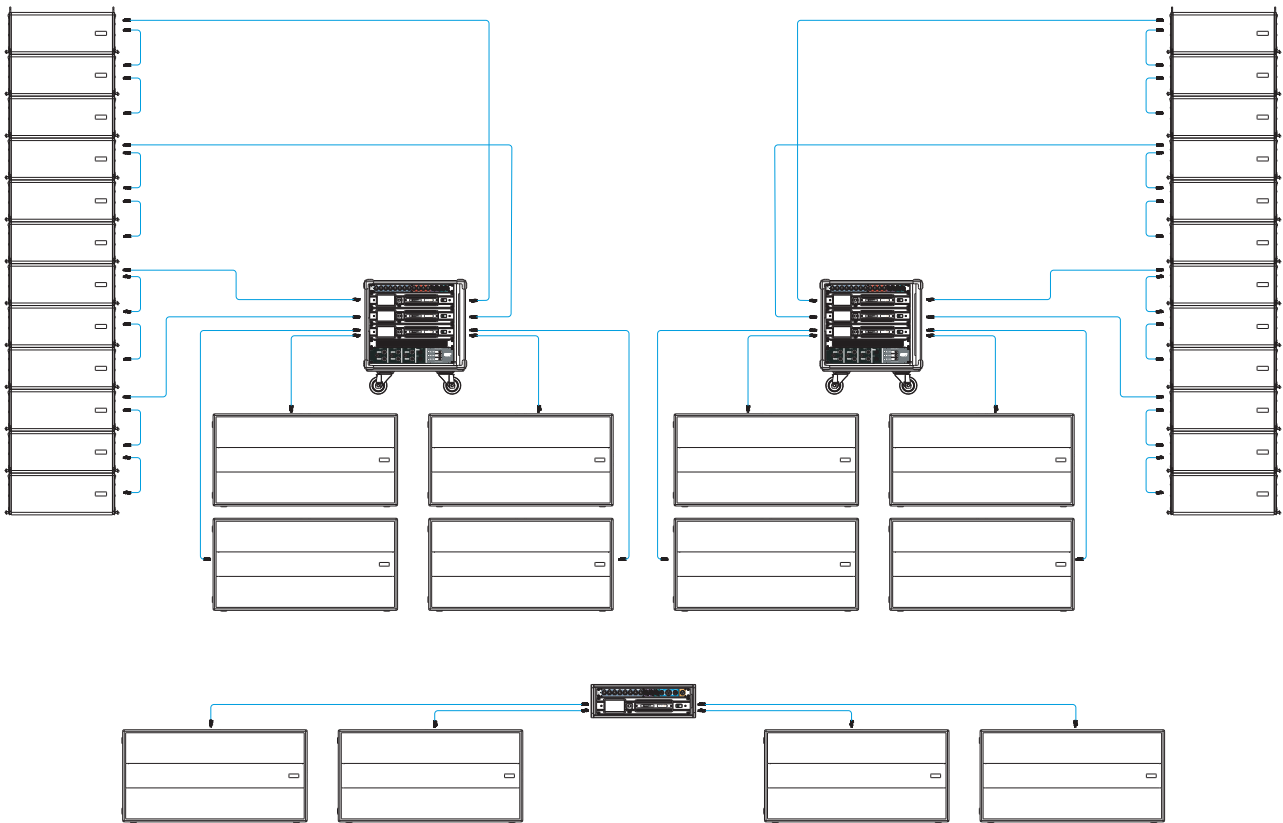


REQUIRED ACCESORIES

- 2 x SV-LAIA28 Flying/Stack Frames
- 4 x CA-LAIA28 Transport dolly
- 4 x CA-LAIA218S Transport dolly or 4 x GR-18WKIT
- 4 x FD-4LAIA28 Nylon cover
- 4 x FD-2LAIA218S Nylon cover
- 2 x SDU-01 Signal Distribution Unit
- 2 x SPDU-01 Speaker Distribution Unit
- 2 x GTX-10K/GTX14K (or 4 units for bi-amp mode)
- 2 x GTX-20K

24 LAIA-28P + 12 LAIA-218SP

For the tops, in passive mode, two GTX-10K, GTX-14K, or GTX-20K amplifiers are required. In bi-amp mode, four amplifiers are required. For the LAIA-218SP, we need three additional GTX-20K.

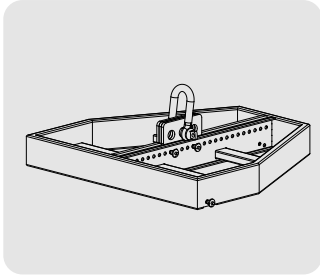


REQUIRED ACCESORIES

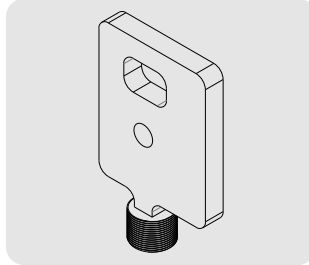
- 2 x SV-LAIA28 Flying/Stack Frames
- 6 x CA-LAIA28 Transport dolly
- 6 x CA-LAIA218S Transport dolly or 4 x GR-18WKIT
- 6 x FD-4LAIA28 Nylon cover
- 6 x FD-2LAIA218S Nylon cover
- 3 x SDU-01 Signal Distribution Unit
- 3 x SPDU-01 Speaker Distribution Unit
- 2 x GTX-10K/GTX14K (or 4 units for bi-amp mode)
- 3 x GTX-20K

7. HARDWARE AND ACCESSORIES

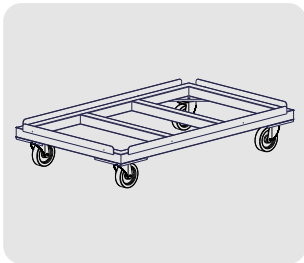
The LAIA cabinets offer a variety of practical accessories to help use the system in a number of events, from touring applications to fixed installations, indoor and outdoor.



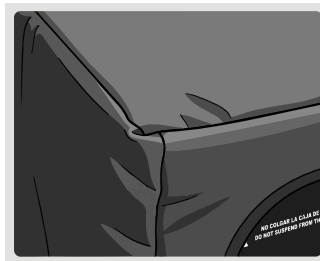
• **SV-LAIA28**
Flying Frame and stack for LAIA-218SP



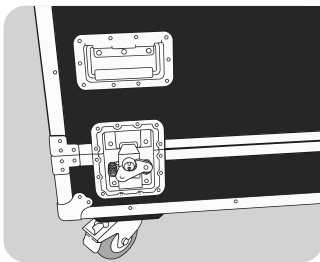
• **ST-SVCLS/M20**
Kit to connect SV-CLS flying frame and M20 plate.



• **CA-LAIA218S**
Transport dolly for up to 3 x LAIA-218SP.



• **FD-LAIA218S, FD-LAIA218S/2
& FD-LAIA218S/3**
Nylon Cover for 1, 2 or 3 LAIA-218SP



• **Transport**
Flight Case for 4 units of LAIA-218SP

About the rain hood

This rain hood is crafted to provide effective protection against regular rainfall. However, it is important to note that it is not engineered to serve as a waterproof barrier in extreme weather conditions. For severe storms or heavy downpours, we recommend additional protective gear to ensure complete waterproofing.

8. ONLINE CONTROL SYSTEM

- Who is it for?

Users of Self powered DSP incorporated Lynx Pro Audio Cabinets where the user has requested the cabinets be supplied with the Ethernet Module kit.

- What is it for?

Obtain detailed information of cabinet behaviour and monitor the cabinet/s in real time. You can change the preset, gain, mute, polarity and phase. You can also activate the air absorption compensation and select the «SOLO» mode.

- How does it work?

Via Ethernet (cable or wireless). Once installed, the O.C.S. software automatically detects all the cabinets connected to the network and displays them in the O.C.S. window on the users PC.

- What does it show?

As well as displaying the cabinet model and IP address the O.C.S will be monitoring in real time and the user will be able to view RMS levels, Input clip, power module temperature, compression levels, air absorption compensation and cabinet angulation.



9. RAINBOW (Acoustic Prediction Software)

Lynx Pro Audio's R&D department is working on Rainbow 3D, our acoustic simulation software with dynamic 3D features. With a sophisticated design, Rainbow 3D stands out for its speed, being able to provide a simulation in just a few seconds. It also provides algorithms for beam steering and optimizing the listening area.

- **Designed from scratch by professionals**

Rainbow 3D has been programmed from scratch by Lynx Pro Audio engineers, using new programming procedures that achieve an effective simulation with really low calculation time.

- **Multiple listening zones**

The program can simulate all Lynx Pro Audio's acoustic enclosures located in a 3D space, including the classic side, top and front views. It can also define multiple listening zones and allows offset positioning and symmetry. Blueprint images, textures and PNG format pictures can be imported.

- **Unlimited sound sources**

Allows the acoustic simulation for an unlimited number of sound sources and audio systems. You can place as many systems (subwoofers, line arrays, columns and individual boxes) as you desire. Also, the line arrays can be placed in stack or flown configuration.

- **Beam steering**

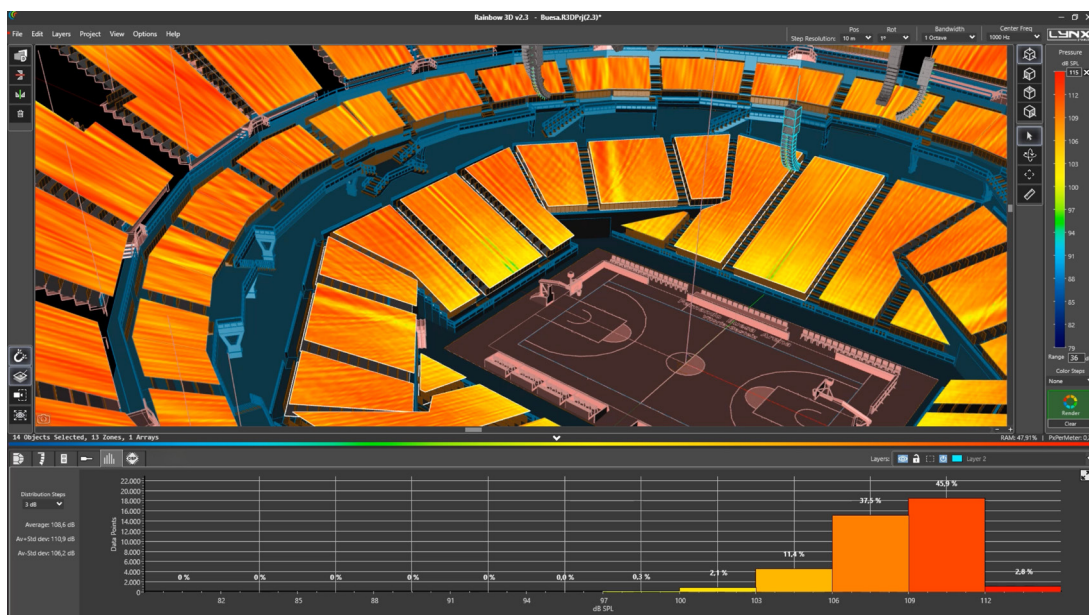
Rainbow 3D has the ability to add DSP processing to the simulation and uses algorithms to control the directivity (beam steering) in columns, without the need to tilt them physically, being able to divide the column into several beams that point to different zones.

- **Accurate optimization thanks to FIR filters**

Optimized algorithms are used in the listening area to improve the sound coverage and the frequency response. This feature can be executed in a matter of seconds. Additionally, the export of FIR coefficients can be performed with the optimization for later loading in the DSP via Ethernet or a USB device. In the near future direct communication with Lynx Pro Audio and OCS will be available.

- **Multiple measures and tools**

Likewise, the R&D department is developing multiple measurement and analysis tools for the calculated data. For example, the sound pressure curves (SPL) in the listening areas and the capture of virtual measurements that show the frequency response in the points of location indicated and added. Among other tools you will find autoplay and a wizard to set up different subwoofer arrangements.



LYNX PRO AUDIO GUARANTEE

Lynx products are guaranteed against every kind of manufacturing fault 2 year after the date of sale. When products are under guarantee, the repairing and the free supplying of the device parts in order to correct any kind of defect are guaranteed by Lynx Pro Audio S.L. In the case that the product could not be returned to the factory for checking and repairing, Lynx Pro Audio S.L. would supply all the necessary parts.

Lynx Pro Audio S.L. is not responsible for any damage or defect caused during the transport or caused by an undue or improper handling by a non-authorized person during the life of this guarantee.

All our products go through rigorous testing and quality controls. We guarantee the characteristics described here within and their quality against any fabrication defect.

The user loses all warranty rights if he incorporates or carries out any modification to the product, if he uses it outside of the stated safe working loads or does not secure the system properly using all the pins in their corresponding holes.

For any question regarding the product, the user must quote the model and serial number.

WEEE Declaration: Electrical and electronic equipment must be disposed of separately from normal waste at the end of its operational lifetime. Please dispose of this product according to the respective national regulations or contractual agreements. If there are any further questions concerning the disposal of this product please contact Lynx Pro Audio S.L.



DECLARATION OF CONFORMITY

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Lynx Pro Audio S.L. declares that LAIA series are in conformity with the following EC directives:

Low Voltage Directive	2014/35/UE
Electromagnetic Compatibility EMC	2014/30/UE
RoHS Directive	2011/65/UE
RAEE (WEEE)	2012/19/UE

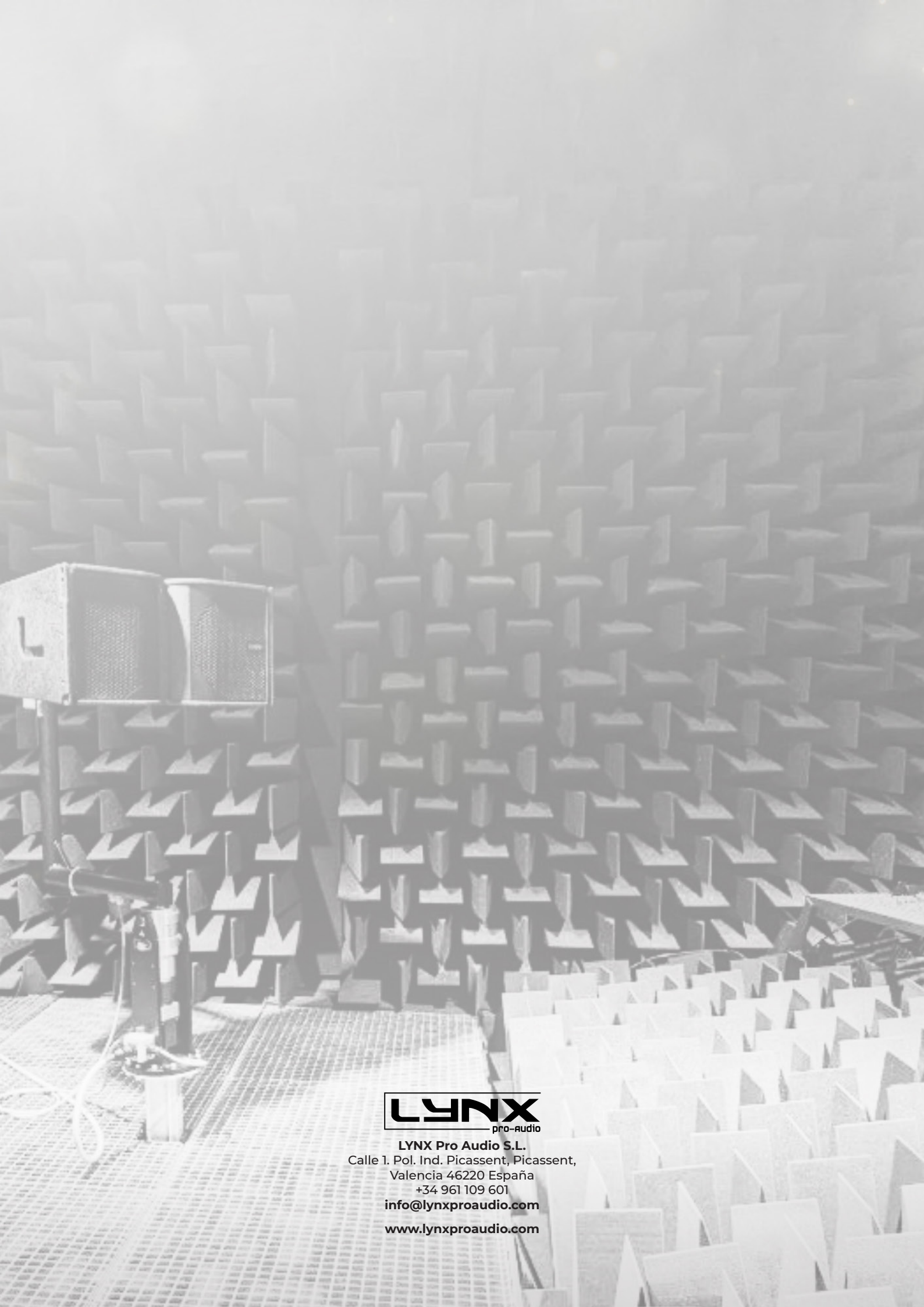
In accordance with Harmonized European Norms:

EN 60065:2014	Audio, video and similar electronic apparatus. Safety requirements
EN 60065:2002	Audio, video and similar electronic apparatus. Safety requirements
EN 55103-1:1996	Electromagnetic compatibility. Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 1: Emission.
EN 50581:2012	Technical documentation for the assessment of electrical and electronic products with respect to the restriction of hazardous substances

Models

LAIA - 210		LAIA - 28		LAIA - 26
LAIA-12		LAIA - 18S		LAIA - 218S





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