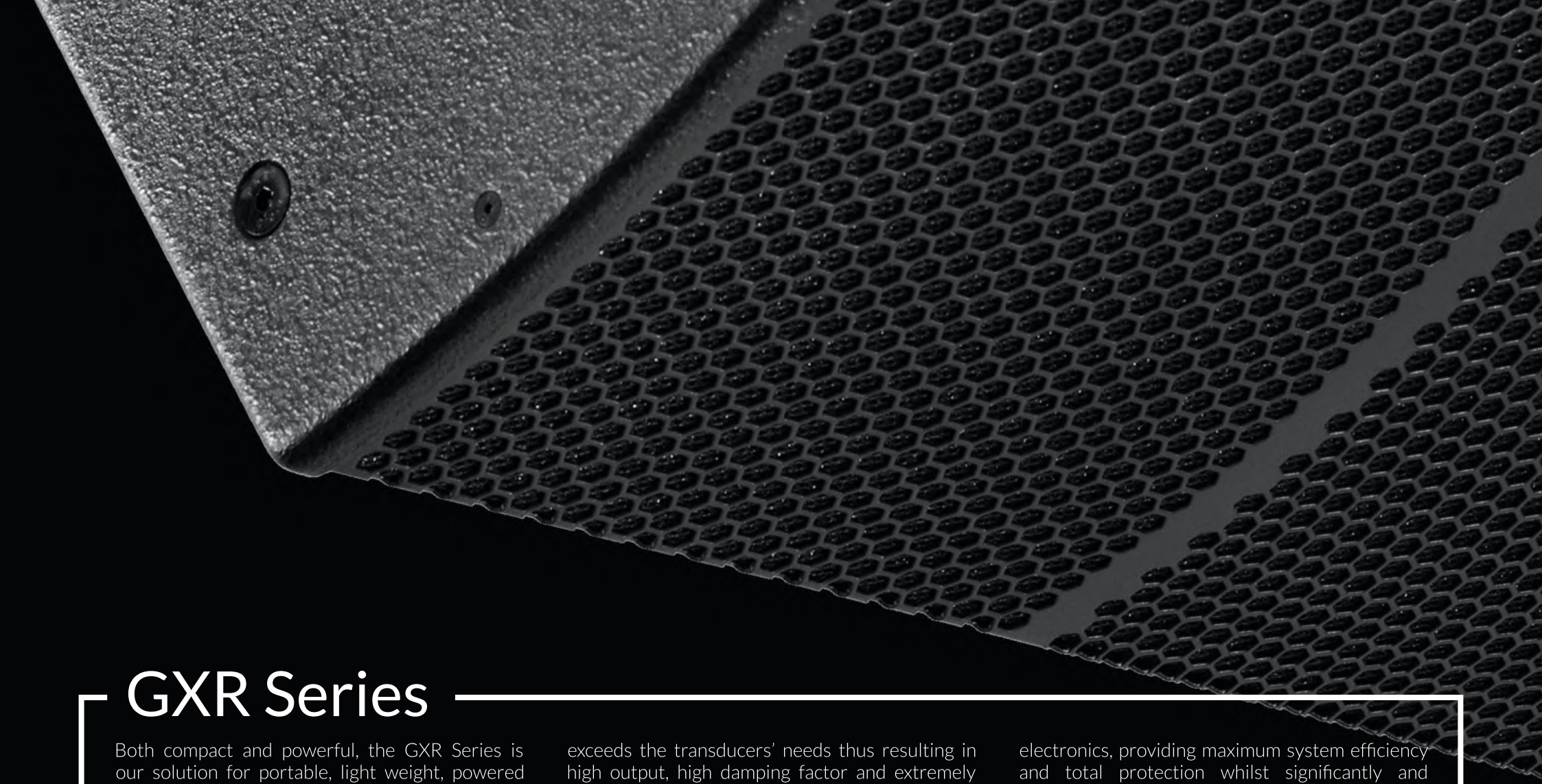
GXR Series **CATALOGUE**

Latest edition

Proudly designed, engineered and
manufactured in SPAIN

LYNX pro-audio

CULTURE OF SOUND



GXR Series

Both compact and powerful, the GXR Series is our solution for portable, light weight, powered speakers. This series has been designed to offer first class portable systems as economically as possible without compromising at all on quality. The series incorporates one line array module (dual 10") three full range, two-way models (12", 15", dual 15") and three subwoofers (18", dual 15" & dual 18").

All models are self-powered (Class D) with switching power supply. The integrated amplification far exceeds the transducers' needs thus resulting in high output, high damping factor and extremely low levels of distortion. The high efficiency modules also include PFC, guaranteeing reliability and consistency in all operating conditions and low power consumption (less than 0.55W in standby).

All GXR Series cabinets are also controlled by the latest generation of Digital Signal Processing with a DSP integrated in to each cabinet. This DSP, with 56bit internal processing and double dynamics optimizes all the system components and electronics, providing maximum system efficiency and total protection whilst significantly and noticeably lowering distortion. They also utilize linear phase FIR filters.

All the cabinets are finished in rugged, premium birch plywood, coated with polyurea and protected by front steel grilles all backed with a special dark grey triple layer, acoustical textile which allows greater air flow and reduces heat and humidity.

GXR-LA210A

The GXR-LA210A is the ideal solution for both install projects and live events where a compact but powerful line array is required.

Bi-amplified, two-way, class D enclosure that delivers high power levels from a very compact format. It incorporates two 10” (2” coil) Low/Mid speakers whilst the high frequencies have a 1.4” output compression driver coupled to a waveguide offering 100 ° H x 10 ° V coverage.

This cabinet offers very easy to use rigging hardware which is both quick and reliable. The system is very easy to use and control without the need for any external amps. To extend the low frequency response the are 2 options. The GXR-D15A is designed to be flown or stacked in perfect combination with the GXR-LA201A units and when extreme low frequencies are required the GXR-D18A is recommended.

GXR-LA210A

GXR Series

- Class D self-powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- Digital inclinometer system
- FIR linear phase filtering
- Online monitoring available
- Two way active system

The GXR-LA210A is a self-powered (Class D), two-way enclosure that delivers high power levels from a very compact format. It uses two 10" (2"coil) speakers for the Low/Mid frequencies. For the high frequencies it uses a 1.4" output compression driver coupled to a waveguide offering 100° H x 10° V coverage.

DSP (FIR filters) controlled with 1400W amplification, 135 dB SPL.

Applications: live events, clubs, houses of worship, theatres, fixed installations and touring.

Technical Data

	GXR-LA210A
Components	LF: 2 x 10", 2" voice coil, Malt Cross Cooling System HF: 1.4" Exit throat, 3" voice coil with titanium diaphragm
Frequency Range	60 Hz - 20 KHz (-10dB)
Frequency Response	68 Hz – 18 KHz (± 3 dB)
Max. SPL*	135 dB
Coverage Angle	100° H x 10° V
Power	1400 W Class D with switching power supply & PFC
LF Amplifier	1 x 800 W RMS, 1600 W peak
HF Amplifier	1 x 600 W RMS, 1200 W peak
Processing	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Control	User control interface with 2.8" IPS screen
Control Connections	Ethernet (OCS) / USB (DSP updating)
Input	Analog / AES3 optional
AC Power	90 – 264V. 50/60 Hz with PFC
AC Connections	16A Neutrik powerCon TRUE1 with looping
Finish	Polyurea coating high grade resistant paint
Material	15mm Premium birch plywood
Dimensions	298 x 790 x 436 mm (H x W x D)
Weight	31 Kg (68.2 lbs)

* Calculated based on power rating and measured sensitivity

GXR-D15A

Technical Data

- Class D Powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- Online monitoring available

High output subwoofer, self powered (class D switch mode power supply with PFC) Bi-amp.

The GXR-D15A can be flown together with the GXR-LA210A.

Consists of dual 15” low frequencies transducers (4” voice coil), direct radiation configuration. DSP with 3000 W amplification, 134 dB SPL.

Applications: live events, clubs, houses of worship, theatres, fixed installations and touring.

	GXR-D15A
Components	LF: 2 x 15” (4” voice coil)
Frequency Range	30Hz - 140Hz (-10dB) processed
Frequency Response	35 Hz – 125 Hz (± 3dB) processed
Max. SPL*	134 dB / 140 dB peak
Coverage Angle	Omnidirectional
Power	3000W Class D with switching power supply & PFC
LF Amplifier	1 x 3000 W
Processing	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Control	User control interface with 2.8" IPS screen
Control Connections	USB (DSP updating) / Ethernet (OCS)
Input	Analog / AES3 optional
AC Power	90 – 264V. 50/60 Hz with PFC
AC Connections	16A Neutrik powerCon TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	18mm Premium birch plywood
Dimensions	505 x 790 x 690 mm (H x W x D)
Weight	63 Kg (139 lbs)

* Calculated based on power rating and measured sensitivity

GXR-D18A

Technical Data

GXR Series

- Class D Powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- Online monitoring available

High output subwoofer, self powered (class D switch mode power supply with PFC) Bi-amp.

Consists of dual 18” low frequencies transducers (4” voice coil), direct radiation configuration. DSP with 3000 W amplification, 135 dB SPL.

Applications: live events, clubs, houses of worship, theatres, fixed installations and touring.

	GXR-D18A
Components	LF: 2 x 18” (4” voice coil)
Frequency Range	30 Hz – 120 Hz (-10dB)
Frequency Response	35 Hz - 100 Hz (± 3dB)
Max. SPL*	135 dB / 141 dB peak
Coverage Angle	Omnidirectional
Power	3000W Class D with switching power supply & PFC
LF Amplifier	1 x 3000 W
Processing	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Control	User control interface with 2.8" IPS screen
Control Connections	USB (DSP updating) / Ethernet (OCS)
Input	Analog / AES3 optional
AC Power	90 – 264V. 50/60 Hz with PFC
AC Connections	16A Neutrik powerCon TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	18mm Premium birch plywood
Dimensions	605 x 1100 x 750 mm (H x W x D)
Weight	92 kg (202 lbs)

* Calculated based on power rating and measured sensitivity

GXR-15

- Class D Powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- FIR linear phase filtering
- Online monitoring available
- Two way active system

High Output, self powered (class D switch mode power supply with PFC), two-way cabinet.

Consists of a 15" (2.5" voice coil) transducer with a 1" compression driver with a polyimide diaphragm mounted on a 90°H x 40°V precise directivity horn. DSP (FIR Filters) controlled with 1400W amplification, 128dB SPL.

Applications: theatres & auditoriums, houses of worship, small/ middle sized clubs & disco, smaller live stages / events, front fill / side fill reinforcement and portable sound reinforcement..

Technical Data

	GXR-15
Components	LF: 15" 2,5" voice coil, Malt Cross Cooling System HF: 1" Exit compression Driver , 1,7" aluminium voice coil
Frequency Range	60Hz - 20KHz (-10dB)
Frequency Response	66Hz - 18KHz (± 3dB)
Max. SPL*	128 dB
Coverage Angle	90° x 40° constant directivity horn. Rotatable.
Power	1400 W Class D with switching power supply & PFC
LF Amplifier	1 x 800 W
HF Amplifier	1 x 600 W
Processing	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Control	User control interface with 2.8" IPS screen
Control Connections	Ethernet (optional) / USB (DSP programming)
Input	Analog / AES3 (optional)
AC Power	90 – 264V. 50/60 Hz with PFC
AC Connections	16 A Neutrik powerCON TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	15mm Premium birch plywood
Dimensions	730 x 444 x 433 mm (H x W x D)
Weight	28.5 Kg (62.8 lbs)

* Calculated based on power rating and measured sensitivity

GXR-12

GXR Series

- Class D Powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- FIR linear phase filtering
- Online monitoring available
- Two way active system

High Output, self powered (class D switch mode power supply with PFC), two-way cabinet.

Consists of a 15" (2.5" voice coil) transducer with a 1" compression driver with a polyimide diaphragm mounted on a 90°H x 40°V precise directivity horn. DSP (FIR Filters) controlled with 1400W amplification, 128dB SPL.

Applications: theatres & auditoriums, houses of worship, small/ middle sized clubs & disco, smaller live stages / events, front fill / side fill reinforcement and portable sound reinforcement..

Technical Data

	GXR-12
Components	LF: 12". 2,5" voice coil, Malt Cross Cooling System HF: 1" Exit compression Driver , 1,75" aluminium voice coil
Frequency Range	60Hz - 20KHz (-10dB)
Frequency Response	66Hz - 18KHz (± 3dB)
Max. SPL*	127 dB
Coverage Angle	90° x 40° constant directivity horn. Rotatable.
Power	1400 W Class D with switching power supply & PFC
LF Amplifier	1 x 800 W
HF Amplifier	1 x 600 W
Processing	96 KHz / 64 bit double-precision, DSP with FIR filter linear phase
Control	User control interface with 2.8" IPS screen
Control Connections	Ethernet (optional) / USB (DSP programming)
Input	Analog / AES3 (optional)
AC Power	90 – 264V. 50/60 Hz with PFC
AC Connections	16 A Neutrik powerCON TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	15mm Premium birch plywood
Dimensions	639 x 370 x 386 mm (H x W x D)
Weight	23.5 Kg (51.7 lbs)

* Calculated based on power rating and measured sensitivity

GXR-18S

Technical Data

- Class D Powered
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- Online monitoring available
- Three way active system

High output, self powered (class D switch mode power supply with PFC), direct radiation subwoofer cabinet.

Consists of a 18" (3" voice coil) transducer with triple roll surround. DSP controlled with 1400W amplification, 132dB SPL.

Applications: theatres & auditoriums, houses of worship, small/ middle sized clubs & disco, smaller live stages / events, front fill / side fill reinforcement and portable sound reinforcement.

	GXR-18S
Components	LF: 1 x 18". 3" voice coil
Frequency Range	38Hz - 140 Hz (-10dB)
Frequency Response	44Hz - 125 Hz (± 3dB)
Max. SPL*	132 dB
Coverage Angle	Omnidirectional
Power	1400 W Class D with switching power supply & PFC
LF Amplifier	1 x 1400 W
Processing	48 KHz / 56 bit double precision DSP
Control	User control interface with LCD
Control Connections	USB (DSP programming)
AC Power	85 – 270V. 50/60 Hz with PFC
AC Connections	16 A Neutrik powerCON TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	18 mm Premium birch plywood
Dimensions	505 x 505 x 700 mm (H x W x D)
Weight	41 Kg (90 lbs)

* Calculated based on power rating and measured sensitivity

Super Penguin Celebrity Game in Shanghai, China

This event brings together entertainment celebrities and professional basketball players and is one of the most watched. 32 LX-V12 and 16 GXR-LA10A were flown at the stadium.

Software

Prediction, control, DSP updates, management system...all our softwares are designed in-house and are a fundamental part of the Lynx Pro Audio technology. They are designed by and for sound technicians, with a very intuitive interface easy to use.

Masters of DSP technology and one of the few companies in the world that develops its own digital processing systems. This allows us to control all internal processing, from gain to crossover, dynamics, etc.

Online Control System (OCS)

Control and monitoring software for multiple devices (loudspeakers, amplifiers and processors). Allows control via Ethernet / USB for Lynx Pro Audio systems with integrated DSP.

It controls the powered cabinets in real time and obtain detailed information of cabinet behavior.

Cabinet Updater

Connect the cabinet by USB to your PC. The Cabinet Updater software will automatically detects your cabinet hardware and updates the presets to the latest and optimum configuration available.

ARK Software

The ARK software works via USB or Ethernet (cable or wireless) and is the interface to configure all the parameters of the range of processors ARK-70 and ARK-20 series.

The ARK software has been completely designed at the Lynx Pro Audio laboratory by our own engineers. It allows you to configure every one of the parameters in the processor, being in "Real Time" or "Offline", storing them in the processor via the USB interface or ETHERNET.

Rainbow 3D

Rainbow 3D is an electro-acoustical prediction software for loudspeaker systems, boasting comprehensive high-speed simulation in a three-dimensional environment. With a sophisticated design, Rainbow 3D stands out for its speed, being able to do a simulation in a few seconds.

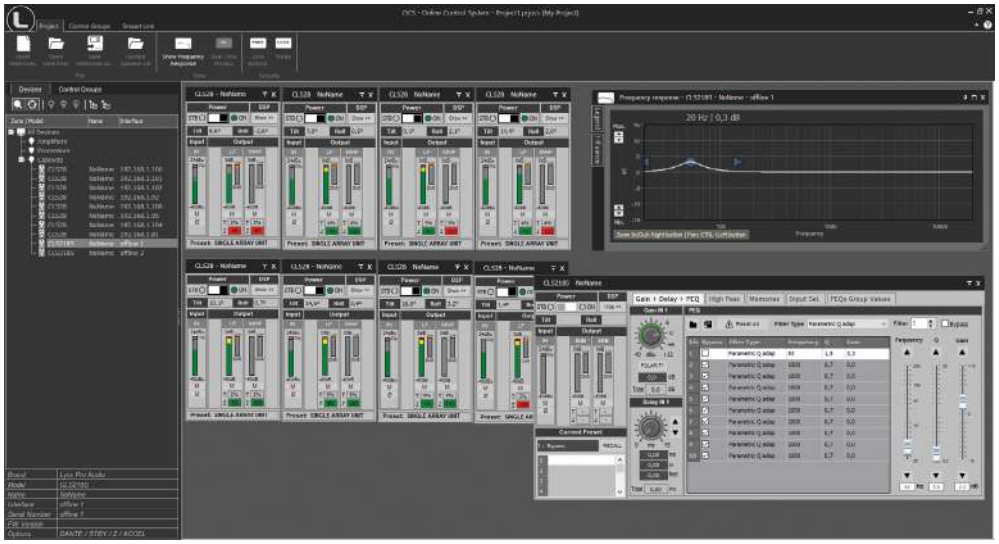
Thanks to this software you will be able to "virtually" determine the acoustical response of one or various cabinets at the same time.

Online Control System (OCS)

OCS is our control software, **working in real time for all our digital processing systems.** It is a user interface enabling the set-up of all digital devices in an installation.

With OCS you can configure / monitor all the parameters of a self-powered Lynx Pro Audio system (input levels, cabinet angles, module temperature, compression levels....), all parameters available in our processors and all settings for our HPX amplifiers, **from the input sensitivity to the digital process for each channel independently.** You can change the preset,gain, mute and polarity, activate the weather compensation and the SOLO mode.

OCS enables configuration from one single software system for all devices connected to an Ethernet network and incorporates direct communication with Smaart(R) measurement system. T**hrough our Smaart Link we can connect to any of Smaart(R) session connected to the local network**. This allows us to see, in real time, the captured measurement directly in our process window.



Control and monitoring software for multiple devices (loudspeakers, amplifiers and processors). Allows control via Ethernet / USB for Lynx Pro Audio systems with integrated DSP.

• Who is it for?

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

• What is it for?

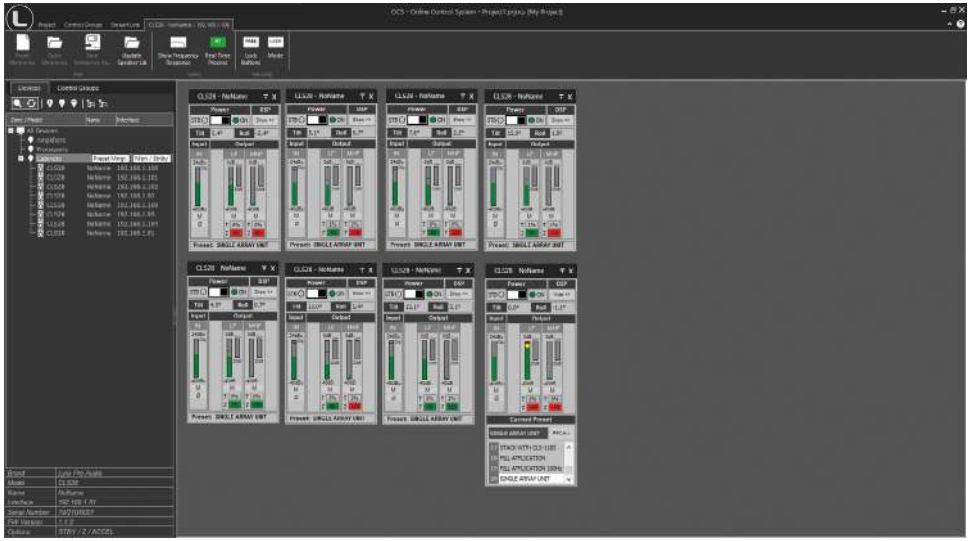
Obtain detailed information of cabinet behaviour and monitor the cabinet/s in real time through the users PC so you can control online a single cabinet or a complete cabinet system from the OCS window. You can apply a Parametric EQ with 6 filters totally configurable, insert a delay up to 90 ms, change the preset, gain, mute, polarity and phase of every cabinet connected. 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 OCS software automatically detects all the cabinets connected to the network and displays them in the OCS window on the users PC.

• What does it show?

As well as displaying the cabinet model and IP address the OCS will be monitoring in real time and the user will be able to view RMS levels, compression and output levels per way, delay, EQ, power module temperature, air absorption compensation and cabinet angulation.



Rainbow 3D Electroacoustical prediction software

Rainbow 3D is an **electro-acoustical prediction software for loudspeaker systems,** boasting comprehensive **high-speed simulation in a three-dimensional environment.** With a sophisticated design, Rainbow 3D stands out for its speed, being able to do a simulation in a few seconds.

Being a technology that has been developed in-house by our engineers, we are able to adapt to the needs of our clients, make improvements when necessary and develop new tools. Rainbow 3D is an ongoing project that will be constantly adding new features.

- **Designed from scratch by professionals**

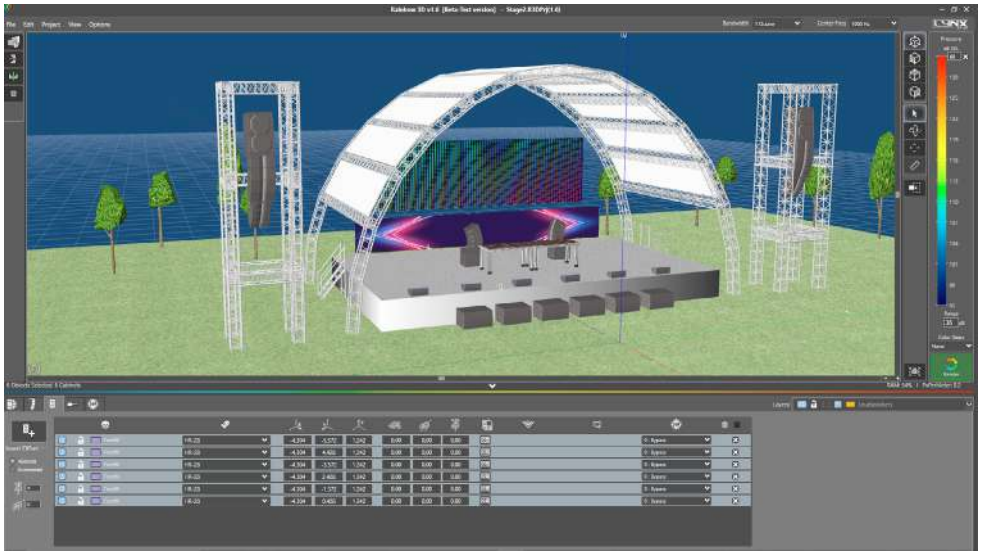
Despite the existence of the previous Rainbow 2D, this new software has been coded from scratch by our engineers in order to achieve an ultra-fast simulation and to create a visually rich 3D environment. The simulation takes advantage of all cores in the computer using multi-threading techniques for optimised calculation speed.

The program can simulate all Lynx Pro Audio's acoustic enclosures located in a 3D space. New spherical measurements of the loudspeakers have been performed, with up to one degree of accuracy, in the recently built anechoic chamber.

- **Complex-shaped surfaces**

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

You can create complex-shaped surfaces as listening zones (venues): trapezoidal forms, semicircles, circles, rectangles and other asymmetrical forms. Each corner in a 4-vertex surface is independently definable as straight or round.



- **Blueprints, textures and ornaments**

Blueprints can be loaded and used as a reference point or template on which reproduce the venue more closely to reality.

Furthermore, you can add textures and ornaments (decorative 3D objects) that you will find in the library to make the project more realistic and visually appealing.

- **Create projects with endless zones**

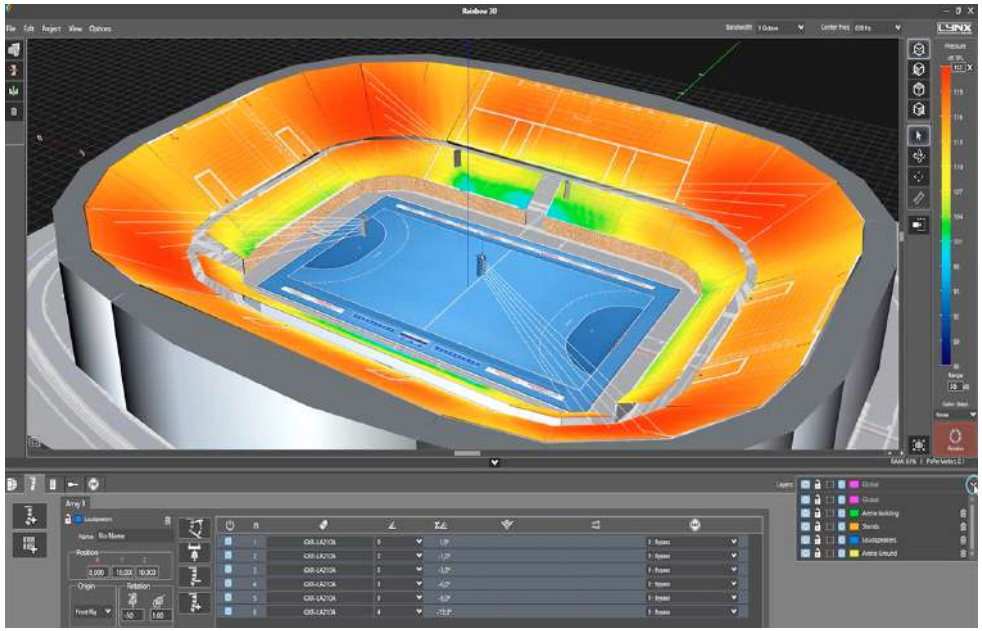
You can create customized designs using multiple edition and productivity tools: create surfaces, duplicate, apply symmetry on X and Y, show/hide surfaces, change dimensions, change position, change rotation, take screenshots, etc.

• 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 cabinets) as you desire or you can create your own group of customized sound systems.

Line arrays can be placed in stack or flown configuration. Also, you can create clusters from any individual cabinet available in the library.



• Create your own “Sound Systems”

You can select different models of cabinets from the library, create a group with the desired configuration and save them as a sound system. In this way, you can create a group of customized sound systems with your own configurations and reuse them in other projects, saving time.

To make this possible, you will need to create a “.system” file. This can be integrated upon other projects with the “Load sound system from file” option or you can import it directly into the library to get access whenever you need it with the “Insert sound system” option.

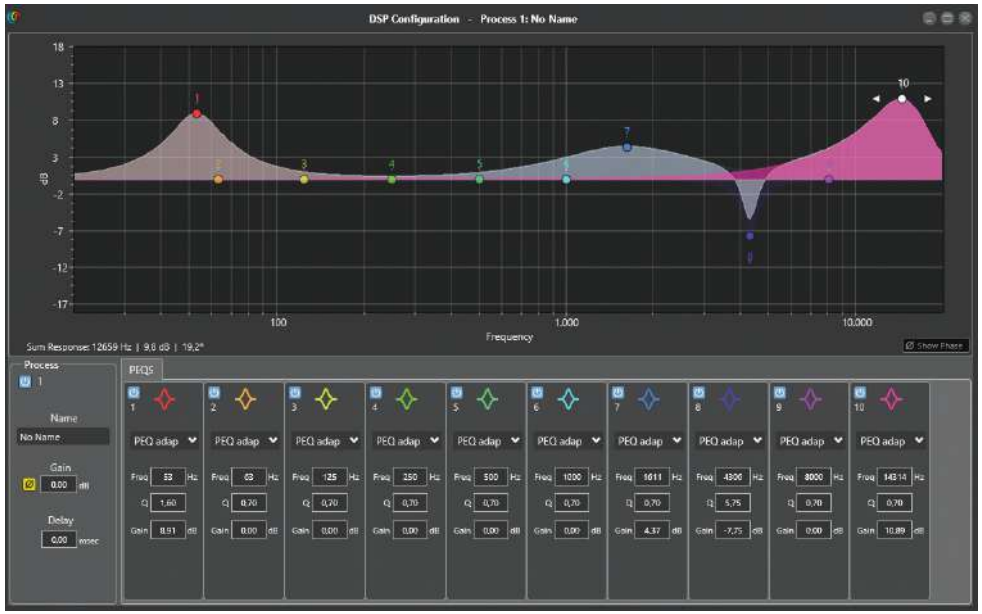
When you create a Sound System, you can add a name, a description and you have the chance to upload a picture.

• Organisation by layers

To work in a more organized way you can create multiple layers, with different names and colors to distinguish them. All elements within a layer can be selected and/or moved among them. You can also lock a layer, delete it or disable the speakers for simulation.

• DSP process over sound sources

Adding DSP process to sound sources to make corrections and optimize sound, using EQ filters, delay, gain and polarity inversion. In the near future, direct communication with Lynx Pro Audio’s cabinets will be available.



• Multiple measures and tools

Likewise, the R&D department is developing multiple measurements and analysis tools for the calculated data. For example, adding virtual microphones that show the frequency response in the points of location indicated.

Among other tools you will find a wizard to set up different line array arragements, a tool for line array autosplay and a ruler to take measurements (meters) in the 3D scene.

A PDF report can be generated with extensive information that includes 3D views of the project as well as a list of surfaces and loudspeakers with set-up data and EQ.


Rainbow 3D v0.8
File Edit Project View Options
Pressure
dB SPL
127
124
121
118
115
112
109
106
103
100
97
Range
30
dB
Color Steps
None
Venue Design
Line Array
Cabinets
Freq. Response
DSP Process
Array 12
Name
No Name
Position
Rotation
Mounting
Flown
GXR-LA10A
14,0°
7,0°
-3,0°
-13,0°
-23,0°
-33,0°
-43,0°
1: Internal DSP
0 : Bypass
1 Octave
1000 Hz
Render

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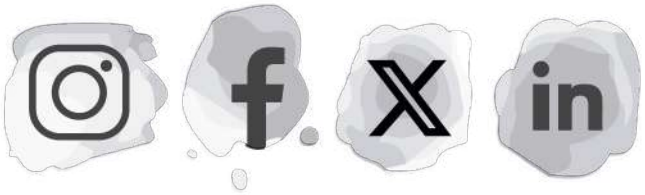

or visit our website
www.lynxproaudio.com

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