WCX Series **CATALOGUE**

Latest edition

Proudly designed, engineered and manufactured in SPAIN

LYNX
pro-audio

CULTURE OF SOUND

· Compacto y versátil
· Resistente a las intemperie
· Interiores y exteriores
· Preset ARK optimizado
· Fácil de usar, fácil de instalar
· Transformador de línea opcional
· Disponible en colores RAL

WCX series

WEATHER-RESISTANT COAXIAL CABINETS

The WCX Series have been designed to offer the utmost sound quality for indoor and outdoor installations.

These cabinets are weather resistant speakers, designed to withstand harder weather conditions, where the cabinets are exposed to the elements.

Weight has been left as low as possible providing easy set ups in fixed installation as well as easy transport. It can also be powered from an external amplifier using the ARK optimised preset.

The enclosure is made from premium grade birch plywood and finished with a polyurea coating for longer durability & weather protection.

Applications: PA system, public address, convention centers, houses of worship, background music or commercial complexes.

The WCX-8 is a two-way coaxial speaker part of the WCX series. The WCX-8 is a compact, modular and powerful cabinet designed for outdoor applicatios. Line transformer optional.

The WCX-8 uses a 8" coaxial speaker (2.5" LF voice coil and 1.75" HF voice coil) offering a coverage of 70° conical dispersion and 126 dB SPL (600 W program).

The WCX-8 has a stainless steel 1 mm grill also available in aluminum with protective layer and micro textured paint and a weatherstrip edging for extreme protection. It has an acoustex filter, a hydrophobic polyester sheet to prevent the penetration of water and external elements produced by extreme weather conditions. Also, 35 ppi Acoustic foam to protect against dust particles, M8 stainless steel 316 L screws and a waterproof protected cone on both sides.

	WCX-8
Components	1 x 8" coaxial speaker with LF 2.5" and HF 1.75" voice coil
Frequency range	70 Hz - 17 KHz (-10dB)
Frequency response	100 Hz - 18 KHz (± 3dB)
Sensibility	95 dB (1W@1m)
Max SPL*	120 dB – 126 dB peak
Coverage angle	70° conical dispersion
Potencia	300 W AES (600 W program, 1200 peak)
Operating Mode	8 Ω / Optional 100 V: 200 W / 100 W / 50 W selectable
Nominal impedance	8 Ω
Connectors	In: Euroblock terminal / Out: Cablegland
Finish	Polyurea coating
Material	15 mm premium birch plywood
Dimensions	265 x 265 x 265 mm (H x W x D)
Weight	10 Kg (22 lbs)

* Calculated based on power rating and measured sensitivity

WCX series

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.
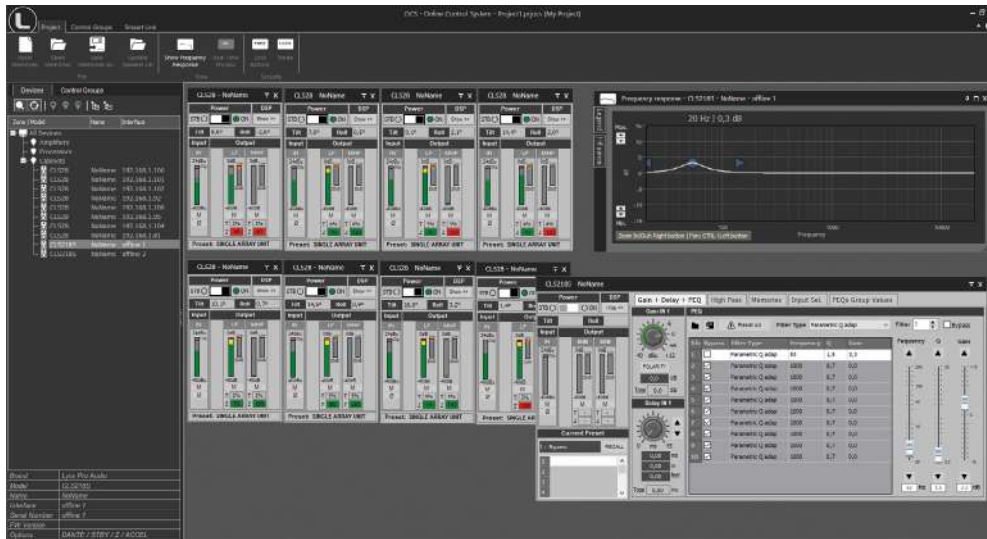
• Who is it for?
Users of Self powered DSP incorporated Lynx Pro Audio Cabinets where the user has requested the cabinets to be supplied with the Ethernet Module kit.
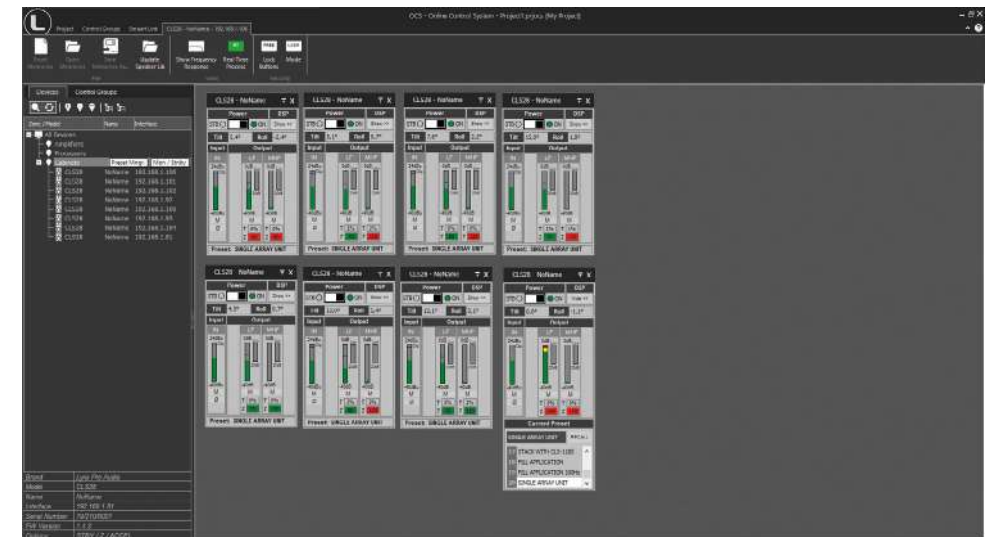
• What is it for?
Obtain detailed information of cabinet behaviour and monitor the cabinet/s in real time through the users PC so you can control online a single cabinet or a complete cabinet system from the OCS window. You can apply a Parametric EQ with 6 filters totally configurable, insert a delay 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.

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

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.
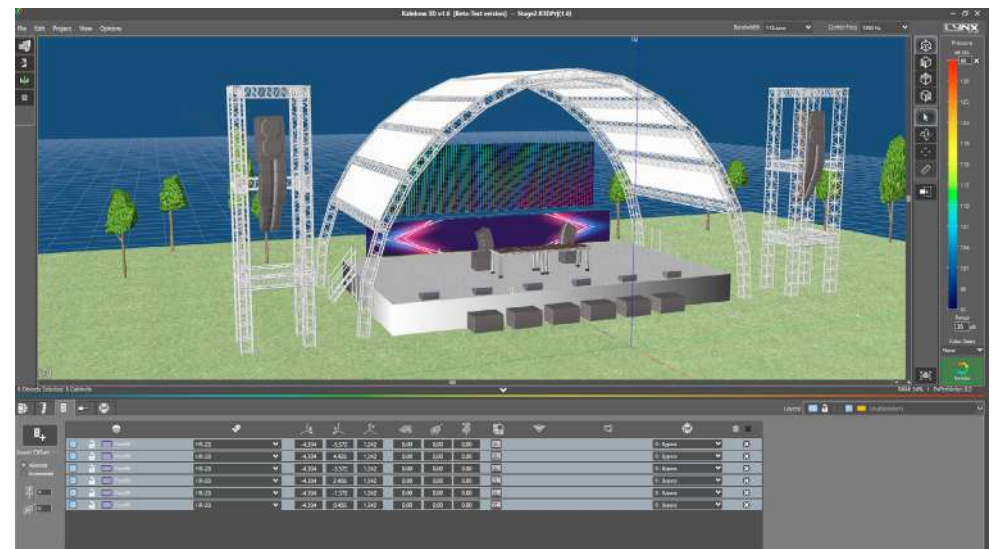
• Unlimited sound sources

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.
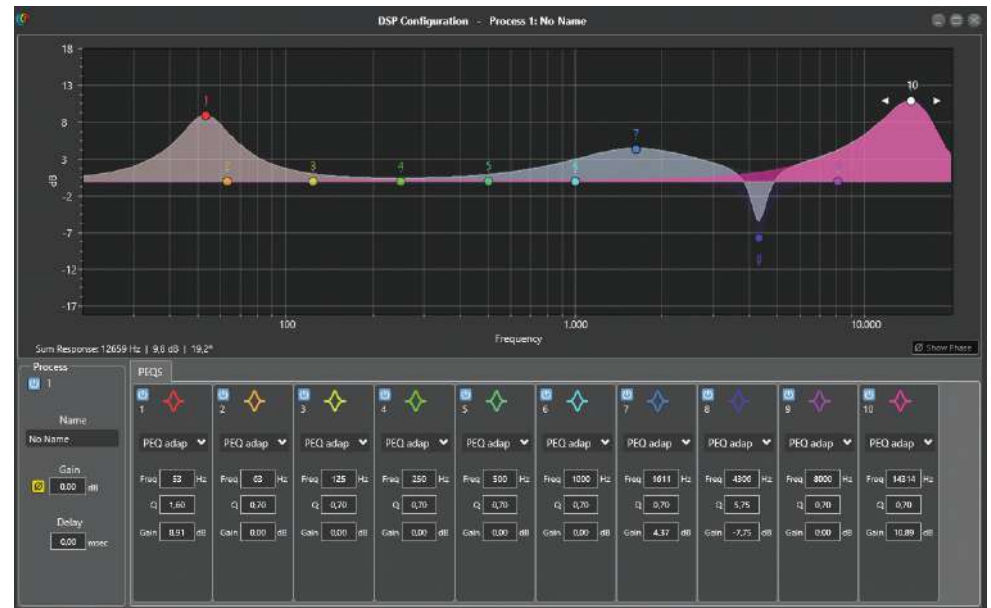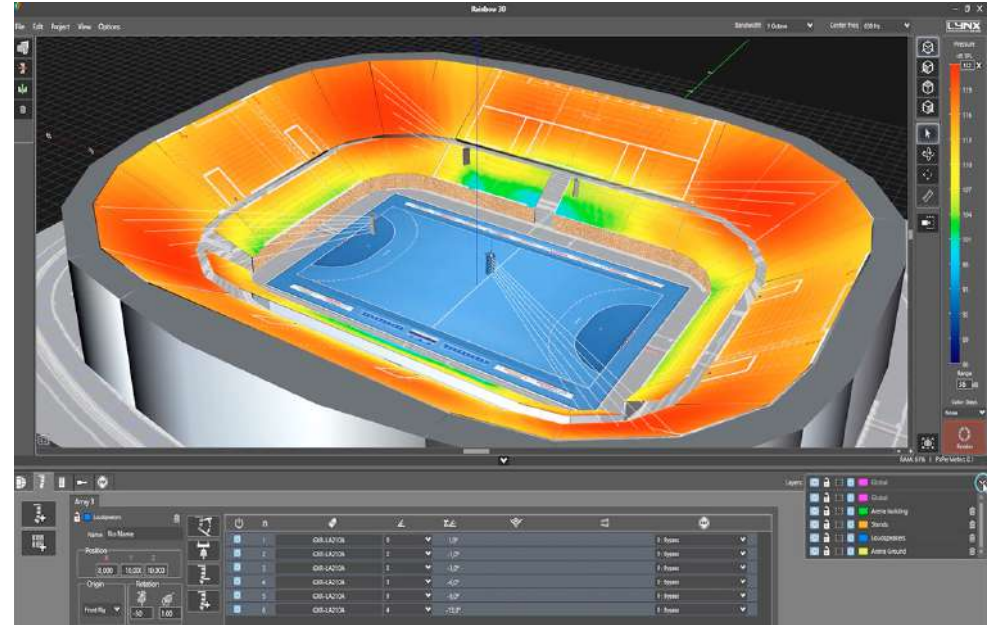
• DSP process over sound sources

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.
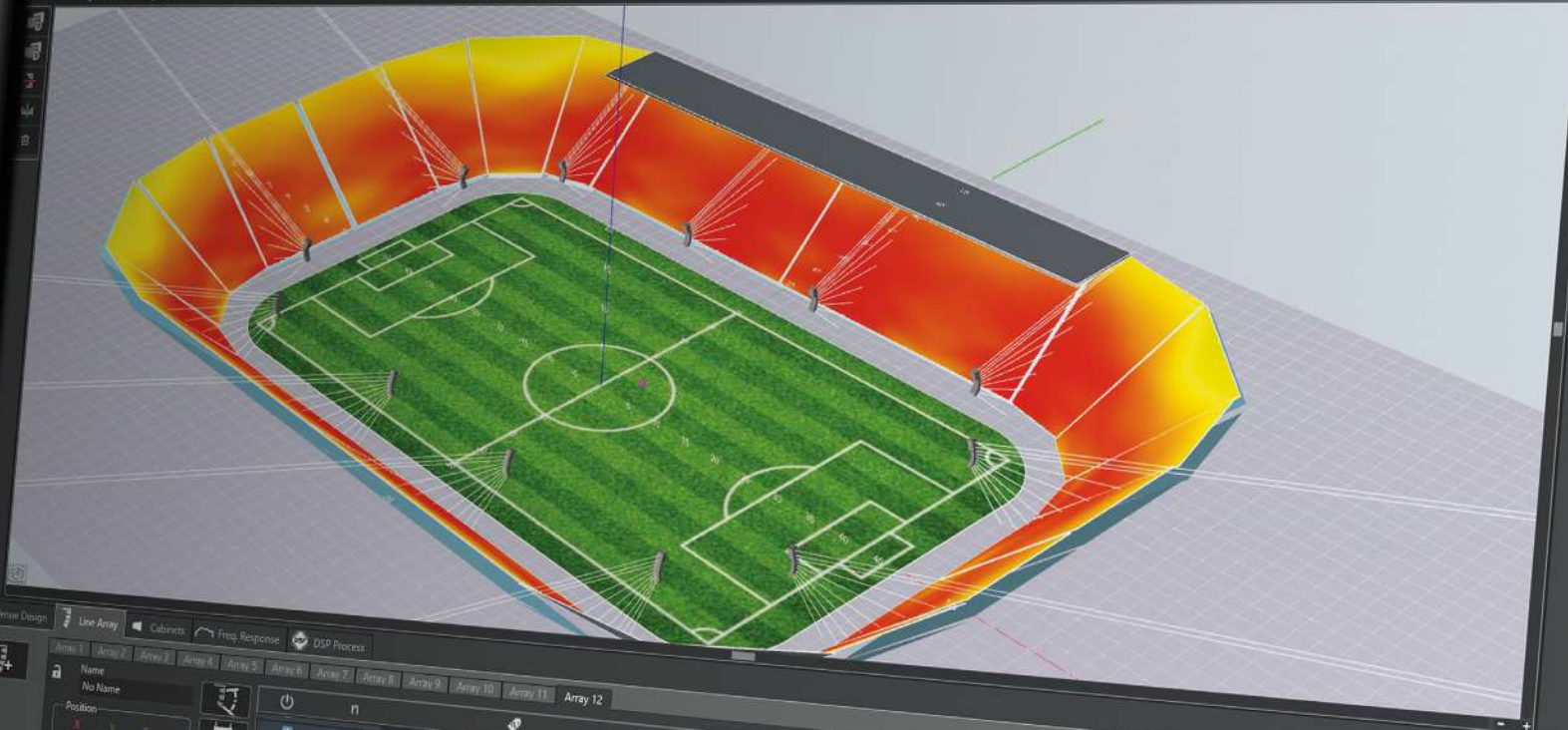
• Multiple measures and tools

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 X

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 1 Array 2 Array 3 Array 4 Array 5 Array 6 Array 7 Array 8 Array 9 Array 10 Array 11 Array 12

Name
No Name

Position
X Y Z
-44.64 -14.47 7.62

Rotation
180 19.00
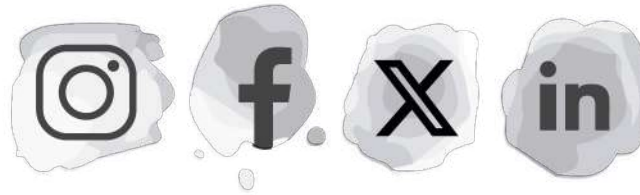
Mounting Flown

n			Σ		
4	GXR-LA10A				
5	GXR-LA10A	5			
6	GXR-LA10A	7	14,0°	1 : Internal DSP	
7	GXR-LA10A	10	7,0°	1 : Internal DSP	0 : Bypass
8	GXR-LA10A	10	-3,0°	1 : Internal DSP	0 : Bypass
9	GXR-LA10A	10	-13,0°	1 : Internal DSP	0 : Bypass
10	GXR-LA10A	10	-23,0°	1 : Internal DSP	0 : Bypass
		10	-33,0°	1 : Internal DSP	0 : Bypass
			-43,0°	1 : Internal DSP	0 : Bypass
					0 : Bypass

1 Octave

1000 Hz

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