



IONIC **CATALOGUE**

Latest edition

Proudly designed, engineered and
manufactured in SPAIN





Ionic Series

The Ionic series is Lynx Pro Audio's answer to light, portable or permanent installation column speakers. The Ionic series comprises four full-range modular columns (two of them Outdoor suitable), one coaxial speaker and two subwoofers.

These columns are very low profile, versatile, aesthetically pleasing and are designed for reverberant installations where intelligible, clear voice reproduction is paramount and where a low profile, discreet column is required.

The full-range columns can be powered from the active subwoofers and also offer various preset configurations from the integrated DSP.

Available in a variety of colours, with the full-range cabinets finished in anti-rust steel and the subs finished in rugged, premium birch plywood, coated with polyurea. All protected by front steel grilles and backed with a special triple layer, acoustical textile which allows greater air flow and reduces heat and humidity.



- Compact & versatile
- Powered from the sub bass unit
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable
- Available in RAL colours by request and water-vinyl customization
- Outdoor suitable

The Ionic-V28 is a two-way passive column speaker part of the Ionic series. This column is oriented to contain high fidelity voice and has more vertical directivity thanks to the waveguide.

It is the newest and most powerful column system in the series and it is ideal for indoor installations. Water-based paint available in several colors.

Powered from the subwoofer units which include a DSP offering different presets to cover a wide range of sound applications.

Ionic V28	
Components	Low/mid: 8 x 4" speakers with 1" voice coil High: 1 x 1" exit on waveguide
Frequency Range	80 Hz - 20 KHz (-6dB) (processed)
Sensitivity*	99 dB (1W@1m)
Max. SPL**	126 dB / 132 dB peak
Coverage	100° H x 25° V
Rated Power (AES)	560 W (1120 W program, 2240 W peak)
Nominal Impedance	16 Ω
Connectors	1 x Neutrik NL4MP / 4 poles PHOENIX connector
Finish	Water-based paint
Material	9 mm birch plywood
Dimensions	1004 x 118 x 149 mm (H x W x D)
Weight	12 Kg (26.5 lbs)

*2,83v@1m Pink noise with 12 dB crest factor processed.

** Calculated based on power rating and measured sensitivity processed.

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.



Ionic V24



- Compact & versatile
- Powered from the sub bass unit
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable

The Ionic-V24 is a two-way passive column speaker part of the Ionic series. This column is oriented to contain high fidelity voice and has more vertical directivity thanks to the waveguide.

It is the newest and most powerful column system in the series and it is ideal for indoor installations. Water-based paint available in several colors.

It is powered from the subwoofer units which include a Digital Signal Processor offering different presets to cover a wide range of sound applications.

Available in white and RAL colours.



Technical Data

Ionic V24	
Components	Low/mid: 4 x 4" speakers with 1" voice coil High: 1 x 1" exit on waveguide
Frequency Range	90 Hz - 20 KHz (-6dB) (processed)
Sensitivity*	96 dB (1W@1m)
Max. SPL**	120 dB / 126 dB peak
Coverage	100° H x 25° V
Rated Power (AES)	280 W (560 W program, 1120 W peak)
Nominal Impedance	16 Ω
Connectors	1 x Neutrik NL4MP / 4 poles PHOENIX connector
Finish	Water-based paint
Material	9 mm birch plywood
Dimensions	586 x 118 x 149 mm (H x W x D)
Weight	7 Kg (15.4 lbs)

*4v@1m Pink noise with 12 dB crest factor processed.

** Calculated based on power rating and measured sensitivity processed.

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.

Ionic 100/OD



- Compact & versatile
- Powered from the sub bass unit
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable
- Available in RAL colours by request and water-vinyl customization
- Outdoor suitable

Ultra-compact, passive column speaker with 12 x 3" (0.75" voice coil) neodymium transducers. 15° +/- 5° vertical coverage. 121dB SPL. The Ionic-100OD is ideal for outdoor installations thanks to its special treatment.

The Ionic-100OD is a passive column speaker part of the Ionic series. The Ionic columns are compact, modular and powerful and the complete series includes two columns & two subwoofers. The Ionic-100 uses 12 x 3" (0.75" voice coil) neodymium transducers offering a coverage of 15° +/- 5° V x 100° H and 121dB SPL.

The Ionic-100 is powered from the subwoofer units which include a Digital Signal Processor offering different presets to cover a wide range of sound applications.

Available in RAL colours by request and water-vinyl customization.



Technical Data

Ionic 100 / OD	
Components	12 x 3" speaker with 0.75" voice coil
Frequency Range	150 Hz - 20 KHz (-10dB)
Frequency Response	180 Hz - 20 KHz (± 3dB)
Sensitivity	96 dB (1W@1m)
Max. SPL*	121 dB / 127 dB Peak
Coverage	15° ±5° V x 100° H
Rated Power (AES)	300 W, 600 W program, 1200 W peak
Nominal Impedance	8 Ω
Connectors	2 x Neutrik Speakon NL4MP
Finish	Epoxy paint / bespoke pattern
Material	1.5 mm stainless steel
Dimensions	1000 x 89 x 117 mm (H x W x D)
Weight	13 kg (29 lbs)

* Calculated based on power rating and measured sensitivity

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.

Outdoor specifications

The cabinet receive the following treatment so that they can be installed in outside locations:

- Micro perforated aluminium grill with special polyester protection against water.
- Tropicalized speaker treatment with special latex covering.
- Double cabinet sealing

100V Line transformer:

The Ionic-LT is the ideal accessory to transform Ionics series to 100 V line. Using the same enclosure shape, finished in stainless steel, it's a discreet and easy-to-use accessory.

Ionic 50/OD



- Compact & versatile
- Powered from the sub bass unit
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable
- Available in RAL colours by request and water-vinyl customization
- Outdoor suitable

Ultra-compact, passive column speaker. Consists of 6 x 3" (0.75" voice coil) neodymium transducers. 15° +/- 5° vertical coverage. 119dB SPL The Ionic-100OD is ideal for outdoor installations thanks to its special treatment.

The Ionic-50 is a passive column speaker part of the Ionic series. The ionic cabinets are compact, modular and powerful and the complete serie include two sub units and two column models. The Ionic-50 uses 6 x 3" (0.75" voice coil) neodymium transducers offering a coverage of 15° +/- 5° V x 100° H and 119dB SPL.

Weight has been left as low as possible providing easy set ups infixed installation as well as easy transport for portable applications.

The Ionic-50 is powered from the subwoofer units which include a Digital Signal Processor offering different presets to cover a wide range of sound applications.

Available in RAL colours by request and water-vinyl customization.



Technical Data

Ionic 50 / OD	
Components	6 x 3" speaker with 0.75" voice coil
Frequency Range	150 Hz – 20 KHz (-10dB)
Frequency Response	180 Hz - 20 KHz (± 3dB)
Sensitivity	97 dB (1W@1m)
Max. SPL*	119 dB / 125 dB Peak
Coverage	15° ±5° V x 100° H
Rated Power (AES)	150 W, 300 W program, 600 W peak
Nominal Impedance	32 Ω
Connectors	2 x Neutrik Speakon NL4MP
Finish	Epoxy paint / bespoke pattern
Material	1.5 mm stainless steel
Dimensions	502 x 89 x 117 mm (H x W x D)
Weight	7 kg (15 lbs)

* Calculated based on power rating and measured sensitivity

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.

Outdoor specifications

The cabinet receive the following treatment so that they can be installed in outside locations:

- Micro perforated aluminium grill with special polyester protection against water.
- Tropicalized speaker treatment with special latex covering.
- Double cabinet sealing

100V Line transformer:

The Ionic-LT is the ideal accessory to transform Ionics series to 100 V line. Using the same enclosure shape, finished in stainless steel, it's a discreet and easy-to-use accessory.



- Compact & versatile
- Powered from the sub bass unit or external amp
- ARK optimised preset
- Easy to use, easy to install
- Portable
- Available in black or white

The Ionic-5CXv is a passive coaxial speaker for outdoor use. This install version features double polyurea coating, aluminium grill, polyester foam protection, glamp connectors and the speaker's cones are weatherproof by both sides. 5" coaxial speaker offering a coverage of 70° conical dispersion and 117 dB peak. 100 W autoformer / selectable 8 Ω or 100 V.

The Ionic-5CXv is a passive coaxial speaker ideal for outdoor installations. This ultra-compact cabinet features a double polyurea coating, aluminium grill, polyester foam protection, glamp connectors and weatherproof speaker cones.

The Ionic-5CXv uses a 5" coaxial speaker (1.5" LF voice coil and 1" HF voice coil) offering a coverage of 70° conical dispersion and 117dB SPL (300 W program).

The Ionic-5CXv is powered from the subwoofer unit ionic-12S which includes a Digital Signal Processor offering different presets to cover a wide range of sound applications. It can also be powered from an external amplifier using the ARK optimised preset.



Ionic 5CXv

Components	1 x 5" coaxial speaker with LF 1.5" and HF 1" voice coil
Frequency Range	64 Hz - 20 KHz (-10dB)
Frequency Response	90 Hz - 18 KHz (± 3dB)
Max. SPL*	114 dB - 120 dB peak
Sensitivity	93 dB (1W@1m)
Coverage	70° conical dispersion
Rated Power (AES)	150 W, 300 W program, 600 W peak
Operating mode	8 Ω / 100 V: 100 W / 75 W / 50 W selectable
Connectors	In: Euroblock terminal Out: Cable gland
Finish	Polyurea coating high grade resistant paint
Material	10 mm premium birch plywood
Dimensions	140 x 140 x 220 mm (H x W x D)
Weight	3 Kg (6.6 lbs)

* Calculated based on power rating and measured sensitivity

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.



- Compact & versatile
- Self Powered (Class D)
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable
- Available in black or white

The Ionic-18S is a powered subwoofer enclosure part of the Ionic series. The Ionic cabinets are compact, modular and powerful and the complete series includes two sub units, one coaxial speaker and two column models.

The Ionic-18S uses 1 x 18" (3" voice coil) neodymium transducer offering an ultra compact subwoofer enclosure with 132dB SPL.

The power module (Class D with switching power supply) includes a Digital Signal Processor which offers different presets to cover a wide range of sound applications complementing the column speakers.

Ionic-18S provides quick and easy set ups for both fixed installations and portable applications.

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.

Ionic 18S	
Components	18". 3" voice coil
Frequency Range	38 Hz - 250 Hz (-10dB)
Frequency Response	42 Hz - 250 Hz (± 3dB)
Max. SPL*	132 dB
Coverage Angle	Omnidirectional
Power	2400 W Class D with switching power supply & PFC
LF Amplifier	1 x 1400 W
Speaker Output Amplifier	2 x 600 W @ 4 Ω
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 programming)
Input	Analog / AES3 (optional)
AC Power	85 – 270V. 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	513 x 505 x 704 mm (H x W x D)
Weight	37 Kg (81.5 lbs)

* Calculated based on power rating and measured sensitivity





- Compact & versatile
- Self Powered (Class D)
- DSP presets for various applications
- Weather proof components
- Easy to use, easy to install
- Portable
- Available in black or white

The Ionic-12S is a powered sub enclosure part of the Ionic series. The ionic cabinets are compact, modular and powerful and the complete series includes two subwoofer units, one coaxial speaker and two column models.

The Ionic-12S uses 1 x 12" (3" voice coil) neodymium transducers offering an ultra compact sub enclosure with 127dB SPL.

The power module (Class D with switching power supply) includes a Digital Signal Processor which offers different presets to cover a wide range of sound applications complementing the column speakers.

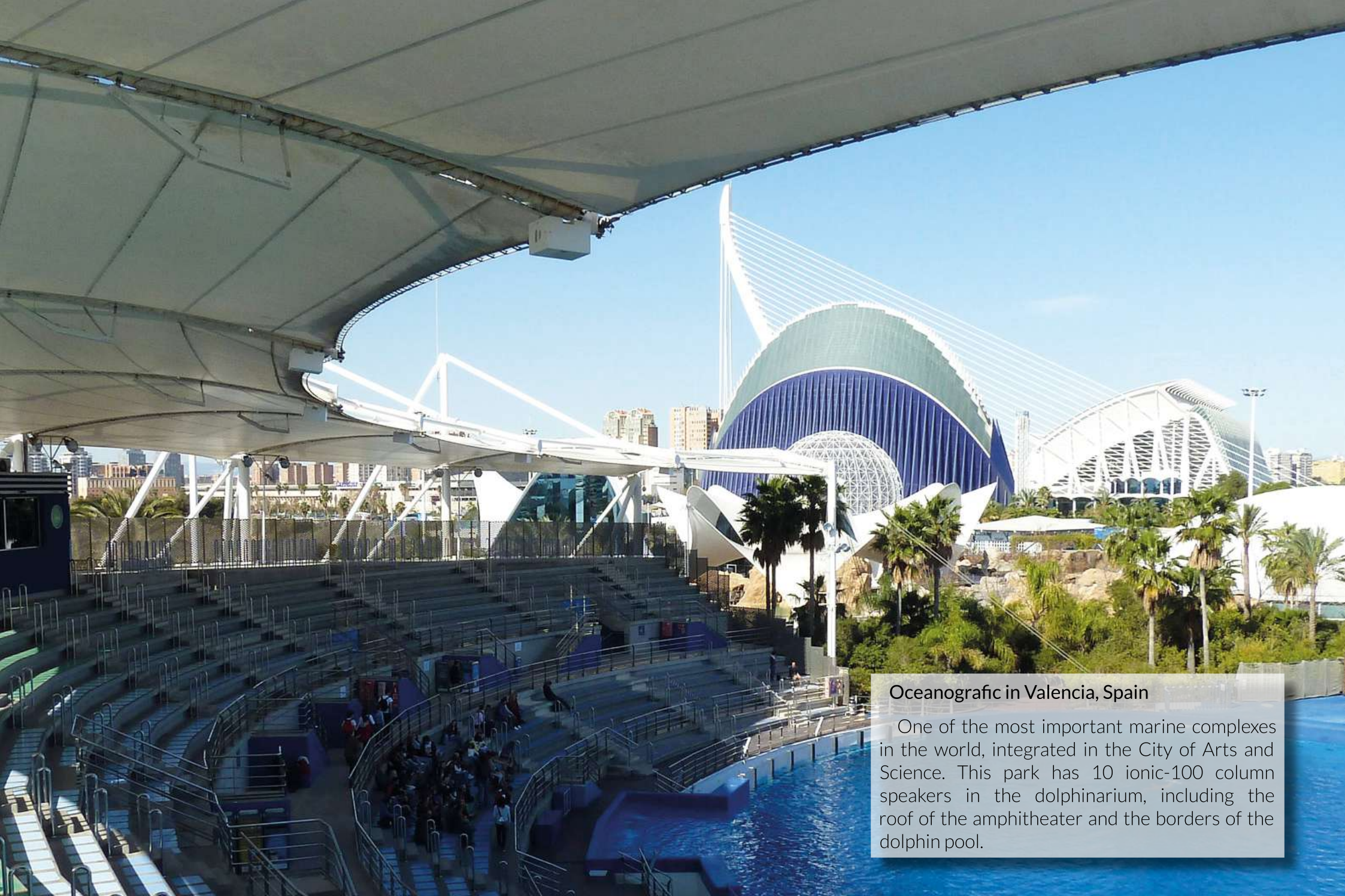
Ionic-12S provides quick and easy set ups for both fixed installations and portable applications.

Applications: PA system, clubs & theatres, houses of worship, public buildings, commercial complex; solo artists, band & DJ.

Ionic 12S	
Components	12". 3" voice coil
Frequency Range	40 Hz - 250 Hz (-10dB)
Frequency Response	46 Hz - 250 Hz (± 3dB)
Max. SPL*	127 dB
Coverage Angle	Omnidirectional
Power	1400 W Class D with switching supply & PFC
LF Amplifier	1 x 700 W
Speaker Output Amplifier	1 x 700 W @ 8 Ω
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 programming)
Input	Analog / AES3 (optional)
AC Power	85 – 270V. 50/60 Hz with PFC
AC Connections	16A Neutrik powerCON TRUE1 with looping output
Finish	Polyurea coating high grade resistant paint
Material	15mm Premium birch plywood
Dimensions	407 x 440 x 520 mm (H x W x D)
Weight	23 Kg (50.6 lbs)

* Calculated based on power rating and measured sensitivity





Oceanogràfic in Valencia, Spain

One of the most important marine complexes in the world, integrated in the City of Arts and Science. This park has 10 ionic-100 column speakers in the dolphinarium, including the roof of the amphitheater and the borders of the dolphin pool.

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.

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.

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.

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.

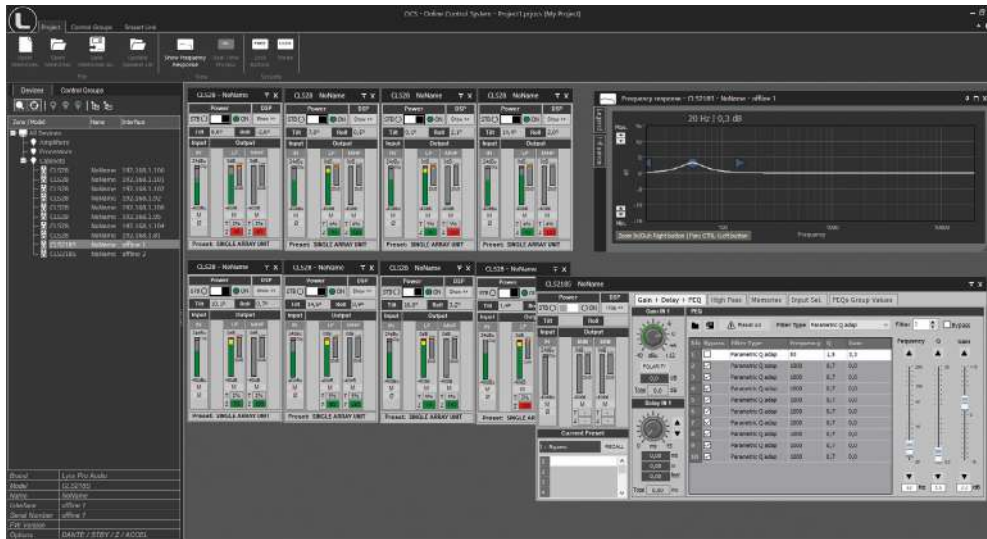
Thanks to this software you will be able to "virtually" determine the acoustical response of one or various cabinets at the same time.

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 Smart(R) measurement system. **Through our Smart Link we can connect to any of Smart(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?

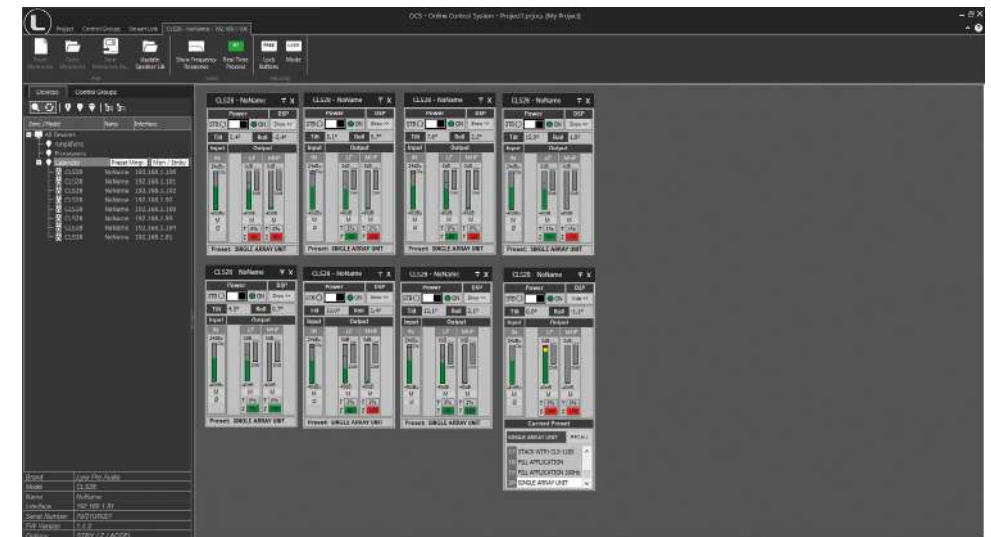
Obtain detailed information of cabinet behaviour and monitor the cabinet/s in real time through the users PC so you can control online a single cabinet or a complete cabinet system from the OCS window. You can apply a Parametric EQ with 6 filters totally configurable, insert a delay up to 90 ms, change 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.

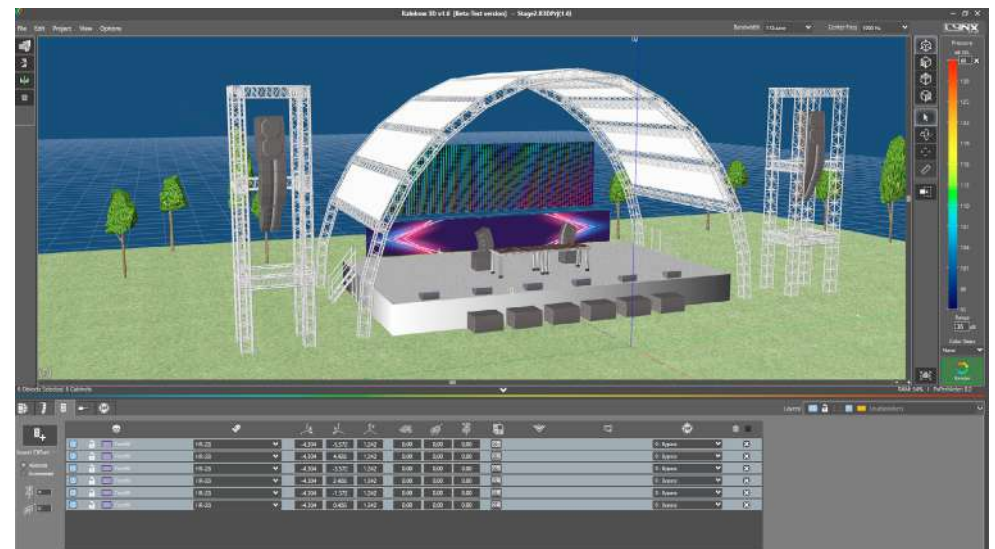
- **Blueprints, textures and ornaments**

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**

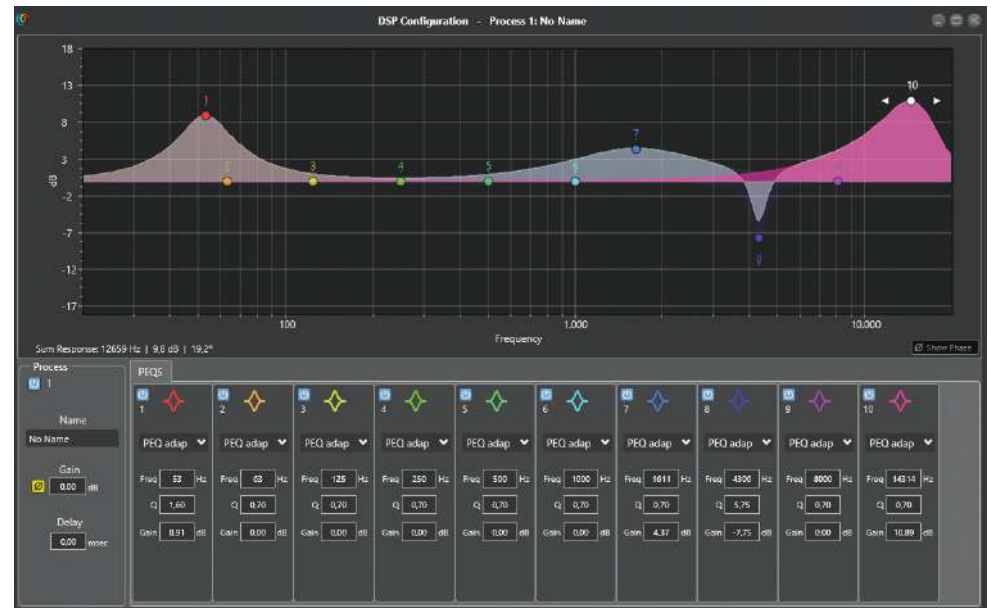
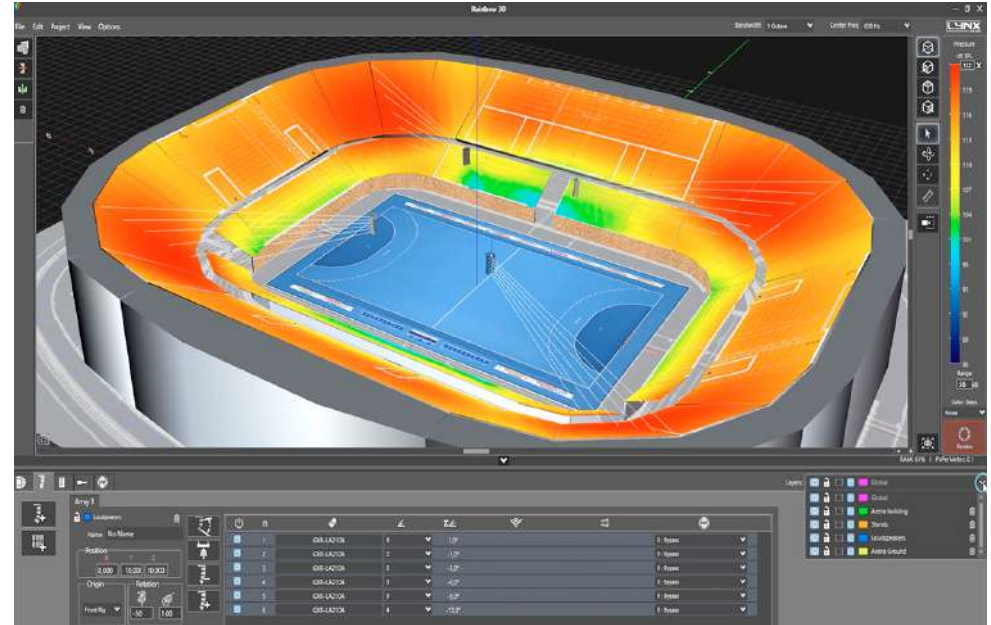
Adding DSP process to sound sources to make corrections and optimize sound, using EQ filters, delay, gain and polarity inversion. In the near future, direct communication with Lynx Pro Audio’s cabinets will be available.

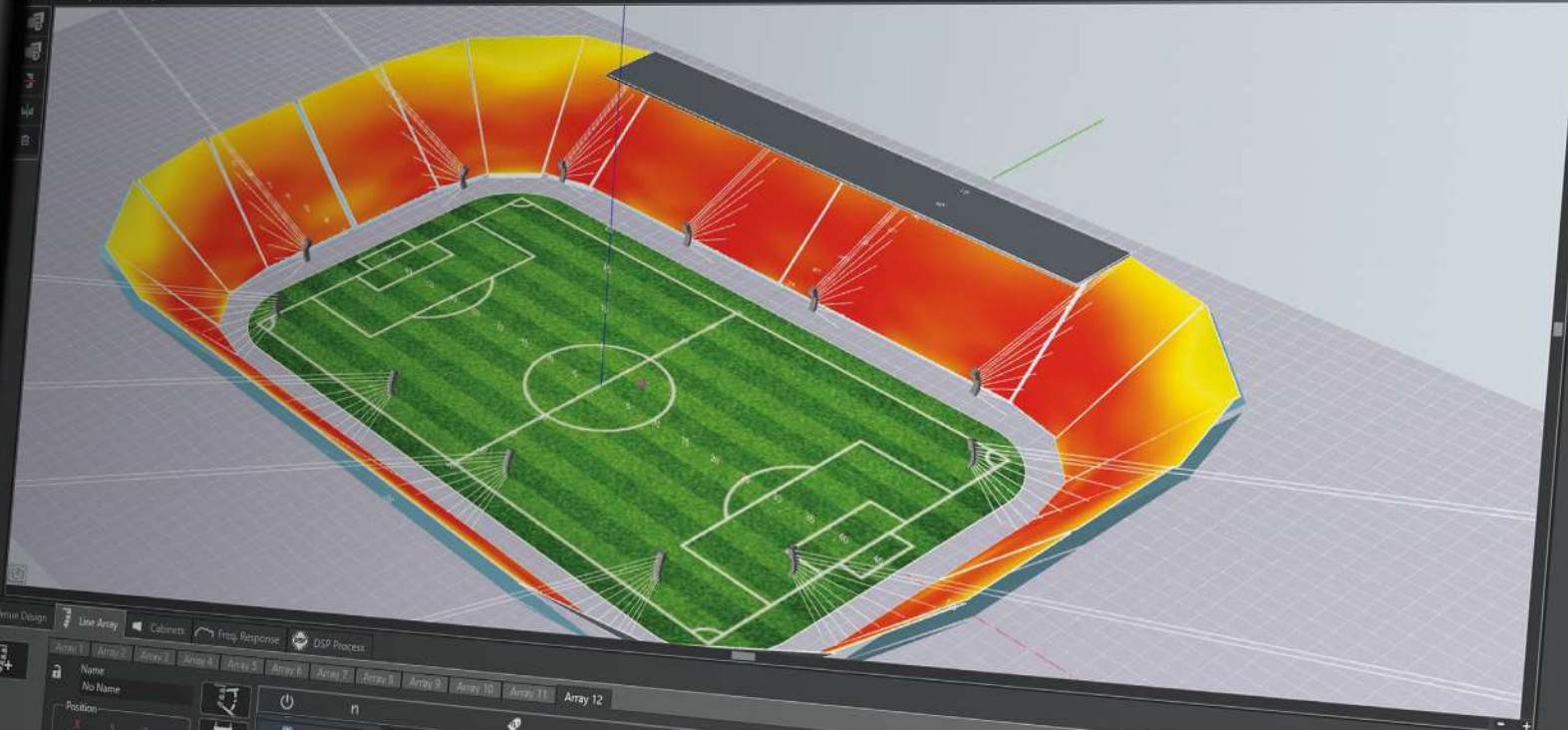
- **Multiple measures and tools**

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 arrangements, a tool for line array autoplay 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.





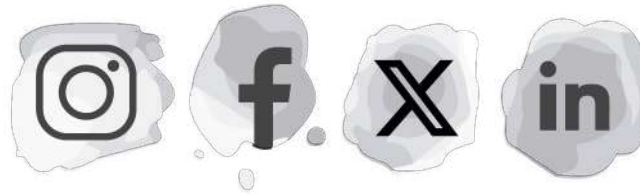
Line Array Cabinets Freq. Response DSP Process

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	Position (X, Y, Z)	Rotation (Pitch, Yaw)	Mounting	Flows	n	Angle	Internal DSP	Bypass
4	-44.64, -14.47, 7.62	180, 19.00			4		1: Internal DSP	0: Bypass
5					5	14.0°	1: Internal DSP	0: Bypass
6					7	7.0°	1: Internal DSP	0: Bypass
7					10	-3.0°	1: Internal DSP	0: Bypass
8					10	-13.0°	1: Internal DSP	0: Bypass
9					10	-23.0°	1: Internal DSP	0: Bypass
10					10	-33.0°	1: Internal DSP	0: Bypass
10					10	-43.0°	1: Internal DSP	0: Bypass

1 Octave
1000 Hz
Render

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