



# IONIC SERIES **CATALOGUE**

Latest edition

Proudly designed, engineered and  
manufactured in SPAIN

**LYNX**  
pro-audio

CULTURE OF SOUND

# OUR TECHNOLOGY

These are the technological features of our cabinets that you will find on each product card:



## DIGITAL PROCESSING

Latest generation 24bit/96Khz digital processor which optimizes the system components.

It includes 2 channel processing electronics with functions for phase correction, driver protection, gain control, equalization, classic crossover and linear phase filtering.



## FIR POWERED

In-house engineered FIR filter algorithms allow Lynx systems to deliver outstanding sound quality and phase compatibility within all the DSP powered product range whilst maintaining very low latency.



## AES / EBU

For self-powered Lynx Pro Audio cabinets that have this option, enabling digital audio input signal via AES / EBU protocol, accepting signals up to 24 bits and 192 kHz whilst with the software being able to choose if you want to use the input L, R or L + R.



## POWER FACTOR CORRECTION

PFC is a measure of how efficiently the load current is being converted into a more useful output current. With PFC the power supply regulates itself when AC mains change, so the amp power output will not change with mains swinging.

This system is also very environmentally friendly with a reduction of approximately 40% of current draw. It transforms the power consumed in to "useful power" producing less hum and distortion.



## NEODYMIUM

Lynx Pro Audio cabinets that use neodymium magnet group components benefit from special characteristics such as improved driver performance and of course the saving in overall system weight.



## ATMOSPHERIC

Air absorption compensation is an algorithm that compensates for the loss of pressure caused by weather conditions and the distance to the listener's ear from the sound system.

By introducing three parameters (temperature, relative humidity and distance) the algorithm calculates the losses and compensates for this loss so they are not apparent in the listening zone.



## DIGITAL INCLINOMETER

Automatic function to calculate cabinet splay angles. The inclinometer data can be viewed and controlled from the cabinet LCD display either manually or automatically.

The inclinometer automatically communicates with the DSP and modifies the equalization algorithms. According to the splay angle of the inclinometer the DSP compensates for atmospheric loss.

The result is a more efficient performance and a flat response, even at long distances.



## IMPORT DATA

This feature of our control software allows us to add the electro-acoustic response of the system we want to adjust to our processing chain, enabling us to see the total system response and not just the electrical one.



## FLOAT POINT OPERATIONS IN DOUBLE PRECISION

The DSP processing works with double precision, achieving an internal resolution of 56 bits or 64 bits, one of the largest resolutions available on the market today.

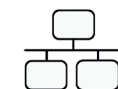
This enables the use of high precision filters with extremely low distortion delivering unbeatable sound clarity and quality.



## AMPLIFICATION

The Class D amplifier is characterized by high efficiency (low loss of energy), which results in smaller heat sinks and much smaller total power consumed by reducing the weight and size of the amplifier.

Class D amplifiers achieve about 80% higher efficiency than other amplifiers, whose efficiency is approximately 45%. There are significant advantages, the lower dissipation produces less heat and saves circuit board space.



## ETHERNET

This option enables you to connect various devices in a standard Ethernet network and control them remotely through our OCS 'Online Control Software'.



## ONLINE CONTROL SYSTEM

OCS is a software to control each cabinet in real time (via Ethernet or pc). It obtains detailed information of the cabinet behaviour: RMS levels, Input clip, compression levels, power module temperature, air absorption compensation and cabinet angulation.



## CABINET UPDATER

This software enables you to update your cabinets with the latest presets and firmware. Enclosures are connected via Internet to our servers and automatically detects any updates that might have been made for them. This ensures the end user always has all the improvements developed by our R & D department available for their system.



## RAINBOW 3D

Based on polar response measurements, taken meticulously with a 360° sphere in a 3D environment.

The Rainbow 3D software calculates the response from multiple sound sources in a 3D space. In addition, the user can optimize the response using our FIR filtering technology.





## Ionic Series

The Ionic series is Lynx Pro Audio's answer to light, portable or permanent installation column speakers. The Ionic series comprises two full-range modular columns (IONIC-100 and IONIC-50), one coaxial speaker (IONIC-5CX) and two subwoofers (IONIC-18S and IONIC-12S).

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.

# Ionic 100



- 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 version available

The Ionic-100 is a passive column speaker part of the ionic series. The Ionic cabinets are compact, modular and powerful and the complete series includes two sub bass units, one coaxial speakers and two column models.

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

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	
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)

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

### Outdoor version: Ionic-100ov

The Ionic-100ov is also available as an outdoor version. The cabinets 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



- 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 version available

The Ionic-50 is a passive column speaker part of the Ionic series. The Ionic cabinets are compact, modular and powerful and the complete series includes two sub bass units, one coaxial speaker 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	
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)

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

### Outdoor version: Ionic-50ov

The Ionic-50ov is also available as an outdoor version. The cabinets 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 5CX



- 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-5CX is a passive coaxial speaker part of the Ionic series. The Ionic cabinets are compact, modular and powerful and the complete serie also include two sub bass units and two column models.

The Ionic-5CX 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). Weight has been left as low as possible providing easy set ups in fixed installation as well as easy transport for portable applications.

The Ionic-5CX 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.



## Technical Data

Ionic 5CX	
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 - 20 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
Nominal Impedance	16 Ω
Connectors	2 x Neutrik Speakon NL4MP / 4 x Terminal Block 7.62 mm between pins
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)

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

### Line transformer version: Ionic 5CXv

The Ionic 5CXv is a weather-resistant loudspeaker. Compact & versatile, easy to use, easy to install. 5" coaxial speaker offering a coverage of 70° conical dispersion and 117dB SPL. 100 W autoformer / selectable 8 Ω or 100 V.



# Ionic 18S



- 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.



## Technical Data

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	48 KHz / 56 bit double precision DSP
Control	User control interface with LCD
Control Connections	Ethernet (OCS) optional / USB (DSP programming)
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)

# Ionic 12S



- 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.



# Technical Data

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	48 KHz / 56 bit double precision DSP
Control	User control interface with LCD
Control Connections	Ethernet (OCS) optional / USB (DSP programming)
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)





### 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.



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