



A culture of sound

Product Guide

Technology

At Lynx Pro Audio, all the technology we employ is our very own. We design and program our own DSP systems and control software.

This allows us to work with the latest technology available for DSPs, AD and DA converters, microprocessors etc. Being able to master such technology allows us to add new features to our products guaranteeing that the users of Lynx Pro Audio systems will always have the latest available upgrades.



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.



FLOAT POINT OPERATIONS IN DOUBLE PRECISION

The DSP processing works with double precision in floating point, achieving an internal resolution of 56 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



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.



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.



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.



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.



POWER FACTOR CORRECTION

PFC is a measure of how efficiently the load current is being converted into a more useful output current.

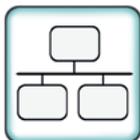
With PFC the power supply regulates itself when AC mains change, so the amp power output will not change with mains swinging.

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.



ETHERNET

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



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.



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.

OCS allows to control each cabinet: You can change the preset, gain, mute and polarity, activate the SOLO mode and the weather compensation.



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

Based on polar response measurements, taken meticulously with a 360° vertically and horizontally.

Both coverage, the Rainbow software is reliable to calculate the SPL response including the interaction between them taking into account the magnitude and phase response, in order to enable the user to correct cancellations and even to create them if the acoustical design so requires.

This software is able to import WMF files



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) 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. They are very easy to install and can be done so either horizontally or vertically.

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 water-based paint. All protected by front steel grilles all backed with a special triple layer, acoustical textile which allows greater air flow and reduces heat and humidity.



IONIC 50

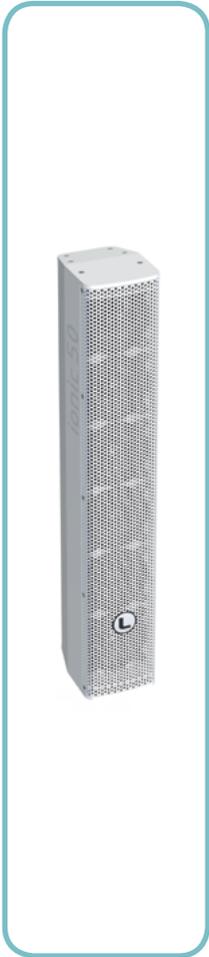
Ultra-compact, passive column speaker. Consists of 6 x 3" (0.75" voice coil) neodymium transducers. 15° + -5° vertical coverage. 119dB SPL

IONIC 100

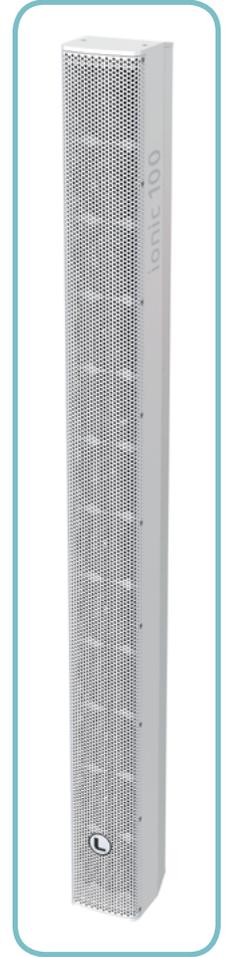
Ultra-compact, passive column speaker. Consists of 12 x 3" (0.75" voice coil) neodymium transducers. 15° + -5° vertical coverage. 121dB SPL



Specs



6 x 3" speaker with 0.75" voice coil	Components	12 x 3" speaker with 0.75" voice coil
150 Hz - 20 KHz (-10dB)	Frequency range	150 Hz - 20 KHz (-10dB)
180 Hz - 20 KHz (± 3dB)	Frequency Response	180 Hz - 18 KHz (± 3dB)
97 dB (1W@1m)	Sensitivity	96 dB (1W@1m)
119 dB - 125 dB peak	Max. SPL	121 dB - 127 dB peak
15° ± 5° V x 100° H	Coverage	15° ± 5° V x 100° H
150 W, 300 W program, 600 W peak	Rated power (AES)	300 W, 600 W program, 1200 W peak
32 Ohms	Nominal Impedance	8 Ohms
2 x Neutrik Speakon NL4MP	Connectors	2 x Neutrik Speakon NL4MP
Epoxy paint / bespoke pattern	Finish	Epoxy paint / bespoke pattern
1.5 mm stainless steel	Material	1.5 mm stainless steel
502 x 89 x 117 mm (H x W x D)	Dimensions	1000 x 89 x 117 mm (H x W x D)
7 Kg (15 lbs)	Weight	13 Kg (29 lbs)



Accessories



SV-I2S
Sub adaptor



WB-I
Wall bracket



SV-2I
Cab connection



SV-IONIC
Flying frame



IONIC 18S



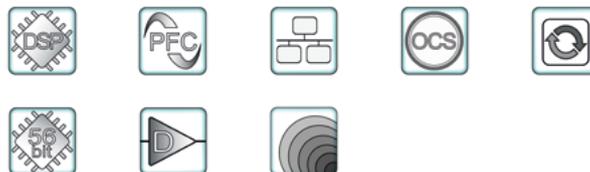
IONIC SERIES



Ultra-compact, self powered (class D switch mode power supply with PFC), omni-directional sub bass cabinet.

Consists of a 18" (3" voice coil) transducer. DSP controlled with 2800W amplification (1400W for the sub & 1400W to power either the IONIC-50 or IONIC-100).

132dB SPL



Specs

Components	18". 3" voice coil	Control	User control interface with LCD
Frequency Range	38 Hz - 250 Hz (-10dB)	Control Connections	Ethernet (OCS) optional / USB (DSP programming)
Frequency Response	42 Hz - 250 Hz (± 3dB)		
Max. SPL	132 dB	AC Power	85 – 270V. 50/60 Hz with PFC
Coverage Angle	Omnidirectional	AC Connections	16A Neutrik powerCon TRUE1 with looping output
Power	2400 W Class D with switching power supply & PFC	Finish	High resistant water-based paint
LF Amplifier	1 x 1400 W	Material	18mm Premium birch plywood
Speaker Output Amplifier	2 x 600W @ 4 Ohms	Dimensions	513 x 505 x 704 mm (H x W x D)
Processing	48 KHz / 56 bit double precision DSP .	Weight	37 Kg (81.5 lbs)

Accessories



SV-I2S
Sub adaptor



GR-18WKIT
Wheel kit



IONIC SERIES

IONIC 12S

Ultra-compact, self powered (class D switch mode power supply with PFC), omni-directional sub bass cabinet.

Consists of a 12" (3" voice coil) transducer. DSP controlled with 1400W amplification (700W for the sub & 700W to power either the IONIC-50 or IONIC-100).

127dB SPL



Specs

Components	12". 3" voice coil	Control	User control interface with LCD
Frequency Range	40 Hz - 250 Hz (-10dB)	Control Connections	Ethernet (OCS) optional / USB (DSP programming)
Frequency Response	46 Hz - 250 Hz (± 3dB)		
Max. SPL	127 dB	AC Power	85 – 270V. 50/60 Hz with PFC
Coverage Angle	Omnidirectional	AC Connections	16A Neutrik powerCon TRUE1 with looping output
Power	1400 W Class D with switching power supply & PFC	Finish	High resistant water-based paint
LF Amplifier	1 x 700W	Material	15mm Premium birch plywood
Speaker Output Amplifier	1 x 700W @ 8 Ohms	Dimensions	407 x 440 x 520 mm (H x W x D)
Processing	48 KHz / 56 bit double precision DSP .	Weight	23 Kg (50.6 lbs)

Accessories



SV-12S
Sub adaptor

You can find us in all these social media:



The technical specifications described in this catalogue can vary without previous notification.

If you want to receive the printed version of this catalogue just click here:
info@lynxproaudio.com

