LX 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 32 bit/96 KHz 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.

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.

LX Series

LX Series Line Arrays are designed to offer high levels of SPL and sound clarity with an unbeatable set-up time. Our transducers are custom made and all components are carefully selected to ensure maximum sound quality.

All the cabinets include class D amplification, 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. Furthermore a Digital Signal Processor is integrated in to each cabinet, optimizing all the system components and electronics. This DSP provides maximum system efficiency and total protection.

The old LX-V8 cabinet was the world's first line array to include a built-in inclinometer and this feature is now included on all LX series cabinets. The inclinometer is an automatic function to calculate cabinet splay angles. The inclinometer data can be viewed and controlled from the cabinet LCD display either manually or automatically. This system 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. Ethernet capabilities are also available allowing the user to monitor and control the cabinets online.

LX-V12

- Class D Powered (tri-amplified)
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- Digital inclinometer system
- FIR linear phase filtering
- Online monitoring available
- Three way active system

Extremely high power, Self-powered Class D with PFC (Power Factor Correction), three-way Line Array.

Dual LF 12" (4" interleaved sandwich voice coil) neodymium woofers with double demodulating rings, Four MF 6.5" transducers with glass fiber cones & ultra-light voice coil and two HF 1.4" neodymium magnet drivers with titanium diaphragm and individual high precision wave guide.

DSP (FIR technology) controlled with 4000W amplification, 143dB SPL, built-in inclinometer.

Applications: theatres, concert halls and auditoriums, sport stadiums, large discos and outdoor events.

Technical Data

	LX-V12
Components	LF: 2 x 12" neodymium Interleaved Sandwich Voice Coil.MF: 4 x 6.5" neodymium Glass fiber cones. HF: 2 x 1.4" neodymium drivers with titanium diaphragm and individual wave guides.
Frequency Range	45Hz – 20KHz (- 10dB)
Frequency Response	55Hz – 18KHz (± 3dB)
Max. SPL	140dB / 143 dB peak
Coverage Angle	100° H x V according to configuration
Power	4000 W Class D with switching power supply & PFC
LF Amplifier	2 x 1200 W
MF Amplifier	1 x 1000 W
HF Amplifier	1 x 600 W
Processing	56 bit Lynx dspb-24 with FIR filters
Control	Cabinet angle detection – temperature sensor – Fan speed – Online Control
Control Connections	Ethernet (OCS) optional / USB (DSP programming)
AC Power	85 – 270V. 50/60 Hz with PFC
AC Connections	32A Neutrik powerCON NAC3FC-HC
Finish	Polyurea coating high resistant paint
Material	15mm Premium birch plywood
Dimensions	378 x 1175 x 479 mm (H x W x D) without pins
Weight	74 Kg (163 lbs)

LX-318C

Technical Data

- Class D Powered (Tri-amplified)
- Integrated Digital Processing
- Internal temperature control
- Electronic protection
- High quality components
- Online control available

Extremelly high power, self-powered (Class D switch mode power supply) Cardioid sub-bass cabinet with three 18" (5" voice coil) low frequency neodymium transducers with Double Silicon Spider (DSS) technology and reinforced cones with carbon fiber.

DSP (FIR technology) controlled with 4200W amplification with PFC (Power Factor Correction), 141dB SPL.

Applications: theatres, concert halls and auditoriums, sport stadiums, large discos and outdoor events.

	LX-318C
Components	Front: 2 x 18" (5" voice coil) neodymium. DDS technology. Reinforced cone with carbon fiber. Rear: 1 x 18" (5" voice coil) neodymium. DDS technology. Reinforced cone with carbon fiber.
Frequency Range	Cardiod: 30Hz – 100Hz (- 10dB) Omni: 30Hz – 160Hz (- 10dB)
Frequency Response	Cardioid: 32Hz – 95Hz (± 3dB) Omni: 32Hz – 140Hz (± 3dB)
Max. SPL	138dB / 141 dB peak
Format	Cardioid or omnidirectional
Coverage Angle	Depending on selected DSP configuration
Power	4200 W Class D with switching power supply and PFC (Power Factor Correction)
Processing	56 bit Lynx dspb-22
Control	Temperature sensor – Fan speed
Control Connections	Ethernet (OCS) optional / USB (DSP programming)
AC Power	85V – 270V. 50/60 Hz with PFC
AC Connections	32A Neutrik powerCON NAC3FC-HC
Finish	Polyurea coating high resistant paint
Material	18mm Premium birch plywood
Dimensions	620 x 1205 x 970 mm (H x W x D)
Weight	112 Kg (245 lbs)

LX Series

Pablo Alborán in Montevideo, Uruguay

The famous Spanish singer performed at the Summer Theatre "Ramón Collazo" in Montevideo. Main stage contains 24 LX-V12 cabinets, with 12 on each side of the stage; 12 LX-318C making a physical bow and 3 LX-318C flown in the center.

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