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

CXA SERIES

The CXA is intended as a flexible solution for both fixed installations and touring where wide coverage is required from as few line array elements as possible.

Designed to be flown either horizontally or vertically, this line source system can be used as a single element or a combination of a maximum of 4 cabinets in array configuration delivering a 72º coverage in the vertical plane. Our HF Multidriver Waveguide system delivers 100H x 18V precise coverage for a multitude of installations. Thanks to its careful construction it can also be installed for symmetrical HF dispersion.

The CXA Array models are self-powered (Class D) with switching power supply and 1400W of amplification each. They are also controlled by the latest generation of Digital Signal Processing with a DSP integrated in to each cabinet, optimizing all the system components and electronics, providing maximum system efficiency and total protection.

CXA SERIES

CXA-12

High Output, self powered (class D switch mode power supply with PFC), constant curvature line array element.

Consists of a 12" (2.5" voice coil) transducer with special HF Multidriver Waveguide system delivering 100ºH x 18ºV precise coverage. DSP (FIR technology) controlled with 1400W amplification, 128dB SPL

Specs

Components	LF: 12", 2.5" voice coil, Malt Cross Cooling System	**Processing**	48 KHz / 56 bit double precision DSP with FIR filters
	HF: Multidriver system with wave guide, 1.4" aluminium voice coil with titanium diaphragm	**Control**	User control interface with LCD
Frequency Range	60 Hz - 20 KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	70 Hz - 18 KHz (± 3dB)	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	128 dB	**AC Connections**	16A Neutrik powerCON TRUE1 with looping output
Coverage	100º H x 18º V	**Finish**	High resistant water-based black paint
Power	1400 W Class D with switching power supply & PFC	**Material**	15mm Premium birch plywood
LF Amplifier	1 x 800 W	**Dimensions**	357 x 632 x 484 mm (H x W x D)
HF Amplifier	1 x 600 W	**Weight**	31 Kg (68 lbs)

Accessories


SV-CXA
Flying frame


BALL-PSR6
Ball pin


SB-02
Stand


TU-C01
Connecting pole


TU-C02
M20 pole


FD-1CXA12NL
Rain Cover


FC-3CXA12
Flight case

CXA-18S

CXA SERIES

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

Consists of a 18" (4" ventilated voice coil) neodymium transducer. DSP controlled with 1400W amplification, 132dB SPL.

Specs

Components	LF: 18", 4" voice coil, Neodymiun magnet assembly	**Control**	User control interface with LCD
Frequency Range	30 Hz - 140 Hz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	35 Hz - 125 Hz (± 3dB)	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	132 dB	**AC Connections**	16A Neutrik powerCon TRUE1 with looping output
Coverage	Omnidirectional	**Finish**	High resistant water-based black paint
Power	1400 W Class D with switching power supply & PFC	**Material**	18mm Premium birch plywood
LF Amplifier	1 x 1400 W	**Dimensions**	556 x 632 x 696 mm (H x W x D)
Processing	48 KHz / 56 bit double precision DSP	**Weight**	45 Kg (99 lbs)

Accessories

SV-CXA
Flying frame

BALL-PSR6
Ball pin

GR-18WKIT
Wheel kit

FD-1CXA18SNL
Rain Cover

FD-CXA18S
Nylon Protection

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 recieve the printed version of this catalogue just click here:
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