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

LX SERIES

Line Array topology is employed to create cylindrical radiation, increasing throw and achieving a precise control of both horizontal and vertical dispersion. The LX Series have been designed as versatile Line Arrays to be used in a variety of applications, from small theatres to large concerts.

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.

LX-V8 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 SERIES

LX-V12

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.

Specs

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.	**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
Frequency Range	45Hz – 20KHz (- 10dB)	**Control Connections**	Ethernet (OCS) optional / USB (DSP programming)
Frequency Response	55Hz – 18KHz (± 3dB)	**AC Power**	85 – 270V. 50/60 Hz with PFC
Max. SPL	140dB / 143 dB peak	**AC Connections**	32A Neutrik powerCON NAC3FC-HC
Coverage Angle	100° H x V according to configuration	**Finish**	High resistant water-based black paint
Power	4000 W Class D with switching power supply & PFC	**Material**	15mm Premium birch plywood
LF Amplifier	2 x 1200 W	**Dimensions**	378 x 1175 x 479 mm (H x W x D)
MF Amplifier	1 x 1000 W	**Weight**	74 Kg (163 lbs)

Accessories

BALL-PSR1020
Ball pin

CA-LXV12
Transport dolly

ST-LX318CV
Connection system

SC-LXV12/8
Connection system

SV-LXV12
Aluminium flying frame

FD-1LXV12NL
Rain cover

FD-4LXV12
Nylon cover

LX-V8

LX SERIES

Compact Self-powered (Class D switch mode power supply) V-Configuration front loaded, two-way Line Array, dual 8" neodymium transducers with nomex cones and two 1" neodymium magnet drivers with titanium diaphragm and individual wave guide,

DSP (FIR technology) controlled with 1500W amplification, 134dB SPL, built-in inclinometer.

Specs

Components	LF/MF 2 x 8" neodymium, custom Nomex cone. HF 2 x 1" Titanium diaphragm with individual wave guides	**HF Amplifier**	1 x 500 W
		Processing	56 bit Lynx dspb-22 with FIR filters
		Control	Cabinet angle detection – temperature sensor – Fan speed – Online Control
		Control connections	Ethernet (OCS) optional / USB (DSP programming)
Frequency Range	65Hz – 20KHz (- 10dB)	**AC Power**	230V / 115V selectable. 50/60 Hz 3A
Frequency Response	75Hz – 18KHz (± 3dB)	**AC Connections**	16A Neutrik powerCON with link output
Max. SPL	131dB / 134 dB peak	**Finish**	High resistant water-based black paint
Coverage Angle	90° H x V according to configuration	**Material**	15mm Premium birch plywood
Power	1500 W Class D with switching power supply	**Dimensions**	260 x 908 x 505 mm (H x W x D)
LF/MF Amplifier	2 x 500 W	**Weight**	43 Kg (94 lbs)

Accessories

BALL-PSR0820
Ball pin

SV-LXV8
Steel flying frame

SV-LXV8ALU
Alum. flying frame

CA-LXV8
Transport dolly

SC-LXV12/8
Flying adaptor

ST-LX318CV
Flying adaptor

ST-LX218SV
Stack adaptor

FD-1LXV8NL
Rain cover

FD-4LXV8/ FD-6LXV8
Nylon protection

LX SERIES

LX-F6 & LX-F6P

Ultra-compact Self-powered (Class D switch mode power supply) front loaded, three-way Line Array, dual 6" neodymium transducers with nomex cones and one 5"x1" AMT with kapton diaphragm.

DSP (FIR technology) controlled with 1500W amplification , 127dB SPL, built-in inclinometer. A passive version of this cabinet is also available for 'slave link'.

Active and passive versions.

Specs

Components	LF/MF Dual 6" custom Nomex cones + Neodymium magnets – HF one 5"x1" AMT (air motion transformer)	**HF Amplifier**	1 x 750 W (only LX-F6)
		Processing	56 bit Lynx dspb-22 with FIR filters (only LX-F6)
		Control	Cabinet angle detection – temperature sensor – Fan speed – Online Control (only LX-F6)
		Control Connections	Ethernet (OCS) optional / USB (DSP programming) (only LX-F6)
Frequency Range	75Hz – 20KHz (- 10dB)	**AC Power**	230V / 115V selectable. 50/60 Hz 5A (only LX-F6)
Frequency Response	90Hz – 18KHz (± 3dB)	**AC Connections**	16A Neutrik powerCON with link output (LX-F6)
Max. SPL	124 dB / 127 dB peak	**Finish**	High resistant water-based black paint
Coverage Angle	100º H x V according to configuration.	**Material**	Premium birch plywood
Power	1500 W Class D switching power supply (only LX-F6)	**Dimensions**	204 x 644 x 290 mm (H x W x D)
LF/MF Amplifier	1 x 750 W (only LX-F6)	**Weight**	23 Kg (50 lbs) / Passive 20Kg (44 lbs)

Accessories


FC-LX212/F6 / FC-LXF6
Flight case


FD-1LXF6NL
Rain cover


SP-TLF6
Adjustable support


SA-212
Under-sub


SA-F6
Negative ang


ST-212
Stack on sub


SS-LXF6
Ground stack


SV-LXF6
Flying frame


BALL-PSR0820R
Ball pin

LX-318C

LX SERIES

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.

Specs

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.	**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
Frequency Range	Cardiod: 30Hz – 100Hz (- 10dB) Omni: 30Hz – 160Hz (- 10dB)	**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
Frequency Response	Cardioid: 32Hz – 95Hz (± 3dB) Omni: 32Hz – 140Hz (± 3dB)	**Finish**	High resistant water-based black paint
		Material	18mm Premium birch plywood
Max. SPL	138dB / 141 dB peak	**Dimensions**	620 x 1205 x 970 mm (H x W x D)
Format	Cardioid or omnidirectional	**Weight**	112 Kg (245 lbs)

Accessories

BALL-PSR1020
Ball pin

CA-LX318C
Transport dolly

ST-LX318CV
Connection system

KV-318C
Adaptator kit

SV-LX318C
Flying frame

FD-1LX318CNL
Rain cover

FD-2LX318C / FD-3LX318C
Nylon protection

LX SERIES

LX-218S

High power, self-powered (Class D switch mode power supply) front loaded, sub-bass cabinet with two 18" (4" voice coil) low frequency neodymium transducers.

DSP controlled with 3600W amplification with PFC (Power Factor Correction), 139dB SPL.

Specs

Components	2 x 18" (4" voice coil) neodymium, custom Nomex cone	**Control**	Temperature sensor
Frequency Range	30Hz – 200Hz (- 10dB)	**Control Connections**	Ethernet (OCS) optional / USB (DSP programming)
Frequency Response	35Hz – 125Hz (± 3dB)	**AC Power**	85V - 270V 50/60 Hz with PFC
Max. SPL	136dB / 139 dB peak	**AC Connections**	16A Neutrik powerCON with link output
Format	Bass reflex, Direct radiation	**Finish**	High resistant water-based black paint
Coverage Angle	360º single unit	**Material**	18mm Premium birch plywood
Power	3600 W Class D with switching power supply and PFC (Power factor Correction)	**Dimensions**	532 x 1080 x 700 mm (H x W x D)
Processing	56 bit Lynx dspb-22	**Weight**	72 Kg (158 lbs)

Accessories

FD-2LX218S / FD-3LX218S
Nylon protection

FD-1LX218SNL
Rain cover

SV-LX218S
Flying frame

KV-218S
Adaptator kit

ST-LX218SV
Connection system

CA-LX218S
Transport dolly

BALL-PSR0820
Ball pin

LX-212S

LX SERIES

High power, self powered (Class D switch mode power supply) sub-bass cabinet with two 12" (4" ISV voice coil) low frequency transducers with double spider for improved control & linearity, direct radiation configuration.

DSP controlled with 2000W amplification, 136dB SPL.

Specs

Components	2 x 12" (4" voice coil), DUO	**Control**	Temperature sensor – Fan speed
Frequency Range	25Hz – 300Hz	**Control Connections**	Ethernet (OCS) optional / USB (DSP Programming)
Frequency Response	35Hz – 250Hz ± 3dB	**AC Power**	230V / 115V selectable. 50/60 Hz 3A
Max. SPL	133dB / 136 dB peak	**AC Connections**	16A Neutrik powerCON with link output
Format	Bass reflex, direct radiation	**Finish**	High resistant water-based black paint
Coverage Angle	360º single unit	**Material**	18mm Premium birch plywood
Power	2000 W Class D with switching power supply	**Dimensions**	522 x 646 x 525 mm (H x W x D)
Processing	56 bit Lynx dspb-22	**Weight**	58 Kg (128 lbs)

Accessories

BALL-PSR0820
Ball pin

SV-LX212S
Flying frame

FD-1LX212SNL
Rain cover

FC-LX212/F6
Flight case

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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