LYNX pro-audio

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 360º 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

GXR SERIES

Both compact and powerful, the GXR Series is our latest solution for portable, light weight, powered speakers. Designed as a more economical solution to the ADP Series, the GXR series retains all the features and delivers all the power of a truly first class touring series.

The series incorporates a new compact line array, the top enclosure GXR-LA10A offering 2 x 10" and two options for the LF. Furthermore the series offer three full range (two-way) models including 12", 15", dual 15" and one 18" subwoofer. All models are self-powered (Class D) with switching power supply and 1400W of amplification each. The integrated amplification far exceeds the transducers' needs thus resulting in high output, high damping factor and extremely low levels of distortion. The high efficiency modules also include PFC, guaranteeing reliability and consistency in all operating conditions and low power consumption (less than 0.55W in standby).

All GXR Series cabinets are controlled by the latest generation of Digital Signal Processing with a DSP integrated in to each cabinet. This DSP, with 56bit internal processing and double dynamics optimizes all the system components and electronics, providing maximum system efficiency and total protection whilst significantly and noticeably lowering distortion. They also utilize linear phase FIR filters.

All the cabinets are finished in rugged, premium birch plywood, coated with water-based black paint and protected by front steel grilles all backed with a special dark grey triple layer, acoustical textile which allows greater air flow and reduces heat and humidity.

GXR SERIES

GXR-LA10A

High output line array, self powered (class D switch mode power supply with PFC) Bi-amp, two-way.

Consists of dual 10" transducers (2" voice coil) with a 1.4" compression driver (3" voice coil and titanium diaphragm) coupled to a waveguide (100ºH x 10ºV).DSP (FIR filters) controlled with 1400W amplification, 135 dB SPL

Specs

Components	LF: 10", 2" voice coil, Malt Cross Cooling System	**Processing**	96 KHz / 56 bit double precision DSP with FIR filters
	HF: 1.4" Exit throat, 3" voice coil with titanium diaphragm	**Control**	User control interface with LCD
Frequency Range	60Hz - 20 KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	75Hz - 18 KHz (± 3dB)	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	135dB	**AC Connections**	16A Neutrik powerCon TRUE1 with looping output
Coverage Angle	100º H x 10º 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**	299 x 790 x 436 mm
HF Amplifier	1 x 800 W	**Weight**	31 Kg (68.2 lbs)

Accessories

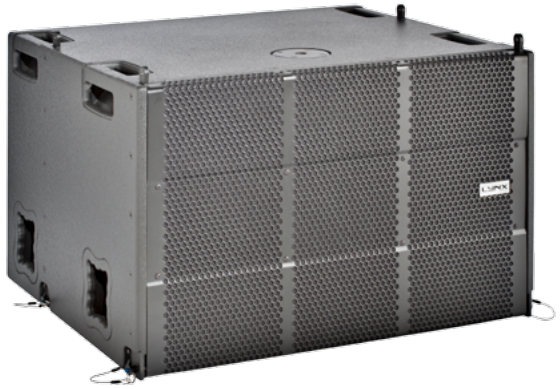

FC-GXRLA10A
Flight case


FD-1GXRLA10ANL
Rain cover


BALL-PSR6
Ball pin


SV-GXRLA10A
Flying frame

GXR-D15A



High output subwoofer, self powered (class D switch mode power supply with PFC) Bi-amp.

Consists of dual 15" neodymium low frequencies transducers (4" voice coil), direct radiation configuration.DSP controlled with 2400W amplification, 134 dB SPL

Specs

Components	LF: 2 x 15" (4" voice coil), neodymium magnetic assembly	**Processing**	96 KHz / 56 bit double precision DSP
		Control	User control interface with LCD
Frequency Range	30Hz - 140KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	35 Hz – 125 Hz (± 3dB) processed	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	134 dB	**AC Connections**	16A Neutrik powerCon TRUE1 with looping output
Coverage Angle	Omnidirectional	**Finish**	High resistant water-based black paint
Power	2400 W Class D with switching power supply & PFC	**Material**	18mm Premium birch plywood
LF Amplifier	2 x 1200 W	**Dimensions**	505 x 790 x 690 mm
		Weight	63 Kg (139 lbs)

Accessories

FD-1GXRD15A
Rain cover

BALL-PSR6
Ball pin

SV-GXRLA10A
Flying frame

GXR SERIES

GXR-D18A

High output subwoofer, self powered (class D switch mode power supply with PFC) Bi-amp.

Consists of dual 18" neodymium low frequencies transducers (4" voice coil), direct radiation configuration.DSP controlled with 2400W amplification, 134 dB SPL

Specs

Components	LF: 2 x 18" (4" voice coil), neodymium magnetic assembly	**Processing**	96 KHz / 56 bit double precision DSP
		Control	User control interface with LCD
Frequency Range	30 Hz – 120 Hz (-10dB) processed	**Control Connections**	USB (DSP programming)
Frequency Response	35 Hz – 100 Hz (± 3dB) processed	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	134 dB	**AC Connections**	16 A Neutrik powerCON TRUE1 with looping output
Coverage Angle	Omnidirectional.	**Finish**	High resistant water-based black paint
Power	2400 W Class D with switching power supply & PFC	**Material**	18mm Premium birch plywood
LF Amplifier	2 x 1200 W	**Dimensions**	600 x 1100 x 750 mm
		Weight	92 Kg (202 lbs)

Accessories

FD-1GXRD18A
Rain cover

GXR-15

High Output, self powered (class D switch mode power supply with PFC), two-way cabinet.

Consists of a 15" (2.5" voice coil) transducer with a 1" compression driver with a polyimide diaphragm mounted on a 90ºH x 40ºV precise directivity horn. DSP (FIR Filters) controlled with 1400W amplification, 128dB SPL

Specs

Components	LF: 15" 2,5" voice coil, Malt Cross Cooling System	**Processing**	48 KHz / 56 bit double precision DSP with FIR filters
	HF: 1" Exit compression Driver , 1,7" aluminium voice coil	**Control**	User control interface with LCD
Frequency Range	60Hz - 20KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	66Hz - 18KHz (± 3dB)	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	128 dB	**AC Connections**	16 A Neutrik powerCON TRUE1 with looping output
Coverage Angle	90º x 40º constant directivity horn. Rotatable.	**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**	730 x 444 x 433 mm (H x W x D)
HF Amplifier	1 x 600 W	**Weight**	28.5 Kg (62.8 lbs)

Accessories


AGR-10
Eye bolt


WB-03
Wall bracket


TU-C01
Connecting pole


TU-C02
M20 pole


SB-02
Stand


FD-GXR15
Nylon protection


FC-GXR15X2
Flight case

GXR SERIES

GXR-12

High Output, self powered (class D switch mode power supply with PFC), two-way cabinet.

Consists of a 12" (2.5" voice coil) transducer with a 1" compression driver with a polyimide diaphragm mounted on a 90ºH x 40ºV precise directivity horn. DSP (FIR Filters) controlled with 1400W amplification, 127dB SPL

Specs

Components	LF: 12". 2,5" voice coil, Malt Cross Cooling System	**Processing**	96 KHz / 64 bit double precision DSP with FIR filters
	HF: 1" Exit compression Driver , 1,75" aluminium voice coil	**Control**	User control interface with LCD
Frequency Range	60Hz - 20KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	66Hz-18KHz (± 3dB)	**AC Power**	90 – 264V. 50/60 Hz with PFC
Max. SPL	127 dB	**AC Connections**	16 A Neutrik powerCON TRUE1 with looping output
Coverage Angle	90º x 40º constant directivity horn. Rotatable.	**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**	639 x 370 x 386 mm (H x W x D)
HF Amplifier	1 x 600 W	**Weight**	23.5 Kg (51.7 lbs)

Accessories


FC-GXR12X2
Flight case


FD-GXR12
Nylon protection


SB-02
Stand


TU-C02
M20 pole


TU-C01
connecting pole


WB-03
Wall bracket


AGR-10
Eye bolt

GXR-18S

High output, self powered (class D switch mode power supply with PFC), direct radiation sub bass cabinet.

Consists of a 18" (3" voice coil) transducer with triple roll surround. DSP controlled with 1400W amplification, 132dB SPL.

Specs

Components	LF: 1 x 18". 3" voice coil,	**Control**	User control interface with LCD
Frequency Range	38Hz - 140Hz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	44Hz - 125Hz (± 3dB)	**AC Power**	85 – 270V. 50/60 Hz with PFC
Max. SPL	132 dB	**AC Connections**	16 A Neutrik powerCON TRUE1 with looping output
Coverage Angle	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**	505 x 505 x 700.5 mm (H x W x D)
Processing	48 KHz / 56 bit double precision DSP	**Weight**	41 Kg (90 lbs)

Accessories

GR-18WKIT
Wheel kit

FD-GXR18S
Nylon protection

GXR SERIES

High Output, self powered (class D switch mode power supply with PFC), two-way cabinet.

Consists of dual 15" (2.5" voice coil) transducers with a 1.4" compression driver with a PM4 polymer diaphragm mounted on a 60ºH x 50ºV constant directivity horn. DSP (FIR Filters) controlled with 1400W amplification, 131dB SPL

GXR-215

Specs

Components	LF: 2 x 15" 2,5" voice coil, Malt Cross Cooling System	**Processing**	48 KHz / 56 bit double precision DSP with FIR filters
	HF: 1'4" Exit compression Driver , 1,75" aluminium voice coil	**Control**	User control interface with LCD
Frequency Range	55Hz - 20 KHz (-10dB)	**Control Connections**	USB (DSP programming)
Frequency Response	60Hz - 18 KHz (± 3dB)	**AC Power**	85 – 270V. 50/60 Hz with PFC
Max. SPL	131dB	**AC Connections**	16 A Neutrik powerCON TRUE1 with looping output
Coverage Angle	60º H x 50º V constant directivity horn.	**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**	1140 x 444 x 486 mm (H x W x D)
HF Amplifier	1 x 350 W @ 8 ohm	**Weight**	45 Kg (99 lbs)

Accessories

FD-GXR215
Nylon protection

AGR-10
Eye bolt

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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