



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



# DS SERIES

The DS series offer a full range horn loaded cabinet and a extremely high power sub-bass enclosure, both specifically designed for club and discotheque installs.

Manufactured as standard with premium birch plywood and finished with high-resistant water based black paint it can also be manufactured in any colour or finish to compliment any install design.

The DS cabinets are designed to not only be pleasing to the eye but also to the ear.



## DS SERIES

High Output, hornloaded, two-way cabinet. Consists of a 12" (64mm aluminium voice coil) transducer and a 1.4" neodymium compression driver with titanium diaphragm mounted on a special GFK/Sandwich 60° x 40° horn.

Bi-amplified delivering AES 60W (HF) and AES 500W (LF/MF), 133dB SPL.



### Specs

<b>Components</b>	LF/MF 1×12" + 1.4" titanium diaphragm HF driver	<b>Crossover</b>	1450 Hz
		<b>Nominal Impedance</b>	Low/Mid: 8 Ohm High: 8 Ohm
<b>Frequency range</b>	130 Hz – 20 KHz	<b>Shape</b>	Trapezoidal
<b>Frequency Response</b>	150 Hz – 18 KHz (± 3 dB)	<b>Connectors</b>	2 x Neurtik Speakon NL4MP
<b>Max. SPL</b>	130 dB / 133 dB peak	<b>Construction</b>	15mm Premium birch plywood
<b>Coverage angle</b>	60° H x 40° V	<b>Finish</b>	Different colours and finishing options
<b>Rated Power</b>	Low/Mid: 500W High: 60W	<b>Dimensions</b>	649 x 499 x 482 mm (H x W x D)
<b>Program Power</b>	Low/Mid: 1000W High: 120W	<b>Weight</b>	32 kg (70 lbs)



# DS-18S



## DS SERIES

High output, direct radiation sub bass cabinet.

Consists of one 18" (4" DUO voice coil) low frequency transducer with aluminium demodulating ring. 136dB SPL, (2800W program).



### Specs

<b>Components</b>	LF 1x18"	<b>Coverage</b>	360° single unit
<b>Frequency range</b>	30 Hz – 250 Hz	<b>Nominal Impedance</b>	8 Ohms
<b>Frequency Response</b>	35 Hz – 200 Hz (± 3 dB)	<b>Construction</b>	18 mm Premium Birch plywood
<b>Max. SPL</b>	133 dB / 136 dB peak	<b>Finish</b>	Different colours and finishing options
<b>Rated Power RMS</b>	1400 W	<b>Dimensions</b>	639 x 585 x 733 mm (H x W x D)
<b>Program Power</b>	2800 W	<b>Weight</b>	42 kg (92 lbs)



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

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