



PRODUCT CATALOGUE

Latest edition

Proudly designed, engineered and
manufactured in SPAIN



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.



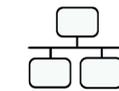
This enables the use of high precision filters with extremely low distortion delivering unbeatable sound clarity and quality.



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.



ARK processors

Digital processors designed, assembled and manufactured by Lynx Pro Audio to be easily configured providing optimum sound and results in both fixed installation and touring.

Digital processors offering 7 different models with 2 or 4 inputs each and with up to 8 outputs (analogue or digital and Ethersound optional).



ARK-20 model



ARK-70 model



ARK7024



ARK7044



ARK7026



ARK7048

- Double Dynamics (RMS and Peak) are standard in all ARK-70 models. These double dynamics lower levels of distortion and provide protection for all the speaker components and internal electronics.

- All ARK units deliver a wide dynamic range of 120dB, high performance Cirrus Logic AD & DA 24-bit converters running at 96kHz. The internal 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.

- Each input has up to 29 filters of Parametric EQ which can be switched to Graphic EQ. Each output also has Parametric EQ which can be chosen between adaptable or constant Q, All Pass, Band Pass, Notch, HP Q, LP Q or High and low Shelves providing flexibility.

Moreover, crossover filters with high and low cuts of Linkwitz Riley, Bessel, Butterworth upto 48 dB/oct slopes in 6 dB steps are available. A 6 dB/octave slope, for instance, corresponding to a first order filter, allows for frequency shading.

- With 0.6ms fixed latency the ARK-70 is one of the lowest latency processors available.

- ARK software has been designed for fast user access to make each processing zone simpler for the user. The Compare function option enables the user to listen to the difference between 2 complete set ups in real time with no fade-ins or fade-outs.

As well as being able to import measurement curves from the principal systems (SMAART LIVE, CLIO, SAT Live etc), they can also be seen directly in the final frequency response window showing the effects of the process applied. All ARK processors can be configured and monitored in real time by USB or Ethernet.

- The ARK-70 offer atmospheric compensation – essential when working outdoors where temperature and humidity varies considerably between night and day causing noticeable loss in high frequency, especially at long distances. Each output can be configured separately depending on the throw required from each cabinet.

- Other features include advanced security features, polarity, gain and delay on ins and outs, routing of any input to any output and a signal generator with sine and noise (pink or white).

Input	2 or 4 Impedance: 20 K Ohm Balanced (10 K Ohm unbalanced). Connector: Balanced XLR (pin 2 +). AD converter: 24 bit-192KHz, 512x Oversampling. Dynamic Range: 120 dB. Max. level: +19 dBu (balanced). Digital AES/EBU: Optional.	General	Power supply 85-240 V ~ 40-400 Hz. IEC connector. (Switching power supply, wide range). Consumption 30 W. Operating temperature: -5° to 60° C (23° to 140° F). Storage temperature: -60° to 75° C (-76° to 167° F). Humidity: Max. 90% non-condensing. Dimensions 482 x 45 x 226 mm. Weight 3 Kg Warranty 3 years
Outputs	4, 6 or 8 Impedance: 50 Ohm Balanced (25 Ohm unbalanced). Connector: Balanced XLR (pin 2 +). DA converter: 24 bit-192KHz, 512x Oversampling. Dynamic Range: 120 dB. Max. level: +18 dBu (balanced). Digital AES/EBU: Optional.	Front Panel	Display: LCD with 24 x 2 characters. Encoders: 3. Buttons: Navigator with 5 backlight buttons. 12 buttons for Edition and Mute with light indications. Level Meter: 7 leds per input/output, -40db, -6db, 0db, +6db, +12db, Limit, Over Limit.
Ethersound	Optional	Latency	0.6 ms
Audio	Frequency Range 10 Hz – 24 KHz. THD (%) <0,0018%. DSP Process Internal resolution with 56 bit double precision in floating point. Converters 24 bit resolution. Propagation Delay: 0.6 milliseconds.	Level control	Gain +6dBu to -40 dBu per input / output. Mute per input / output.Phase inversion per input / output. Possibility to Link Controls.
Equalisation	Input GEQ / PEQ: 29 GEQ Bands or 29 parametric filters per input. PEQ Output: PEQ Type filters Parametric, Shelving High, Shelving Low, Low-Pass, High-Pass, Low-Pass Q variable, High-Pass Q variable, BandPass, Reject Band, AllPass order 1, AllPass order 2. Possibility to Link filters between Input and Outputs.	Security options	Password global. Level 0: No restrictions. Level 1: Only allows preset to changes. Level 2: Only allows mute modification. Level 3: Only allows preset to changes and mute modification. Level 4: Blocks all the front panel controls. Restricted Zones: For each Preset it is possible to disable the access to any processor function (EQ, crossover, Limiter, etc) writing a reset password.
Crossover	Linkwitz Riley with 12, 24, 48 dB/oct. Butterworth and Bessel with 6, 12, 18, 24, 30, 36, 42 and 48 dB/oct.	Communication	USB. Ethernet.
Delay	Input: 190 milisec. (channels A & B) / 54 milisec. (C & D) Output: 20.8 milisec for Speaker alignment. Possibility to Link Delays.	Noise Gate	1 per Output. Noise Threshold: -79dBu to -37dBu.
RMS Limiter-Compressor	1 per output. Threshold: +18dBu to -50dBu. Compression Ratio: 1:1 to 1:10 (1:infinite with limiter). Power indication: Shows the maximum power applied to the speaker for the selected threshold.	Peak Limiter	1 per output. Threshold: +18dBu to -50dBu. Peak Indication: Shows the maximum peak Voltage applied to the speaker for the selected threshold.
Signal Generator	Level 0dBu to -40dBu. Type: sine tone from 10Hz to 22KHz, Pink noise, White noise.	Other functions	Atmospheric compensation by Air absorption. Process Integration with RAINBOW – The acoustical prediction software. Speaker data import from main audio measurement systems. Export & Import EQ files. Etc.



ARK2048



ARK2024



ARK2026

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Audio	Frequency Range 10 Hz – 24 KHz. THD (%) <0,0018%. DSP Process Internal resolution with 56 bit double precision in floating point. Converters 24 bit resolution. Propagation Delay: 0.6 milliseconds	Level control	Gain +6dBu to -40 dBu per input / output. Mute per input / output. Phase inversion per input / output. Possibility to Link Controls.
Equalisation	Input GEQ, 29Bands 1/3 oct. PEQ output 9 per way. PEQ Type filters Parametric, Shelving High, Shelving Low, Low-Pass, High-Pass, Low-Pass Q variable, High-Pass Q variable, BandPass, Reject Band, AllPass order 1, AllPass order 2. Possibility to Link filters between Input and Outputs.	Security options	Password global. Level 0: No restrictions. Level 1: Only allows preset to changes. Level 2: Only allows mute modification. Level 3: Only allows preset to changes and mute modification. Level 4: Blocks all the front panel controls. Restricted Zones: For each Preset it is possible to disable the access to any processor function (EQ, crossover, Limiter, etc) writing a preset password.
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