PRODUCT PROCESSORS

Latest edition

Proudly designed, engineered and
manufactured in SPAIN

LYNX pro-audio

CULTURE OF SOUND

Processors

ARK processors

The ARK-70 and ARK-20 are a series of digital processors designed, assembled and manufactured by Lynx Pro Audio offering 7 different models with 2 or 4 inputs each and with up to 8 outputs (analogue or digital and Ethersound optional).

LUKA processors

LUKA series is the new series of digital signal processors from Lynx Pro Audio. The series are conformed by the LUKA-224, LUKA-226 and LUKA-228, offering 3 different models with an AES3 input and 2 or 4 analog inputs each and with up to 8 outputs.

ARK-70

ARK7024

ARK7044

ARK7026

ARK7048

Features

· 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 24bit 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 Shelvs 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).

ARK-70

Technical Data

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 miliseconds.	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 Otuput: PEQ Type filtersParametric, 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.

ARK-20

ARK2048

ARK2024

ARK2026

Features

· 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 24bit 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 Shelvs 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).	General	Power supply 85-240 V ~ 40-400 Hz. IEC connector. (Switching power supply, wide range). Consumption 25 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).	Front Panel	Display: LCD with 24 x 2 characters. Encoders: 1 with push button. Level Meter: Signal and Clip leds per input Signal and Limiting leds per output
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 miliseconds	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 filtersParametric, 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.
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 (optional)
Delay	Input 54 milisec. (channels A & B) 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.	Signal Generator	Level 0dBu to –40dBu. Type: sine tone from 10Hz to 22KHz, Pink noise, White noise
Other functions	Process Integration with RAINBOW – The acoustical prediction software. Speaker data import from main audio measurement systems. Export & Import EQ files. Etc.		

LUKA processors

LUKA series is the new series of digital signal processors from Lynx Pro Audio. The series are conformed by the LUKA-224, LUKA-226 and LUKA-248.

The LUKA series are the latest in the series of digital processors designed, assembled and manufactured by Lynx Pro Audio offering 3 different models with an AES3 input and 2 or 4 analog inputs each and with up to 8 outputs.

General	
Power supply	85-240 V ~ 40-400 Hz. IEC connector. (Switching power supply, wide range)
Consumption	20 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	483 x 45 x 200 mm
Weight	3 Kg
Communication	UBS and Ethernet
Input	2 or 4 analogic + digital AES3 2 channel
Impedance	10 K Ohm Balanced (5 K Ohm unbalanced)
Connector	Balanced XLR (pin 2 +)
AD converter	32 bit-768KHz Sigma-Delta, 512x Oversampling
Dynamic Range	121 dB
Max. level	+24 dBu
Digital AES3	2 channel up to 24 bits 192 KHz
Audio	Frequency range
Frequency range	10 Hz - 24 KHz
DSP process	Internal resolution with 64 bit double precision (48 KHz)
Converters	32 bit resolution
Propagation Delay	1.17 miliseconds
Input Matrix	Input Routing matrix Analog/AES3 Configurable backup inputs
Crossover [1]	Linkwitz Riley with 12, 24, 48 dB/oct. Butterworth and Bessel with 6, 12, 18, 24, 30, 36, 42 and 48 dB/oct.
RMS Limiter- Compressor	1 per output.
Thershold	In Watts
Compression Ratio	1:1 to 1:10 (1: infinite with limiter).
Power indication	Power indication: shows the maximum power applied to the speaker.
Peak Limiter	1 per output
Threshold	In Volts
Peak Indication	Shows the maximum peak Voltage applied to the speaker for the selected threshold.

Front Panel	
Display	IPS 320 x 170 mm colour + joystick encoder + up to 12 buttons for Edition and Mute, with light indications.
Level meter	Input: LED signal + Over Limit. Output: LED signal + Compression.
Latency	1.17 ms
Output	4 / 6 / 8
Impedance	200 K Ohm Balanced (100 K Ohm unbalanced)
Connector	Balanced XLR (pin 2 +)
DA converter	32 bit-768KHz
Dynamic Range	120 dB
Max. level	+24 dBu (balanced)
Equalisation	
User EQ:	High-Pass[1] + 10 Parametric[2]
Mode EQ:	High-Pass / Low-Pass[1] + 10 Parametric[2]
Out EQ:	High-Pass / Low-Pass[1] + 12 Parametric[2] + FIR custom (vary Magnitude and Phase). Taps File (import external FIR) up to 1000 taps.
PEQ Type filters [2]	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.
Delay	Input / output: up to 206 ms (70 m)
Other functions	Presets memories library: User (up to 999), Snapshot (up to 999) and Speaker (up to 999). Control by OCS software: - Copy / paste function. - Speaker data import from main audio measurement systems. - Export & Import EQ files, etc. - Control groups - Smaart Link

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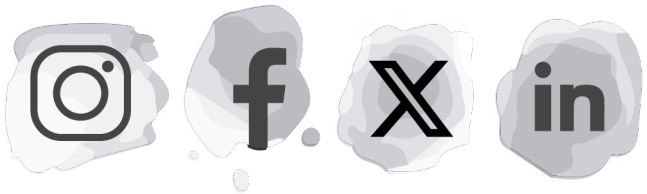

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