

## LINUS-Series



Having total control of your art - LINUS systems by Coda Audio  
More power, more control, more communication, more efficiency

The creation of Coda Audio's own Power/DSP platform, encompassing a range of two and four channel DSP/amplifiers, with audio networking, graphical user interface all designed to be the future proof control/power platform for all Coda Audio speaker systems.

The first product in the range is the LINUS10 a dual channel DSP, Network, Comparator and Amplifier delivering 10000 W of clean power in a light weight 19"/2U package. The exceptional power of the LINUS10 ensures maximum headroom and optimal system performance for all Coda Audio touring systems. This engine technology, already tried and tested, is now combined with; LINUS CORE – the dual SHARC floating point DSP processors, ensuring vast processing power which enables the integration of sophisticated audio algorithms for the most exacting results. The advanced signal processing includes IIR and phase linear FIR filters for perfect linearity and superior sound performance as well as look-ahead and frequency dependent limiters for increased system headroom.

LiNET transmits the digital audio signal over a standard CAT5 cable. Up to 8 digital audio signals can be sent to each amplifier via LiNET, buffered and sent to the next unit via the LiNET link out for daisy chaining. The signal routing inside the LINUS10 can be controlled remotely or via the unit's front panel controls.

LINUS LIVE is an Ethernet based, graphical user interface, allowing for fast and flexible system configuration, tuning and control, intuitive and straight forward in design, fast and practical in use.

LINUS CORE/LiNET/LINUS LIVE a far reaching and powerful set of technologies applied to each LINUS device, allowing complete system integration, configuration and ultimate control. Completing the LINUS10's technology count is the COMPARATOR - the LINUS10 provides integrated feedback loop control for sensor controlled subwoofers. The Comparator's electronic circuit loop measures the voice coil movement and adjusts the amplifier driving voltage and/or current to correct any driver inaccuracy. The key advantage is a very extended and controlled response. Any distortion produced by the driver or the enclosure is instantly corrected by the feedback.

LINUS CON is a 4 input / 6 output speaker management system featuring IIR and FIR filtering, delivering all the LINUS technologies in a standalone controller which provides ultimate system design configuration flexibility for applications where outboard controller options are preferred. It also allows for LINUS DSP upgrades for existing systems. Complete with LINUS CORE/LiNET/LINUS LIVE technology, LINUS CON joins LINUS10 as the first products in the LINUS family to be introduced from a range that will see additional multi-channel amplifiers/DSP products released during the course 2014.

## LINUS RACK20



### LINUS RACK20

- LINUS RACK 20
- 2x LINUS10 amplifiers
- 7U Touring Case
- PAN4 Connector panel 1U
- PD32 Power distribution
- Internal cables
- Cover

#### Application:

LINUS RACK20 is optimized to power Compact Coda Line Array Line Array Systems, Sensor controlled Subwoofers and as an addition to Large AIRLINE LA12 Line Array Systems.

Coda Audio's LINUS Tour racks, LINUS RACK20 and LINUS RACK40, provide complete housing and system connection solutions for ease of use and rugged protection for all Coda Audio Line Array and SC systems.

With an internal shock-mount steel suspension system providing maximum protection to the LINUS amplifiers, the rack design also features a rack to rack connection system allowing for flown or ground stacked positioning and the connection point for the transport system.

The racks also provide an advanced front facing cable connection patch panel and rear mounted AC mains distribution system designed to facilitate quick and accurate set-up.

In addition, the LINUS DSP platform provides factory pre-sets for all Coda Audio Product, therefore along with providing FOH system control these racks can be used for application such as; monitor system, delay systems, zoned systems, in fact wherever you need power & processing for your Coda system. The LINUS touring rack has an advanced set of technical and physical solutions that will deliver across all application areas. Smart in design highly durable in construction and constant in delivering highest

## LINUS RACK40



### LINUS RACK40

- 4x LINUS10 amplifiers
- 11U Touring Case
- PAN8 Connector panel 2U
- PD32-6 Power distribution
- Internal cables
- Cover

#### Application:

LINUS RACK40 is optimized to power the Coda Audio large touring products including: Large AIRLINE Line Array Systems, Sensor Controlled Subwoofers, Compact Line Array Systems (bi-amp) in larger configurations.

possible results the rack design completes the Coda Audio systemisation concept for touring/temporary applications. For fixed Installations the LINUS RACK20i and LINUS RACK40i provide a none shock-mount / AC distribution version. Both maintain the same LINUS amplification and patch panel systems and this allows continuity for venues which may need to increase installed systems size/location on temporary basis with ease from local hire networks. "LINUS Technology" delivers in all areas to all audio professionals.

TECHNICAL SPECIFICATIONS	LINUS RACK20	LINUS RACK40
Size:	19"/7U	19"/11U
Number of amplifiers:	2	4
Shock mounts:	yes	yes
Doors:	sliding doors	sliding doors
Castors:	optional dolly DOT-RC	optional dolly DOT-RC
Power distribution:	PD32, 3x 32A	PD32-6
Connector panel:	PAN4	PAN8
Soft cover:	yes	yes
Weight:	64 kg	98 kg

## LINUS10



- Integrated DSP, Network, Comparator and Amplifier solution
- 2 x 4955W @ 4 Ohms
- High output voltage (200V peak) provides plenty of headroom
- True Class H design for superior sound performance
- SMPS with automatic selection for 115 V or 230 V
- SHARC floating point DSP @ 96 kHz
- 2 balanced analogue inputs
- AVB compatible

**Description:**

The LINUS10 is a dual channel DSP, Network, Comparator and Amplifier delivering 10000 W of clean power in a light weight 19"/2U package. The exceptional power of the LINUS 10 ensures maximum headroom and optimal system performance for all Coda Audio touring systems.

## LINUS10

## 2-channel DSP amplifier

- LiNET – 8x freely configurable digital audio signals over a CAT5 cable
- 2 dynamic comparators for use with Coda Audio sensor controlled subwoofers
- Advanced IIR and linear phase FIR filters
- LINUS LIVE - Network Control and Monitoring of amplifiers over Ethernet
- Factory presets for all Coda Audio loudspeaker systems
- 6 year warranty

LINUS10 ENGINE - the hybrid class H output stage topology delivers audiophile sonic accuracy with enormous headroom providing significant improvement of the system performance in dynamic and transparency.

APPLICATIONS – containing factory presets for all Coda Audio loudspeaker systems LINUS10 is ideally suited to touring and installation applications.

## TECHNICAL SPECIFICATIONS LINUS10

## GENERAL

Channels	2 inputs (Analogue, LiNET) routable to any of the 2 outputs
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## AUDIO

Input impedance	12k balanced
Max Input level	+21dBu
Output noise (analogue input)*	< -107 dB (unweighted) / -110dB (A-weighted)
Output noise (digital input)*	< -116 dB (unweighted) / -119dB (A-weighted)
Frequency response	
(20 Hz - 20 kHz)	+/-0.1 dB at 4 Ohms
THD+N (20 Hz - 20 kHz)	< 0.01%, 8 Ohms P/2
SMPTE (20 Hz - 20 kHz)	< 0.01%, 8 Ohms P/2
Damping Factor	> 400

## DSP

Inputs	2x
Outputs	2x
Processor:	Analog Devices SHARC DSP
Sampling rate	96 kHz / 32 bit floating point
Presets	190 Factory and 10 User presets

## COMPARATOR

Comparator channels	2x
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## AMPLIFIERS

Number of channels	2x
8 Ω*	2x 2300 W
4 Ω*	2x 4000 W
2 Ω*	2x 5100 W
Peak***	2x 5300 W
Output Circuitry	Class H
Output Voltage	200V/pk

\* All channels driven, 1 kHz, >1% THD @VAC

## TECHNICAL SPECIFICATIONS LINUS10

## FRONT PANEL

Power on/off switch	yes
Display	yes
Mute buttons	each channel
Menu buttons	provide front panel control
Signal, Limit, Protect LEDs	each channel
Comparator LEDs	2 x disconnected sensor (red)
Input signal detection LEDs	Analogue, LiNET
Ethernet LED	yes
Standby LED	yes

## REAR PANEL

Balanced analogue inputs	2 x XLR / F
Link analogue signal	2 x XLR / M
LiNET input	RJ45
LiNET daisy-chain link	RJ45
LINUS LIVE (User interface)	RJ45 (Ethernet)
LINUS LIVE daisy-chain link	RJ45 (Ethernet)
AUX	RJ45
Sensor inputs	XLR/F - 5PoI
Amplifier outputs	2 x NL4
Mains	Neutrik PowerCon 32A

## MAINS POWER

Dual-voltage SMPS with automatic voltage selection	
230V: 180 - 267V (47-63 Hz)	
120V: 70 - 134V (47-63 Hz)	

Net Weight	14 kg
Shipping weight	15.6 kg
Dimensions (WxHxD)	483 x 88.9 x 453 mm (19" x 3.5" x 17.8")
Shipping Dim. (WxHxD)	540 x 135 x 615 mm (0.045 m³), (21.3" x 5.3" x 24.2")

\*\* Peak Power at 4 Ohm, component tolerance dependent (+/- 1.25%)

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## 4 channel loudspeaker management system



- 4 inputs and 4 outputs (LiNET)
- SHARC floating point DSP @ 96 kHz
- High quality A/D/A converters with 24-bit resolution @ 96kHz
- LiNET – 8x freely configurable digital audio signals over a CAT5 cable

- Advanced IIR and linear phase FIR filters
- LINUS LIVE - Network Control and Monitoring of amplifiers over Ethernet
- Factory presets for all Coda Audio loudspeaker systems
- 6 year warranty

**Description:**

The LINUS CON loudspeaker management system is designed to control all Coda Audio loudspeaker systems. The 19"/1U unit incorporates 4 balanced analogue inputs, 4 outputs (analogue and AES3) and can receive up to 8 digital signals via LiNET.

The unit can be controlled directly from its front panel or using the Ethernet based LINUS LIVE user interface.

APPLICATIONS – containing factory presets for all Coda Audio loudspeaker systems, LINUS CON is ideally suited to touring and installation applications.

## TECHNICAL SPECIFICATIONS LINUS CON

## GENERAL

Channels	4 inputs (Analogue, LiNET, AVB) routable to any of the 4 outputs
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## AUDIO

Input impedance	12k balanced
Max Input level	+18dBu
Output noise (analogue input)*	< -114 dB (unweighted) / -117dB (A-weighted)
Output noise (digital input)*	< -117 dB (unweighted) / -120dB (A-weighted)
Frequency response	
(10 Hz - 30 kHz)	+/-0.5 dB
THD + N (20Hz-20kHz)	< 0.001%

## DSP

Inputs	4x
Outputs	4x
Processor	Analogue Devices SHARC DSP
Sampling rate	96 kHz / 32 bit floating point
Presets	190 Factory and 10 user presets

## TECHNICAL SPECIFICATIONS LINUS CON

## FRONT PANEL

Balanced analogue inputs	4x XLR / F
LiNET input	RJ45
LiNET daisy-chain link	RJ45
Ethernet input	RJ45
Ethernet daisy-chain link	RJ45
Display	yes
Mute buttons	each channel
Menu buttons	provide front panel control
Signal, Limit, Protect LEDs	each channel
Input signal detection LEDs	Analogue, LiNET
Ethernet LED	yes
Standby LED	yes

## REAR PANEL

Balanced analogue in and outputs	SubD 25
AUX	RJ45
Balanced analogue outputs	4 x XLR / M
AES3 outputs	2 x XLR / M
Mains	Neutrik PowerCon 20A

## MAINS POWER

Net Weight	3.4 kg (6.8 lbs)
Shipping weight	3.8 kg (7.7 lbs)
Dimensions (WxHxD)	483 x 44 x 216 mm (19" x 1.75" x 8.5")
Shipping Dim. (WxHxD)	510 x 80 x 360 mm (20" x 3.15" X 14.17")

\* Noise measurement is referenced to Fullscale Outputlevel +18dBu with transparent DSP-Settings