



LA4X

AMPLIFIED CONTROLLER



The **LA4X** is an amplified controller based on a four input by four output architecture combining the benefits of the self-powered speaker packages with the flexibility of outboard DSP and amplification. L-ACOUSTICS® loudspeaker enclosures can be driven by the LA4X in three different modes: “à la carte” - where the 4 inputs/4 outputs are allocated to passive enclosures in a one-to-one link, “full active” - a fully discrete power and DSP drive for active enclosures, “conventional” - connecting multiple enclosures in parallel. The LA4X features a green SMPS power supply with PFC. Its high efficiency class D amplification is capable of delivering 4 x 1000 W power at 8 Ω or 4 Ω with class leading hold times. Other notable features include AES/EBU as standard and extensive DSP resources per output: 1000 ms of delay, a comprehensive EQ station including the exclusive Array Morphing tool together with 8 IIR, 3 FIR and air absorption compensation filters and advanced L-DRIVE protection. All with Ethernet networking and a powerful yet simple to use interface backed by a firmware with ultra-fast start-up time.

L-ACOUSTICS preset library for LA4X

- 5XT, 8XT(i), 12XT(i), 115XTHiQ
- ARCS WIDE, ARCS FOCUS, ARCS II
- KIVA, KILO, KARA(i), KUDO, K2
- SB15m, SB18(i/m)
- LA4 legacy systems (via LA Network Manager)

4-channel analog and digital audio input stages

- 24-bit/96 kHz cascaded A/D converters, 130 dB dynamic range
- AES/EBU inputs with active link and failsafe relay
- Sample Rate Converters accepting from 44.1 to 192 kHz AES/EBU or S/PDIF sources
- Digital-to-analog /Digital-to-digital automatic fallback functions in two channel mode with constant delay & user selectable level compensation

4 x 4 DSP engine

- 32-bit floating point processing, 96 kHz sampling rate
- Flexible I/O routing matrix
- 1000 ms of delay for each channel
- Internal IIR and FIR EQ algorithms for speaker phase linearization and improved impulse responses
- Per output: Built-in EQ station with 8 IIR, 3 FIR EQ filters, Array Morphing (LF contour, zoom factor), Air absorption compensation filters
- L-DRIVE excursion and temperature real-time control
- Load monitoring

4-channel power amplification and power supply

- SMPS Universal Switched Mode Power Supply (100-240V +/-10%) with Power Factor Correction (PFC)
- Lightweight, energy-efficient class D circuits
- 4 x 1000 W / 4 or 8 Ω at 1% THD, all channels driven simultaneously
- 32 dB gain structure

Audio specifications

Frequency response	20 Hz - 20 kHz, ±0.25 dB at 8 Ω
Output noise	-71 dBV (20 Hz - 20 kHz, A-weighted)
Output dynamic range	110 dB (20 Hz - 20 kHz, A-weighted)
Max input level	+22 dBu (balanced, THD 1%)
Channel separation	> 90 dB
Analog in impedance	22 kΩ, balanced
Input to output delay	3.84 ms

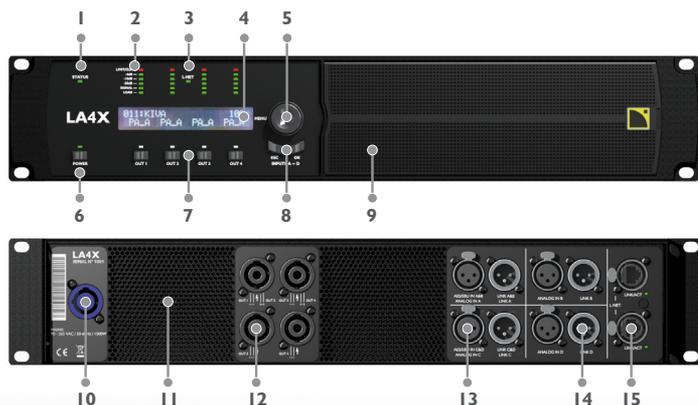
Remote control and monitoring

- Dual-port Ethernet card for control and monitoring from LA Network Manager 2
- SNMP support for third-party management solutions
- CRESTRON® and EXTRON® control modules



Physical

H x W x D	88 (2U) x 483 x 420 mm
	3.5 (2U) x 19 x 16.5 in
Weight (net)	11.3 kg 24.9 lbs
Finish	Black
Protection rating	IP3x



- 1 Status LED
- 2 LOAD/SIGNAL/LIMIT/CLIP LED
- 3 L-NET control network LED
- 4 2 x 24 char. LCD display
- 5 Navigation/Edition rotary encoder
- 6 Power/Standby button and LED
- 7 Channel selection key
- 8 Menu key
- 9 Anti-dust cover
- 10 PowerCON power supply inlet
- 11 Fan grill
- 12 SpeakON output connector
- 13 XLR analog or AES/EBU input connector
- 14 XLR analog or AES/EBU link connector
- 15 EtherCON Ethernet connector