PRELIMINARY

# LA2Xi AMPLIFIED CONTROLLER


LA2Xi is a four-channel amplified controller dedicated to permanent installations. Designed to match the power of small-format loudspeakers, LA2Xi can also be used to support larger loudspeakers at lower SPL capability (4 x 4 single-ended mode) or at full SPL capability (4 x 3, 4 x 2 or 4 x 1 bridge mode).

The streamlined and elegant 1U front panel hides a powerful DSP engine with features for loudspeaker management, protection and monitoring as well as a comprehensive set of tools for system adjustment and calibration. In addition to analog and AES, LA2Xi integrates AVB signal inputs with Milan seamless network redundancy. Four GPIO and a 24 V DC backup power for the DSP card offer external control and improved reliability. The flexible LA2Xi is ideal for background music systems in leisure venues, distributed fills, studio monitors and private auditorium systems.

## SPECIFICATIONS

| | | | | | |
|---|---|---|---|---|---|
| **Amplification and power supply** | | | | | |
| Amplification class | High efficiency class D | | | | |
| Output power, all channels loaded | 4 channels at 4 Ω | 4 channels at 8 Ω | 4 channels at 16 Ω | 2 channels at 8 Ω | 1 channel at 4 Ω |
| Peak output power 12 dB Crest Factor, Sine burst, 1 kHz, 2 ms | 710 W | 370 W | 190 W | 1400 W | 2750 W |
| Output power 200 ms, Sine burst, 1 kHz, 200 ms, < 1 % THD | 640 W | 360 W | 190 W | 1260 W | 2550 W |
| Power supply model | Universal Switched Mode Power Supply (SMPS) with Power Factor Correction (PFC) | | | | |
| Mains rating | 100 V - 240 V ~ ±10%, 50-60 Hz | | | | |
| **Audio specifications** | | | | | |
| Frequency response (20 Hz - 20 kHz, 8 Ω load, 60 W output power) | ± 0.25 dB | | | | |
| Distortion THD+N (20 Hz - 10 kHz, 8 Ω load, 60 W output power) | < 0.1% | | | | |
| Output dynamic range (20 Hz - 20 kHz, 8 Ω, A-weigthed, Digital input) | > 117 dB | | | | |
| Noise level (20 Hz - 20 kHz, 8 Ω, A-weighted, Digital input) | < - 81 dBV | | | | |
| **DSP** | | | | | |
| Digital Signal Processor (DSP) | Gen.4 Dual SHARC 32-bit, floating point, 96 kHz sampling rate | | | | |
| I/O routing | 4x4 routing and summation matrix | | | | |
| Per output channel | Built-in EQ station with 8 IIR, 3 FIR EQ filters<br>Array morphing (LF contour, zoom factor), Air absorption compensation filters | | | | |
| | Internal IIR and FIR EQ algorithms for speaker phase linearization and improved impulse responses | | | | |
| | L-DRIVE advanced system protection (excursion, temperature and over-voltage) | | | | |
| | Output delay from 0 to 1000 ms | | | | |
| **Circuits protection** | | | | | |
| Mains and power supply | Over and under voltage / over temperature / overcurrent / inrush current protection | | | | |
| Power outputs | Over current limiting / DC / short circuit / over temperature | | | | |
| **Inputs / Outputs** | | | | | |
| Analog input | 4 channels, 3-pin Phoenix Euroblock | | | | |
| AES / EBU input | 4 channels (2xAES3), 3-pin Phoenix Euroblock (44.1 - 192 kHz sampling rate)<br>With active link and bypass relay | | | | |
| AVB input with support of Milan seamless dual networking | 4 channels 48kHz / 96 kHz from 1 stream of up to 8 channels | | | | |
| Loudspeaker output | 2 x 4-pin Phoenix Euroblock | | | | |
| **Remote control and monitoring** | | | | | |
| Network connection | Dual-port Ethernet Gigabit interface | | | | |
| General Purpose Inputs / Outputs (GPIO) | 4 GPIO, isolated optocoupler inputs, isolated relays contacts | | | | |
| External DSP backup voltage input | 24 V DC, 2-pin Phoenix Euroblock | | | | |
| Third-party management solutions | QSC® / SNMP / Extron® / Crestron® | | | | |
| **Operating conditions** | | | | | |
| Temperature | Room temperature from 0° C / 32° F to +50° C / 122° F | | | | |
| **Physical data** | | | | | |
| Height | 1U | | | | |
| Weight | 4.40 kg / 9.70 lb | | | | |