# Technical Data LUCIA: Localized Utility Compact Intelligent Amplification





LUCIA® 240/2M

- Maximum output power across range of loads 2 x 120 W into 8, 4 or 2 ohms
- Comprehensive DSP features Per channel presets for high-pass filter, parametric EQ, multi-band compressor, and look-ahead limiter
- ► Automatic Dynamic Loudness Contouring<sup>TM</sup> DSP automatically adapts to optimize performance at any output level
- Optimized presets Available for specific loudspeaker models<sup>1</sup>
- ► Auto Load Sense<sup>TM</sup> Proprietary auto-set VPL<sup>TM</sup> (Voltage Peak Limiter) for optimum performance with any connected load
- 4 x 4 mix matrix Route input signals internally to amplifier or to line-level outputs
- Configuration software Windows and Mac software wizard for initial set-up, and advanced editor for preset configuration (LUCIA connection via USB)

### Great sound, flexibility and ease of use

Lab.gruppen's innovative LUCIA (Localized Utility Compact Intelligent Amplification) brings superior audio performance and extraordinary flexibility to a decentralized approach in AV systems design. Power, processing, control and I/O are conveniently placed exactly where they are needed. In many AV applications requiring consistent, high quality audio output, LUCIA offers a logical, costefficient and scalable solution that eliminates the complications and added expense of a centralized equipment room for amplification, matrixing and processing. All LUCIA amplifiers incorporate a digital, firmware-controlled front end coupled to a robust, durable and highly efficient Lab.gruppen output stage, all of which make it the best sounding compact amplifier in its category.

#### Fast installation, reliable operation

LUCIA amplifiers install quickly and easily, with the supplied wall-mount bracket enabling discreet on-wall placement behind video displays. All connections are via Euroblock screw terminals, and level setting is available on front-panel potentiometers. An advanced protection scheme protects the amplifier and connected loudspeakers from potential damage caused by clipping, thermal overload, or extreme low line voltage.



- RS232 Remote control and monitoring from third party control solutions
- ► GPIO Remote control (e.g. wall panel) for channel switching, level control and integration with paging systems
- Efficient Class D amplifier Patented design for low distortion and minimal heat dissipation
- Compact form factor Half-rack, 1U chassis and supplied bracket for discreet on-wall mounting (e.g. behind display screens)
- Intelligent fan control Silent operation at idle and at lower output levels
- Fail-safe operation Comprehensive short circuit, thermal, and under-voltage protection
- Universal power supply Operates at 100 240 V AC (50 or 60 Hz)
- ENERGY STAR<sup>®</sup> qualified Conforms to latest specification energy efficiency standards

### **Integrated mix-matrix and DSP**

A versatile 4 x 4 mix-matrix and comprehensive DSP features eliminate the need for external mixers and processors in many applications, saving time and money. A software wizard facilitates fast set-up, while the PC editor allows offline configuration of common presets that can be quickly downloaded to multiple units via USB.

#### **Green credentials**

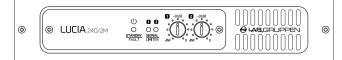
LUCIA amplifiers are ENERGY STAR qualified, making them an ideal choice for installation in projects seeking energy efficient certifications. The amplifiers automatically enter standby mode after a 20 minute period with no signal input, consuming less than 1 watt. Automatic power-up occurs within two seconds after an input signal is sensed.

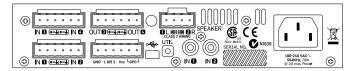
<sup>1</sup> Presets available at launch for selected Tannoy loudspeakers including the industry leading CMS Series in-ceiling systems.

## Applications

- Retail outlets
- Bars & restaurants
- Entertainment venues
- Corporate board rooms
- Classrooms
- Multimedia spaces
- Hotel reception/lobbies
   Museums & galleries
  - Museums & galleries Small corporate event spaces







# **Specifications LUCIA 240/2M**

• /	
General	
Number of powered channels	2
Total output all channels driven	240 W
Max output voltage per channel 1)	43.8 V peak
Max. output current per channel	7.8 Arms
Max. Output Power (all ch.'s driven)	
2 ohms	120 W
4 ohms	120 W
8 ohms	120 W
16 ohms	60 W
Performance	
THD 20 Hz - 20 kHz at 1 W into 8 ohms	<0.3%
THD at 1 kHz and 1 dB below clipping	<0.2%
Signal To noise ratio into 8 ohms	>101 dBA
Channel separation (Crosstalk) at 1 kHz	>60 dB
Frequency response	5 Hz - 22 kHz
Input impedance	10 kOhm
Input common mode rejection, CMR	40 dB
Gain, Sensitivity and Limiters	
	43.8 V pools
VPL for 16 ohm mode	43.8 V peak
VPL for 8 ohm mode	43.8 V peak
VPL for 4 ohm mode	31 V peak
VPL for 2 ohm mode	
	22 V peak
Sensitivity, balanced input	4 dBu / 1.23 Vrms
Sensitivity, RCA input	-2 dBu / 0.62 Vrms
Input headroom for clip, balanced 2)	12 dBu / 3.09 Vrms
Input headroom for clip, RCA 2)	6 dBu / 1.55 Vrms
Connectors and buttons	
Input connectors (per ch.)	3-pin detachable screw terminals, electronically balanced
Input connectors (ch 1 & 2)	Unbalanced RCA type
Output connectors (per ch.)	2-pin detachable screw terminals
Line-level output connectors (ch. 3 & 4)	3-pin detachable screw terminals, electronically balanced
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GPI (power control input) 3)	2 channels of voltage sense type. 4 pins in a detachable screw terminal. Default for gain.
GPO (power state output) <sup>3)</sup>	Contact closure type, 2 pins in a detachable screw terminal
GFO (power state output)	Default for external monitoring of fault/protection/power off
RS232	Can be controlled and monitored by third parties via RS232 using both the GPI pins
USB	For firmware update and configuration for the matrix models
Level adjustment (per channel)	Front panel potentiometer, detented from -inf to 0 dB
Processing features	
-	4 EQ apetiana par input
Inputs processing block 4)	4 EQ sections per input
Mix-matrix routing block 4)	4 in - 4 out mix-matrix controllable from GPI
	4 EQ sections per output (presets available for many loudspeakers)
Outputs processing block 4)	User adjustable output look ahead limiter
	ADLC (Adaptive ISO 226 compensation)
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Two line level outputs 5)	Each capable of driving 6 LUCIA units in parallel
Latency from any input to any output	9.15 ms
Power	
Nominal voltage	100 - 240 VAC
Operating voltage	85 - 265 VAC
Standby consumption	<1 W
	IEC inlet
Mains connector	
	One fan, no filter required, front-to-rear airflow, temperature controlled speed
Cooling	Can stay off if the sustained power average stays below $2 \times 6$ W and the surrounding
	temperature is below 25 degrees C
Auto mode	The power state is controlled automatically with the audio signal
Dimensions	W: 216 mm (8.5"), H: 44 mm (1.7"), D: 280 mm (11")
Weight	1.9 kg (4.2 lbs.)
Finish	Black aluminum front and black steel chassis
Approvals	CE, CSA, CCC, PSE, FCC, ENERGY STAR

 Note 1): Into 8 ohms and higher

 Note 2): An analog soft limit will be engaged on the input above this level to reduce the clip distortion

 Note 3): Can be configured for different functionality via USB

 Note 4): DSP settings determined by settings downloaded from the Application Browser software; not configurable on the unit itself

 Note 5): Noise levels typically allow daisy chaining of 3 LUCIA amplifiers without issues

All specifications are subject to change without notice.

