Technical Data LUCIA: Localized Utility Compact Intelligent Amplification





LUCIA® 60/1-70

- Maximum output power across range of loads 2 x 30 W into 8, 4 or 2 ohms
- Comprehensive DSP features Per channel presets for high-pass filter, parametric EQ, delay and look-ahead limiter
- ► Automatic Dynamic Loudness ContouringTM DSP automatically adapts to optimize performance at any output level
- Optimized presets Available for specific loudspeaker models
- ► Auto Load SenseTM Proprietary auto-set VPLTM (Voltage Peak Limiter) for optimum performance with any connected load
- 2 x 1 mix matrix Route input signals internally to either or both amplifier channels
- 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



- Configuration software Windows and Mac software wizard for initial set-up, and advanced editor for preset configuration (LUCIA connection via USB)
- Compact form factor Half-rack, 1U chassis and supplied bracket for discreet on-wall mounting (e.g. behind display screens)
- Efficient Class D amplifier Patented design for low distortion and minimal heat dissipation
- 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® qualified Conforms to latest specification energy efficiency standard
- Intelligent fan control Silent at idle and extremely quiet at low output levels

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 consistently outstanding performance, LUCIA offers a logical, cost-efficient and scalable solution that often eliminates the complications and added expense of a centralized equipment room. 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 LUCIA the best-sounding and most reliable compact amplifier in its category.

Fits in anywhere

LUCIA 60/1-70 has been designed and engineered for quick installation and easy setup. The supplied wall-mount bracket enables discreet on-wall location (such as behind video displays), but the ultra-compact form factor also allows easy placement virtually anyplace – whether next to a projector or integrated into a reception counter, podium & lectern or bar area. All input and output connections are on Euroblock screw terminals (with parallel unbalanced RCA connectors), and level setting is available on frontpanel potentiometers. Advanced circuitry protects the amplifier and connected loudspeakers from potential damage caused by clipping, thermal overload, or extreme low line voltage.

Integrated mix-matrix and DSP front end

The LUCIA 60/1-70 incorporates a digital front end with a 2 x 2 Mix Matrix and comprehensive DSP features, including proprietary Automatic Dynamic Loudness Contouring (ADLCTM) and a full selection of EQ filters both before and after the matrix – features that eliminate the need for external mixers and processors in many applications, saving time and money. A software wizard facilitates fast setup, while the advanced 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.

Applications

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







Specifications LUCIA 60/1-70

Conorol	
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Number of powered channels	
Total output all channels driven	60 W
Max output voltage	100 V peak
Max. output current	1.8 Arms
Performance	
70 V	60 W
100 V 1)	20 W
100 V	50 W
Gain, Sensitivity and Limiters	
VPL	100 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 switches	
	2 nin detachable corow terminals, electronically belanced
	S-pin detachable sciew terminals, electronically balanced
Input connectors (cn 1 & 2)	
Output connector	2-pin detachable screw terminal
GPI 3)	2 channels of voltage sense type. 4 pins in a detachable screw terminal.
	Default functionality is output level for GPI1 and wake up from stand by for GPI2.
GPO (power state output) 3)	Contact closure type, 2 pins in a detachable screw terminal. Default for external monitoring of fault/protection/power off
RS232 4)	Can be controlled and monitored by third parties via RS232 using both the GPI pins
USB	For firmware update and configuration with the Application Browser software
	One fan, no filter required, front-to-rear airflow, temperature controlled speed Can stay off if the sustained power average
Cooling	stays below 12 W and the surrounding temperature is below 25 degrees C
	This filter is in series with the other filters in the DSP and it is controlled with switches on the back
High pass filter	Settings OFE / 50 Hz / 80 Hz.
Automode	The nower state is controlled automatically with the audio signal
l ovel adjustment (per input)	Front panel potentionator, detented from inf to 0 dP
Eever adjustment (per input)	
Dessessing Fastures	
Processing reatures	
Input processing block ⁵⁾	4 EQ sections per input
Mix matrix routing block 5)	2 in - 1 out mix-matrix controllable from GPI
	4 EQ sections (presets available for many loudspeakers)
Output processing block 5)	User adjustable output look ahead limiter
	ADLC (Adaptive ISO 226 compensation)
Latency from any input to any output	User adjustable from 9.15 to 137 ms
Power	
Nominal voltage	100 - 240 VAC
Operating voltage	
Standby consumption	
Mains connector	IEG inlet
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): The peak voltage is 100 V, but the look-ahead limiter solution ensures that it cannot clip, so in real life use with music or speech it will typically be able to sustain a higher SPL in 100 V applications than 100 V amplifiers with higher peak voltage capability as the amplifier have the capacity to handle peaks way beyond "clip" without sounding harsh. 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): Included from October 2016 and onwards

Note 5): DSP settings determined by settings downloaded from the Application Browser software; not configurable on the unit itself

All specifications are subject to change without notice.

