



LUCIA® 60/1-70

Technical Data LUCIA: Localized Utility Compact Intelligent Amplification



- ▶ **Model for constant voltage applications** – 1 x 60 W into 70 V/100 V¹
- ▶ **Comprehensive DSP features** – Per channel presets for high-pass filter, parametric EQ, multi-band compressor, and look-ahead limiter
- ▶ **Automatic Dynamic Loudness Contouring™** – DSP automatically adapts to optimize performance at any output level
- ▶ **Optimized presets** – Available for specific loudspeaker models
- ▶ **2 x 1 mix matrix** – Mix two sources to mono or use for source selection
- ▶ **Configuration software** – Windows and Mac software wizard for initial set-up, and advanced editor for preset configuration (LUCIA connection via USB)
- ▶ **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
- ▶ **Selectable high-pass filter** – Rear switches for ON/OFF and 50 Hz or 80 Hz filter. The filter is in series with the customizable input and output EQs (which are flat from the factory)
- ▶ **Universal power supply** – Operates at 100 - 240 V AC (50 or 60 Hz)
- ▶ **ENERGY STAR® qualified** – Conforms to latest specification energy efficiency standards

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 anywhere – 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 front-panel potentiometers. Advanced circuitry protects the amplifier and connected loudspeakers from potential damage caused by clipping, thermal overload, or extreme low line voltage.

Integrated DSP for enhanced flexibility

All LUCIA models incorporate comprehensive DSP features, including look-ahead limiter and flexible equalization which often eliminate the need for external mixers and processors in many applications - saving time and money. A software wizard facilitates fast set-up via USB, a feature that can reuse previous set-up files.

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.

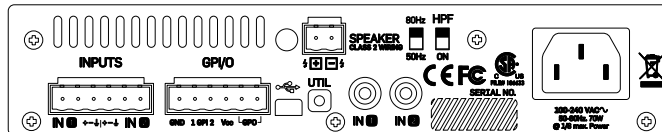
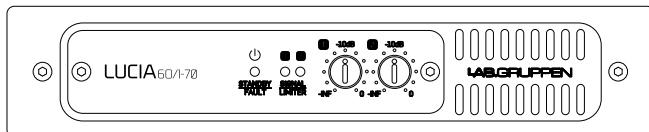
¹ The peak voltage is 100 V, but the look-ahead limiter solution ensures that it cannot clip, so in real life use with music or speech it will typically be able to sustain a higher SPL in 100 V applications than 100 V amplifiers with higher peak voltage capability as the amplifier have the capacity to handle peaks way beyond "clip" without sounding harsh.

Applications

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

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Specifications LUCIA 60/1-70

General	
Number of powered channels	1
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⁾	30 W
16 Ohms	60 W
Signal-to-noise ratio	>100 dBA
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 buttons	
Input connectors (per ch.)	3-pin detachable screw terminals, electronically balanced
Input connectors (ch 1 & 2)	Unbalanced RCA type
Output connector	2-pin detachable screw terminal
GPI (power control input) 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	Can be controlled and monitored by third parties via RS232 using both the GPI pins
USB	For firmware update and configuration of the signal processing and altering the default functions of the GPI ports
High pass filter	This filter is in series with the other filters in the DSP and it is controlled with switches on the back. Settings OFF / 50 Hz / 80 Hz.
Level adjustment (per channel)	Front panel potentiometer, detented from -inf to 0 dB
Processing Features	
Input processing block ⁴⁾	4 EQ sections per input
Mix matrix routing block ⁴⁾	2 in - 1 out mix-matrix controllable from GPI
Output processing block ⁴⁾	4 EQ sections (presets available for many loudspeakers) 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	85 - 265 VAC
Standby consumption	<1 W
Mains connector	IEC inlet
Cooling	One fan, no filter required, front-to-rear airflow, temperature controlled speed Can stay off if the sustained power average stays below 12 W and the surrounding temperature is below 25 degrees C
Auto mode	The power state is controlled automatically with the audio signal
Dimensions	
Weight	W: 216 mm (8.5"), H: 44 mm (1.7"), D: 280 mm (11") 1.9 kg (4.2 lbs.)
Finish	
Approvals	Black aluminum front and black steel chassis 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): 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.

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