



- Integrated DSP management system
- Ethernet remote control
- Two analogue inputs, two AES/EBU inputs, two outputs
- 120 dB dynamic range
- 1900 Watts per channel in 4 Ohms and 2500 W in 100V line
- Dual voltage SMPS with automatic selection for 120 V/ 230 V

Features

The LAM 220 is the second amplifier of the Lotusline system.

Able to deliver high resolution, ultra clean power up to 4500 Watts peak without distortion, the LAM 220 is our second speaker manager.

It can drive any Lotusline system combination with factory setup still offering to the sound engineer to fine tune the overall installation.

The LAM 220 delivers full power on 4 ohms load per channel. When the full power capacity is not mandatory, like in most distributed sound installations, the LAM 220 can handle more cabinets and work under 2 Ohms load.

The LAM 220 have two analogue inputs, two AES/EBU inputs, two outputs, ten PEQ bands per input / output, a frequency range from 20 Hz to 40 kHz, rugged analogue input stage dealing with input voltages up to +23 dBu, excellent dynamic range of 120 dB, highest quality converters, all come together forming part of our amplifiers extensive feature set and resulting sonic purity.

The amplifier section provides highest quality power. The latest SMPS, high value protection system, intuitive control set & rotary encoder control access to all parameters and functions, navigation is straightforward and clear.

DSP Section

The DSP section features 96 kHz sample rate and high quality converters with dynamic range of 120 dB for the analogue inputs and 117 dB on the outputs, for optimal sonic purity. For each input and output you can set up 10 parametric filters, limiters and delay, making the LAM 220 fully configurable for any speaker system.

Up to 50 presets can be stored for instant recall from the front panel of the LAM 220 amplifiers.

Software

Easy to use and easy to configure system setups, the software includes all the control functions that demanding audio engineers require, it is presented graphically to make it straightforward and intuitive to use.

The functions include grouping, clear graphical editing of parametric EQ, saving of PEQ graphs as images, exporting presets as text files, delay can be measured in meters, millimeters, feet, inches, seconds and milliseconds.

Other functions include remote monitoring of status, of external equipment, security access rights and integrated remote firmware upgrade. The software is available for Windows XP, Windows 7 and Mac OS.

Amplifier Specifications

Output Power

Dual Channel operation output power @ 1 kHz, THD < 1%	2 x 600 W @ 16 Ω
	2 x 1100 W @ 8 Ω
	2 x 1900 W @ 4 Ω
	2 x 1950 W @ 2.7 Ω
Mono Bridge operation output power @ 1 kHz, THD < 1%	2 x 1500 W @ 2 Ω
	1 x 2200 W @ 16 Ω
	1 x 3800 W @ 8 Ω
70 / 100 V line operation output power @ 1 kHz, THD < 1%	1 x 3000 W @ 4 Ω
	2 x 1800 W @ 70 V line 1 x 2500 W @ 100V line

Output Circuitry	Bipolar, Class H 2 step high efficiency circuit
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Output Voltage	140 Vp - 280 Vpp
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Audio performance

Frequency Response 4 Ω load with 120 W output	10 Hz – 20 kHz, ± 0.175 dB
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Signal To Noise-Ratio 10 Hz - 20 kHz, 8 Ω load	> 102 dB (Unweighted)
	> 105 dB (A-weighted)

THD+N (typical) 20 Hz - 10 kHz, 4 Ω , 120 W output	< 0.02 %
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Damping Factor 8 Ω load, 1 kHz and below	> 400
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Features

Input Impedance	29 kΩ balanced
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Voltage Gain	32 dB
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Protection Circuits	Inrush-current limitation, mains surge overvoltage protection, temperature monitoring of heatsinks, output DC protection, temperature dependent SOA protection, mains fuse protection, output current limitation, thermal limitation
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Cooling	2 temperature dependent speed-controlled axial fans
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LED Indicators	LEDs for signal / protect and clip, LCD (2 x 16 characters)
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Output Connectors	One 4-pole SPEAKON connector for each output channel (bi-amping possible)
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Modes Of Operation	Dual channel (Stereo), mono bridge
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Net Weight	9.4 kg / 20.7 lbs
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Shipping Weight	11 kg / 24.3 lbs
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Dimensions (W x H x D)	483 x 88.1 x 419 mm 19 x 3.5 x 16.5 inches (19", 2U)
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Shipping Dim. (W x H x D)	600 x 105 x 527 mm 23.3 x 4.1 x 20.7 inches
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DSP Specifications

Audio performance

Dynamic Range (Inputs)	120 dB
Dynamic Range (Outputs)	117 dB
Frequency Range	20 Hz – 40 kHz
Sampling Rate	96kHz, 64 bit digital processing
Latency	Min. 0.58 ms

Audio Control Parameters

Number of Param. Filters	10 on each input and output
Filter Settings	Bell, Shelving, Notch or Allpass
Crossover Filters	Butterworth, Bessel, Linkwitz-Riley filters up to 24 dB / octave
Input Delay	Max, 1 s on each input
Output Delay	Max, 20 ms on each output
Limiters	Limiter on each input and output
Compressor	Multiband compressor
Input Gain	-48 dB to +12 dB
Phase Inversion	180° reversal

Features

Inputs	2 analogue and 2 AES/EBU inputs
Routing	Configurable routing of each inputs to each output
Number of Presets	50
Configurable	via PC (software included)
Monitoring	Real-time via PC (software included)
Grouping	Grouping functions available
Software	Available for Windows XP, Windows 7 and Mac OS

LIMITED WARRANTY

Lotusline loudspeakers and electronics are covered against defects in workmanship or materials for a period of two (2) years from the original date of purchase. At the option of Lotusline, the defective item will be repaired/replaced with no charge for materials/labor. The item is to be adequately packaged and dispatched, pre-paid, to a Lotusline authorized distributor/service center. Unauthorized repair shall void the warranty. This Lotusline warranty does not cover cosmetics or finish and does not apply to any items which in Lotusline's opinion have failed due to user abuse, accidents, modifications or any type of misuse.

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