LT1000 - LT2000
Power Amplifiers

LT SERIES

(LT2000 model shown)

power specifications 1kHz, 0.1% THD+N	8Ω stereo	4Ω stereo	2Ω stereo	8Ω bridged	4Ωbridged
LT2000	560w	1000w	1200w	2000w	2400w
LT1500	400w	750w	900w	1500w	1800w
LT1000	280w	500w	650w	1000w	1300w

Features

- Dramatically reduced net weight
- Linear power supply / switching output stages
- Very low current draw
- Latest generation of high-speed, wide-bandwidth output devices
- Cooled by variable speed fan with back-to-front airflow
- Inputs - Balanced female XLR, 1/4" TRS and three pin phoenix
- Outputs - Speakon and five-way binding posts
- Mode selector switch for stereo, parallel and bridged-mono operation
- Ground-lift switch and rear panel circuit breaker
- Recessed, stepped attenuators with removable knobs
- 16-gauge steel chassis, 14-gauge steel front-panel

TourClass® protection circuits

ACL (Active Clip Limiting) prevents speaker damage by providing gentle gain reduction when signal approaches the clipping threshold.

IGM (Instantaneous Gain Modulation) monitors speaker loads to detect conditions that may overstress output devices. This allows safe operation into nominal 2Ω speaker loads.

AUTORAMP gradually increases gain to the attenuator level-settings when the amplifier is turned on. This prevents abrupt turn-on level.

Other protection features include: short circuit, dc voltage, comprehensive thermal management, current in-rush turn-on/off transient, and sub/ultrasonic input.

Description

The LT Series amplifier is the first in a family of elevated efficiency amplification from Crest Audio. With sonic performance still the primary priority, the LT Series uses a combination of a linear power supply and a Class D output to deliver, Crest Power in a compact and cost-effective package.

A full complement of features and power-points makes this series very versatile, whether powering nightclub systems or high school gymnasiums. The LT series amplifiers bring a new generation of amplification to Crest Audio.

Linear-toroid power supply

A traditional linear power supply is used in the LT Series. Because of the efficiency of the switching output stage (approx 93%), the transformer does not need to be as big or as heavy. This gives the LT Series an advantage in delivering more power in a more compact package. The efficiency of the output stage also gives the power supply the ability to handle heavy-duty cycles without compromising sonic integrity

Switching output stage

To maintain sonic quality along with incorporating the advantages of a switching output stage, Crest Audio's engineering has two years of development time in this new generation Class D amplifier. The multiple rail technology is the key to its efficiency and low operating temperature. An additional advantage to this design is the amount of power needed over time. This amplifier will dramatically reduce the number of kW / hr needed to operate.

Specifications

LT Series Power Amplifiers

	LT1000	LT1500	LT2000
stereo power 8Ω	280W	400W	560W
4Ω	500W	750W	1000W
2Ω	650W	900W	1200W
bridged mono power 8Ω	1000W	1500W	2000W
4Ω	1300W	1800W	2400W
maximum output voltage	53V rms	64V rms	72V rms

1kHz, 0.1% THD+N Power figures are watts per channel, both channels driven.

frequency response 1W @ 8Ω	20Hz–20kHz, +0 / -1dB
power bw rated power @ 4Ω, 1% THD+N	20Hz–20kHz, +0 / -1dB
THD + N	<0.1% rated power @ 4Ω, 1kHz
smpte imd	<0.03% rated power @ 8Ω
damping factor	400:1 @ 8Ω

input CMRR	>60dB @ 1kHz
input sensitivity @ 8Ω	.775 V for full rated output power
input impedance	>20kΩ balanced, >10kΩ unbalanced
hum and noise	-100dB, A-weighted
crosstalk	> -60dB below max rated power (1kHz)
class	D

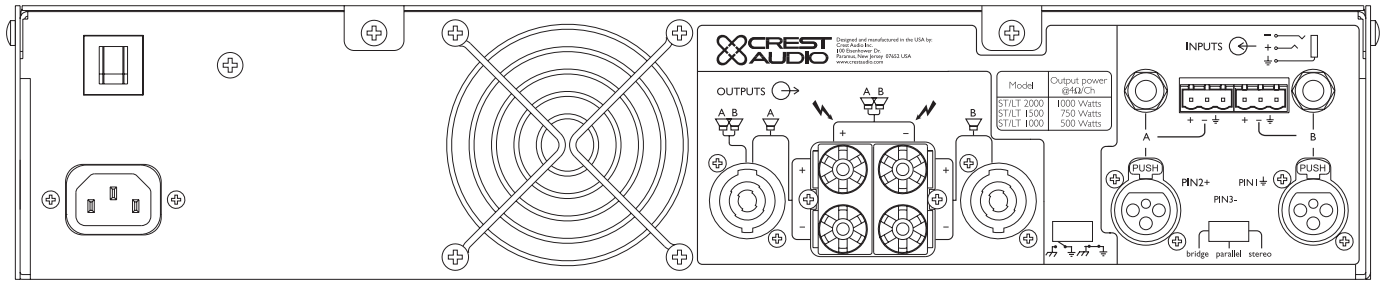
power supply	Linear with toroid transformer		
circuit breaker rating (120V/230V)	10A / 6A	15A / 10A	20A / 12A
current draw (120VAC) 1/8 power4Ω	1.8A	2.4A	3.0A
1/3 power, 4Ω	4.0A	5.5A	7.0A
at idle	0.6A	0.6A	0.6A
thermal emissions 1/3 Power, 4Ωbtu / hr	1220	1430	2100

cooling	Back to front via variable speed DC fan
input connectors	balanced female XLR, 1/4"TRS, and three pin Phoenix™
output connectors	Speakon™ connectors and five-way binding posts
controls	front panel: twin recessed stepped attenuators, power switch rear panel: signal ground-lift, mode select, circuit breaker
LED indicators	signal level, protect, active, ACL / IGM

construction	16-gauge steel chassis, 14-gauge steel front-panel (double thickness in rack ear areas)		
dimensions	3.5" x 19" (front panel) 17" (chassis) x 14" (15.25" to rack ears) h x w x d		
weight	30 lbs	32.5 lbs	35 lbs

Architects' & Engineers' Specifications:

The power amplifier shall consist of 2 channels. Each channel will deliver a minimum of (280 / 400 / 560) watts at 8 ohms, (500 / 750 / 1000) watts at 4 ohms (650 / 900 / 1200) watts at 2 ohms, 20Hz - 20kHz. In Bridged mono mode, it will deliver a minimum of (1000 / 1500 / 2000) watts at 8 ohms and (1300 / 1800 / 2400) watts at 4 ohms, 20 HZ - 20 kHz. It shall weigh (30 / 32.5 / 35) lbs. The amplifier shall incorporate protection circuitry against output short circuits, DC voltage on outputs, thermal overload and load protection due to any form of amp failure. It will include impedance sensing circuitry, and RMS clip limiter and Auto-Ramp signal control. The amplifier shall have a sensitivity of .775V at the input, which will deliver full rated output power in any output configuration. Sensitivity can be changed internally to 1.2V for full rated output power. The hum and noise level shall be greater then 100dB below rated output, "A" weighted. The amplifier shall have a class D output stage with a modulated power supply. The frequency response shall be greater than 20 Hz - 20 kHz, 0 / -1 dB, at full rated output power @ 4 ohms, .5%THD. The amplifier will operate at either 120 VAC, 60hz (safe operating range 100-132VAC) or at 230 VAC, 50Hz (safe operating range 200-264), voltage selection determined at factory. Maximum current draw at 120V shall be no greater then 15 A, both channels driver continuously into 4 ohm load. Front panel indicators shall include LED indicators for Protect, ACL (automatic clip limit), Signal level, and Active status. Front panel attenuators will be recessed and detented. Input connectors shall be XLR, 1/4" TRS and 3-pin Phoenix, per channel. Output connectors shall be 5-way binding posts and Speakon, per channel. A switch shall enable the signal ground to be lifted from the chassis. The packaging of the amplifier shall allow for standard rack mounting without requiring space between similar units as long as rack is properly ventilated. Dimensions main chassis shall be 17" wide (front panel is 19" wide), 14" deep (15.25" including rear rack ears), 3.5" high. The amplifier shall be designated the Crest Audio Model (LT1000 / LT1500 / LT 2000).



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