



(CD3000 model shown)

power specifications 1kHz, 0.2% THD+N	8Ω stereo	4Ω stereo	2Ω stereo	8Ω bridged	4Ω bridged
CD3000	800W	1500W	1800W	3000W	3600W
CD2000	560W	1000W	1200W	2000W	2400W
CD1500	400W	750W	900W	1500W	1800W
CD1000	280W	500W	650W	1000W	1300W

Features

- Dramatically reduced net weight
- Linear power supply / digital output stages
- Very low current draw
- Latest generation of high-speed, mosfet output devices
- Cooled by variable speed fan with back-to-front airflow
- Inputs - Balanced female Neutrik XLR, 1/4" TRS combo jacks
- Outputs - Neutrik Speakon and 5-way "touch-proof" 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, cast aluminum 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 2 ohm 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 CD Series amplifier is the next generation family of elevated efficiency amplification from Crest Audio. With sonic performance the primary priority, the CD 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 CD series amplifiers bring a new generation of amplification to Crest Audio.

Linear-toroid power supply

A traditional linear power supply is used in the CD Series. Because of the efficiency of the switching output stage, the transformer does not need to be as big or as heavy. This gives the CD 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

Crest Audio's engineering has maintained sonic quality while incorporating the advantages of a switching output stage. The high-power class D topology 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

CD Series Power Amplifiers

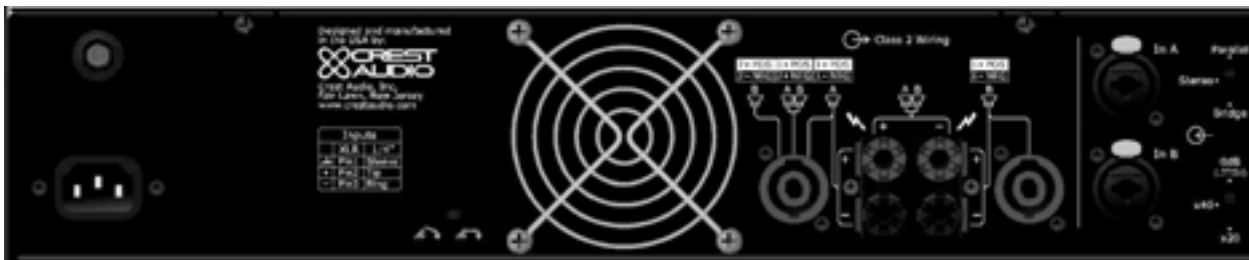
	CD1000	CD1500	CD2000	CD3000
stereo power 8 ohms	280W	400W	560W	800W
4 ohms	500W	750W	1000W	1500W
2 ohms	650W	900W	1200W	1800W
bridged mono power 8 ohms	1000W	1500W	2000W	3000W
4 ohms	1300W	1800W	2400W	3600W
maximum output voltage	53V rms	64V rms	72V rms	85V rms
1kHz, 0.2% THD+N Power figures are watts per channel, both channels driven.				
frequency response 1W @ 8 ohms	20Hz–20kHz, +/-1dB			
power bw rated power @ 4 ohms, 1% THD+N	20Hz–20kHz, +/-1dB			
THD + N	<0.2% rated power @ 4 ohms, 1kHz			
smpte imd	<0.03% rated power @ 8 ohms			
damping factor	400:1 @ 8 ohms			
input CMRR	>60dB @ 1kHz			
gain / input sensitivity @ 4 ohms	Selectable: x20, x40, or .775 V for full rated output power			
input impedance	>20kohms balanced, >10kohms 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	12A / 8A	15A / 10A	20A/12A
current draw (120VAC) 1/8 power 4 ohms	1.8A	2.8A	3.7A	5.6A
1/3 power, 4 ohms	5.0A	7.4A	9.9A	14.9
at idle	1.0A	1.1A	1.25A	1.5A
thermal emissions 1/3 Power, 4 ohms btu / hr	1220	1430	2100	2800
cooling	Back to front via variable speed DC fan			
input connectors	balanced female XLR, 1/4"TRS, unbalanced 1/4" TS on Neutrik combo connectors			
output connectors	Five-way "touch-proof" binding posts and Neutrik Speakon™ connectors (which presents both outputs on the A Speakon™ for bi-amplified applications)			
controls	front panel: twin recessed stepped attenuators, power switch rear panel: signal ground-lift, mode select, gain select, circuit breaker			
LED indicators	signal level (5 element bargraph), protect, active, ACL / IGM			
construction	16-gauge steel chassis, cast aluminum front panel - optional handles available			
dimensions	3.5" x 19" (front panel) 17" (chassis) x 15.3" (16.55" to rack ears) h x w x d			
weight	30 lbs	32.5 lbs	35 lbs	41.4 lbs

Architects' & Engineers' Specifications:

The power amplifier shall consist of 2 channels. Each channel will deliver a minimum of (280 / 400 / 560 / 800) watts at 8 ohms, (500 / 750 / 1000 / 1500) watts at 4 ohms (650 / 900 / 1200 / 1800) watts at 2 ohms, 20Hz - 20kHz. In Bridged mono mode, it will deliver a minimum of (1000 / 1500 / 2000 / 3000) watts at 8 ohms and (1300 / 1800 / 2400 / 3600) watts at 4 ohms, 20 Hz - 20 kHz. It shall weigh (30 / 32.5 / 35 / 41.4) 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 sen-

sitivity of .775V at the input, which will deliver full rated output power in any output configuration. Gain can be changed to x20 or x40. The hum and noise level shall be greater than 100dB below rated output, "A" weighted. The amplifier shall have a class D output stage with a linear power supply. The frequency response shall be greater than 20 Hz - 20 kHz, +/-1 dB, at full rated output power @ 4 ohms, 1%THD. The amplifier will operate at either 120 VAC, 60Hz (safe operating range 100-132VAC) or at 230 VAC, 50Hz (safe operating range 200-253), voltage selection determined at factory. Maximum current draw at 120V shall be no greater than 15 A, both channels driven continuously into 4 ohm load at 1/3 power. Front panel indicators shall include LED indicators for Protect, ACL / IGM (automatic clip limit),

Signal level, and Active status. Front panel attenuators will be recessed and detented. Input connectors shall be Neutrik Combo™ connectors featuring balanced inputs on female XLR and 1/4" TRS, and unbalanced inputs on 1/4" TS, one 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), 15.3" deep (16.55" including rear rack ears), 3.5" high. The amplifiers shall be designated the Crest Audio Model CD1000, CD1500, CD2000, and CD3000.



Crest Audio reserves the right to make improvements in manufacturing or design which may affect specifications.

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