

CC 1800/2800/4000

Power Amplifiers





Power Specifications	8 Ω stereo*	4 Ω stereo *	2Ω stereo *	4 Ω bridged**
CC 400	0 800 W	1,350 W	2,000 W	4,000 W
CC 280	0 595 W	965 W	1,400 W	2,800 W
CC 180	0 450 W	700 W	900 W	1.850 W

^{*} IkHz @ <0.05% T.H.D+N / ** IKhz @ <0.1% T.H.D+N

FEATURE OVERVIEW:

- Toroidal power transformer
- Dual, variable speed fans on CC 2800 and CC 4000, single fan on model CC 1800
- Balanced XLR inputs
- Speakon[®] and 5-way binding post speaker outputs
- Mode selector switch for stereo, parallel and bridged-mono operation
- Input sensitivity selection
- Recessed, stepped attenuators
- Front panel circuit-breaker switch
- Five year warranty*

TOURCLASS/PROTECTION CIRCUITS

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

<u>IGM</u> (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 and current in-rush turn-on/off transient and subsonic input.

DESCRIPTION

Crest Audio CC Series amplifiers are designed to achieve unsurpassed sonic performance and long-term reliability under extreme stress in touring or fixed installation applications.

Absolute sonic accuracy is the hallmark of every Crest amplifier. Bass is solid and defined to the limits of audibility with ample current reserves. Wide-bandwidth output devices ensure detailed, transparent high frequency response. And, thanks to Crest's exclusive IGMTM circuit, the CC Series will drive 2Ω loads safely without compromising performance.





			CC	800	CC 2	2800	CC 4	000		
Stereo Power:		8Ω	450 W		595	595 W		800 W		
		4Ω	700 W		965	965 W		1,350 W		
		2Ω	900 W		1,40	1,400 W		2,000 W		
Bridged Mono Power:		4Ω	1,850 W		2,800 W		4,000 W			
Output Voltage RMS			73 V		82 V		93 V			
8Ω and 4Ω Stereo Power ratings @1kHz, <0.05%			$^{\!$			ngs @1 kHz, <0.1%THD+N				
Frequency Response			10 Hz – 100 kHz; +0), -2 dB at 1 wat	it					
Power Bandwidth		10 Hz $-$ 35 kHz; +0, -3 dB at rated 4 Ω power								
Damping factor 8 Ω @ 20 Hz t	oing factor 8 Ω @ 20 Hz to 1 kHz		150:1		500:I		500:1			
Input CMRR @ I kHz			> -75 dB		> -65 dB		> -65 dB			
Gain			selectable between x40 (32 dB) and x20 (26 dB)							
Input Sensitivity (x40)			I.32V +/- 3% for I kHz, 2Ω rated power		I.7 V +/- 3% for I kHz, 4Ω rated power		1.88 V +/- 3% for 1 kHz, 4Ω rated power			
Input Impedance					15kΩ B	alanced				
Hum and Noise A-weighted @ Rated power 8 Ω		$\mathbf{B}\Omega$	-106 dB		-111 dB		-112 dB			
Crosstalk IkHz @ rated power 8Ω			-55 dB		-65 dB		-65 dB			
Class			modulated rail, H		switched rail, H		switched rail, H			
Power Supply					Linear with toroid transformer					
Current Draw @ 120 VAC	I/8 power	8Ω	400 W	3.4 A	570 W	4.75 A	720 W	6 A		
		4Ω	685 W	5.71 A	880 W	7.34 A	1,185 W	9.86 A		
		2Ω	1,000 W	8.34 A	1,250 W	10.41 A	1,825 W	15.21 A		
	I/3 power	8Ω	1,000 W	8.34 A	1,355 W	11.30 A	1,835 W	15.30 A		
		4Ω	1,650 W	13.75 A	2,220 W	18.5 A	2,975 W	24.8 A		
		2Ω	2,340 W	19.5 A	2,905 W	24.3 A	4,535 W	37.8 A		
Thermal Emissions 1/3 power, 4Ω BTU/hr			2631		3579		4545			
Cooling			Back to front via I	variable speed f	fan	Back to front via	a 2 variable speed	fans		
Input connectors			Balanced female XLR							
Output connectors			Speakon® connectors and five-way binding post							
Controls	front p	anel:	twin recessed stepped attenuators, circuit breaker/power switch							
	rear p	anel:	mode select, gain select							
LED indicators			Signal presence, ACL TM (Active clip limiting), Active status, Temp							
Construction			16-gauge steel chassis, cast aluminum front panel							
Dimensions			$3.5" \times 19" \times 14.875"$ (16.125" to rack ears) 88.9 mm \times 482.6 mm \times 377.8 mm (409.6 mm to rack ears)							
Weight			32.6 lbs. (14.8	kg)	39.8 lbs. (18.05 kg.)	43.3	bs. (19.64 kg.)		

Architects' & Engineers' Specifications:

The power amplifier shall consist of 2 channels. Each channel will deliver a minimum of (450 / 595 / 800) watts at 8 ohms, (700 / 965 / 1,350) watts at 4 ohms, (1,850 / 2,800 / 4,000) watts at 2 ohms, 20 Hz – 20 kHz. In Bridged mono mode, it will deliver a minimum of (1,850 / 2,800 / 4,000 W) at 4 ohms, 20 Hz – 20 kHz. It shall weigh (32.6 / 39.8 / 43.3) 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, a RMS clip limiter and Autoramp signal control. The amplifier shall have a sensitivity of 1.32 / 1.7 | 1.88 volts (x40) at the input, which will deliver full rated output power in any output configuration. Gain can be changed to x20. The hum and noise level shall be greater than (-106 dB / -111 dB / -112 dB) "A" weighted. The amplifier shall have a class H output stage with a linear power supply. The frequency response shall be greater than 10 Hz – 35 kHz +0, -3 dB for the CC 1800 and 10 Hz - 50 kHz, +0, -3 dB for the CC 2800/4000 at full rated output power @ 4 ohms, 11% THD. The amplifier will operate at either 120 VAC, 60 Hz (safe operating range 100-132 VAC) or at 230 VAC, 50 Hz (safe operating range 200-264), voltage selection determined at factory. Maximum current draw at 120 V shall be no greater then 15 A, both channels driven continuously into a 2 ohm load at 1/8 power. Front panel indicators shall include LED indicators for signal present, ACL (automatic clip limiting), Temp, and Active status. Front panel attenuators will be recessed and detented. Input connectors shall be XLR per channel. Output connectors shall be 5-way binding posts and Speakon, per channel. The packaging of the amplifier shall allow for standard rack mounting without requiring space between similar units as long as the rack is properly ventilated. Dimensions main chassis shall be 19" wide (482.6mm), 14.875" deep (482.6mm), 3.5" high. The amplifiers shall be d



