

CLh™ Series

High Power Amplifiers

CREST AUDIO®

CLh 5000 | CLh 6000C | CLh 2500 | CLh 3000C



Description

The Crest Audio CLh™ Series power amplifiers set a new standard for performance and efficiency for the contracting and installation market. CLh amplifiers feature an ultra-high efficiency amplifier output circuit that reduces weight while, increasing output power, reliability and thermal efficiency.

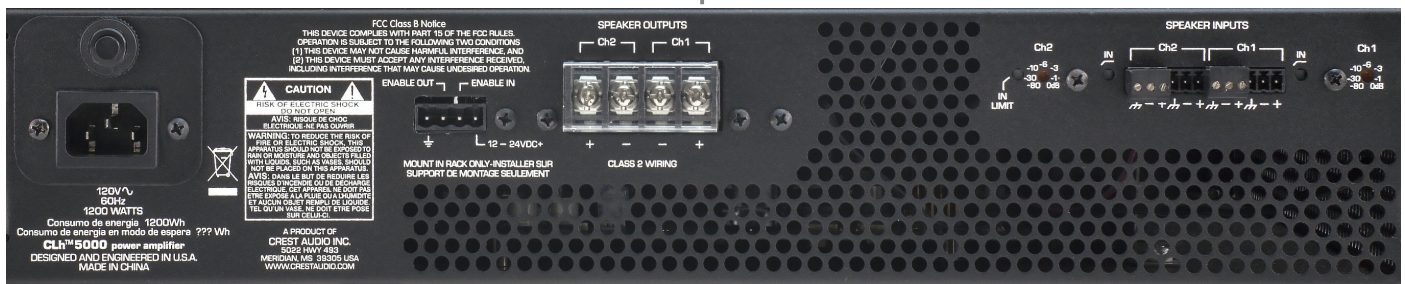
The Crest Audio CLh 5000 and CLh 2500 are ultra-high efficiency, servo-controlled, class-D power amplifiers that deliver high power through two channels to balanced outputs for the ultimate in common-mode noise cancellation

The Crest Audio CLh 6000C and 3000C provide the same high efficiency high power but with Power Factor Corrections for world markets where PFC is required. The CLh 6000C and 3000C models operate on 230V/50 Hz power to drive 100V constant voltage systems.

The CLh Series includes Crest Audio's exclusive ACL™ (Active Clip Limiting), which automatically reduces gain at the onset of clipping to prevent amplifier and load damage; over-current protection; DC voltage; channel active and temperature warning. Additional features include a lightweight switch-mode power-supply, remote turn-on, sequential turn-on, and a switchable, built-in low-cut filter.

Features

- Ultra-high efficiency, servo-controlled, class-D power amplifiers that deliver high power through two channels
- CLh 5000 produces 2,500 watts per channel continuous at 70.7 volts
- CLh 2500 produces 1,250 watts per channel continuous at 70.7 volts
- CLh 6000C produces 3,745 watts per channel at 100 volts
- CLh 3000C produces 1,250 watts per channel at 100 volts
- Crest Audio's exclusive ACL™ (Active Clip Limiting)
- Over-current protection
- DC voltage
- Channel Active and temperature warning
- Light-weight switch-mode power supply
- Remote turn-on
- Sequential turn-on
- Switchable, built-in low-cut filter



CLh™ Series Amplifiers

Specifications

| | CLh™ 2500 | CLh™ 5000 | CLh™ 3000C | CLh™ 6000C |
|----------------------------------|---|---|---|--|
| Rated watts 2 ch x 4 ohms | 1985 watts / 81 volts with 20ms repetitive burst 1470 watts / 77 volts at 0.15% THD, both channels drive at 1kHz. | 1985 watts / 89 volts with 20ms repetitive burst 1470 watts / 77 volts at 0.15% THD, both channels drive at 1kHz. | 2100 watts / 92 volts with 20ms repetitive burst 1500 watts / 77 volts at 0.25% THD, both channels drive at 1kHz. | 3745 watts / 100 volts with 20ms repetitive burst, 3100 watts / 79 volts at 1% THD both channel driven @ 1kHz* (@2.67 ohms) both channels drive at 1kHz. |
| Rated watts 2 ch x 8 ohms | 1175 watts / 97 volts with 20ms repetitive burst 880 watts / 84 volts at 0.15% THD, both channels drive at 1kHz. | 1175 watts / 97 volts with 20ms repetitive burst 880 watts / 84 volts at 0.15% THD, both channels drive at 1kHz. | 1500 watts / 97 volts with 20ms repetitive burst 850 watts / 82 volts at 0.25% THD, both channels drive at 1kHz. | 1250 watts / 100 volts with 20ms repetitive burst 1150 watts / 96 volts at 0.25% THD, both channels drive at 1kHz. |
| Minimum Load Impedance | 4 ohms | 2 ohms | 4 ohms | 2.67 ohms |
| Maximum RMS Voltage Swing | 105 volts | 105 volts | 114 volts | 114 volts |
| Frequency Response | 20Hz - 22kHz; +/-0.5dB at 1 watt | 20Hz - 22kHz; +/-0.5dB at 1 watt | 20Hz - 25kHz; +/-0dB, -3dB | 20Hz - 25kHz; +/-0dB, -3dB |
| 20Hz - 20kHz 2ch x 4 ohms | <0.15% @ 1400 watts 20Hz to 10kHz, decreasing to 1350 watts @ 20kHz, both channels driven | <0.15% @ 1400 watts 20Hz to 10kHz, decreasing to 1350 watts @ 20kHz, both channels driven | <0.2% @ 1400 watts 20Hz to 20kHz, both channels driven | <0.15% @ 1800 watts 20Hz to 20kHz, both channels driven |
| 20Hz - 20kHz 2ch x 8 ohms | <0.15% @ 860 watts 20Hz to 4kHz, increasing to 1000 watts @ 20kHz, both channels driven | <0.15% @ 860 watts 20Hz to 4kHz, increasing to 1000 watts @ 20kHz, both channels driven | <0.15% @ 800 watts 20Hz to 4kHz, both channels driven | <0.15% @ 1000 watts 20Hz to 4kHz, both channels driven |
| Input CMRR | > -75 dB at 1kHz | > -75 dB at 1kHz | > -75 dB at 1kHz | > -75 dB at 1kHz |
| Voltage Gain | x 40 (+32dB) | x 40 (+32dB) | x 40 (+32dB) | x 40 (+32dB) |
| Crosstalk | > -60dB @ 1kHz @ 700 watts power @ 8 ohms | > -60dB @ 1kHz @ 700 watts power @ 8 ohms | > -60dB @ 1kHz @ 1000 watts power @ 8 ohms | > -65dB @ 100Hz @ 1000 watts power @ 8 ohms |
| Hum and Noise | > -100dB, "A" weighted referenced to rated power @ 4 ohms | > -100dB, "A" weighted referenced to rated power @ 4 ohms | > -95dB, "A" weighted referenced to rated power @ 4 ohms | > -100dB, "A" weighted referenced to rated power @ 4 ohms |
| Slew Rate | > 12V/μs | > 12V/μs | > 12V/μs | > 12V/μs |
| Damping Factor (8 ohms) | > 200:1 @ 20Hz - 1 kHz @ 8 ohms | > 200:1 @ 20Hz - 1 kHz @ 8 ohms | > 200:1 @ 20Hz - 1 kHz @ 8 ohms | > 200:1 @ 20Hz - 1 kHz @ 8 ohms |
| Input Sensitivity | 1.92 volts +/- 3% for 1 kHz 4 ohm rated power 2.1 volts +/- 3% for 1 kHz 8 ohm rated power | 1.95 volts +/- 3% for 1 kHz 4 ohm rated power 1.83 volts +/- 3% for 1 kHz 8 ohm rated power | 1.93 volts +/- 3% for 1 kHz 4 ohms rated power, 2.05 volts +/- 3% for 1 kHz 8 ohms rated power | 1.98 volts +/- 3% for 1 kHz 2.67 ohms rated power, 2.23 volts +/- 3% for 1 kHz 4 ohms rated power |
| Input Impedance | 20 kilohms balanced and 10 kilohms unbalanced | 20 kilohms balanced and 10 kilohms unbalanced | 20 kilohms balanced and 10 kilohms unbalanced | 20 kilohms balanced and 10 kilohms unbalanced |
| Current Draw @ 1/8 in VA (watts) | 920 (525) @ 4 ohms, 625 (335) @ 8 ohms | 1435 (890) @ 2 ohms, 920 (525) @ 4 ohms 625 (335) @ 8 ohms | 725 (555) @ 4 ohms, 310 (235) @ 8 ohms | 1570 (1035) @ 2.67 ohms, 1220 (780) @ 4 ohms 930 (440) @ 8 ohms |
| Current Draw @ 1/3 in VA (watts) | 1880 (1200) @ 4 ohms, 1200 (715) @ 8 ohms | 3050 (2155) @ 2 ohms, 1880 (1200) @ 4 ohms 1200 (715) @ 8 ohms | 1700 (1260) @ 4 ohms, 550 (420) @ 8 ohms | 3450 (2465) @ 2.67 ohms, 2200 (1500) @ 4 ohms 1175 (740) @ 8 ohms |
| Idle Consumption: | 195VA, 90 watts | 195VA, 90 watts | 155VA, 100 watts | 205VA, 100 watts |
| Cooling | | 3 temperature dependent variable speed fans | | |
| Controls | | 1 rear panel attenuator and select switch for 70Hz, high pass filter per channel | | |
| Indicator LEDs | | Five LED indicators per channel: Active, Signal, DDT, Temperature, and DC | | |
| Protection | | Thermal, DC, subsonic, incorrect loads, under and over voltage | | |
| Connectors | | 3.81mm 12 position input, 5mm 4 position sequential, 10 gauge wire 4 position output, IEC AC power | | |
| Construction | | 0.0062" thick aluminum | | |
| Dimensions (HxWxD): | 3.48" x 19.0" (front) x 20.30" / 88.39mm x 482.6mm x 515.62mm, 2EIA rack spaces; Mounting depth: 19.70" (500.38mm) behind front rack ears | | | |
| Net Weight: | 14.1lbs / 6.4kg | 14.1lbs / 6.4kg | 14.1lbs / 6.4kg | 14.1lbs / 6.4kg |

*2.67 ohm steady state sine wave power is time limited by circuit breaker and AC limitations

Architect's & Engineer's Specifications

Crest Audio CLh™ Power Amplifiers

The dual channel power amplifiers shall be available as two power levels in each of two power section configurations for domestic and international applications. Each power level shall be capable of low-impedance outputs at 4- and 8-ohms or direct drive constant voltage outputs at 70.7V and 100V.

The power amplifier sections shall be of a highly efficient and lightweight Class D amplifier design with a heavy duty power supply. The power amplifiers shall yield 1,470 watts per channel into 4-ohms or 77 volts for domestic applications. The power amplifiers shall yield 3,745 watts per channel into 2.67-ohms or 100 volts with power factor correction, or 1,250 watts per channel into 8-ohms or 100 volts with power factor correction, for international applications. The power amplifiers' frequency response at 1 watt shall be 20 Hz to 22 kHz.

Each power amplifier shall have rear mounted attenuators with removable knobs, power saving mode and provision for sequential turn-on. Inputs shall be via Euro-style connectors. Powered outputs shall be via touch-proof screw terminals. Each power amplifier shall be contained in a 2U steel chassis with rack mount hardware included.

The dual channel power amplifiers shall be the Crest Audio CLh 2500, CLh 5000, CLh 3000C and CLh 6000C power amplifiers.



Features and specifications subject to change without notice.

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