DCA 2-channel

Digital Cinema Amplifiers

DCA1222 | DCA1622 | DCA2422 | DCA3022 | DCA3422

Crystal-clear, seat-shaking cinema sound is here with our DCA Series Digital Cinema Amplifiers. Five 21 lb (9.5 kg), two rack space models offer power points from 200 to 1700 watts per channel. With QSC's exclusive PowerLight® switching technology you'll hear ultra powerful bass and superior highs in every action scene. In addition to their superior performance we've packed these amplifiers with useful features and every input/output connector you'll ever need.

With PowerLight technology, DCA amplifiers take your soundtracks to a whole new level. Not only does it give your movies bigger bass and cleaner highs, PowerLight also cuts wasted heat and boosts reliability. PowerLight is a switching power supply that provides ample current to the audio power circuitry by charging the supply rails 230,000 times a second through an ultra low impedance circuit. So unlike high-powered amplifiers with conventional supplies, the audio signal is never starved prematurely, but remains crisp and clean.

DCA Series amplifiers also boast a set of useful features such as individually selectable clip limiters, subsonic filters and stereo, parallel, and bridged mono operation. The amplifiers feature XLR, 1/4" TRS, and detachable terminal block input connectors, and outputs are both Neutrik Speakon® and safety shrouded barrier strips.

Five models make it easy to get the exact performance you need. For instance, the DCA 1222 is ideal for surround applications featuring extra low impedance capability to drive 1.6 ohms per channel. The DCA 3422 with 1250 watts per channel at 4 ohms is ideal for powering subwoofer systems.

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	Watts per channel		
Model	8Ω	4Ω	2Ω
DCA 1222	215	375	600
DCA 1622	350	600	800
DCA 2422	475	825	1200
DCA 3022	625	1050	1500
DCA 3422	800	1250	1700

1 kHz, 1% THD

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Output Averaging is a trademark of QSC Audio Products, Inc.
Speakon is a trademark of Neutrik
THX is a trademark of THX Ltd.

Features

- Active inrush limiting—won't blow circuit breakers at turn on
- Both speaker and monitor panel outputs
- THX™ approved for professional cinema applications
- Exclusive PowerLight power supply for great bass
- A hum-free noise floor and ultra low distortion
- Optional crossover modules for bi-amp, tri-amp and subwoofer applications
- Only 3.5" high, even the most powerful systems can be built with only one rack
- DCAs are equipped with a DataPort for use with QSC's DCM (Digital Cinema Monitors) and QSControl.net Basis, a total system solution that greatly reduces labor and wiring costs
- Patented Output Averaging™ short circuit protection
- 14" deep—works with standard depth racks for lower cost and less floor space
- Only 21 lbs for easier racking and shipping—no need to remove amps from pre-wired systems before shipping
- Gain control security cover protects amp from misadjustment
- Variable-speed fan cooling and back-to-front air flow
- Neutrik Speakon and safety shrouded barrier strip output connectors
- LED indicators for metering, status, and operating mode
- 3 year warranty plus optional 3 year extended service contract
- A QSC cinema exclusive!

DCA 2-Channel

Specifications

	DCA1222	DCA1622	DCA2422	DCA3022	DCA3422
Stereo Mode (both channels driven)			Continuous average output power per channel		
8Ω / 20 Hz - 20 kHz / 0.03% THD	200 W	300 W	425 W	550 W	700 W
8Ω / 1 kHz / 1% THD	215 W	350 W	475 W	625 W	800 W
4Ω / 20 Hz - 20 kHz / 0.05% THD	325 W	500 W	700 W	900 W	1100 W
4Ω / 1 kHz / 1% THD	375 W	600 W	825 W	1050 W	1250 W
2Ω / 1 kHz / 1% THD	600 W	800 W	1200 W	1500 W	1700 W
Bridge Mono Mode			Continuous average output power		
16Ω / FTC 20 Hz - 20 kHz / 0.1% THD	400 W	600 W	850 W	1100 W	1400 W
8Ω / FTC 20 Hz - 20 kHz / 0.1% THD	700 W	1100 W	1500 W	2000 W	2300 W
4Ω / EIA 1 kHz / 1% THD	1200 W	1600 W	2400 W	3000 W	3400 W
Signal to Noise (20 Hz - 20 kHz)	< -106 dB	< -107 dB	< -108 dB	< -107 dB	< -107 dB
Input Sensitivity at 8Ω	1.0 Vrms	1.2 Vrms	1.5 Vrms	1.7 Vrms	1.9 Vrms
Input Sensitivity at 4Ω	0.9 Vrms	1.1 Vrms	1.3 Vrms	1.5 Vrms	1.7 Vrms
Output Circuitry	AB	AB	Class H, 2-tier	Class H, 2-tier	Class H, 2-tier
Power Requirements (1/8 pink noise at 4Ω)	6 A*	10 A*	8 A*	12 A*	12 A*
Distortion (SMPTE-IM)	< 0.01%	< 0.01%	< 0.02%	< 0.02%	< 0.02%
Distortion (typical) 20 Hz - 20 kHz: 10 dB below rated power 1.0 kHz and below: full rated power	 < 0.01% THD / 4Ω and 8Ω < 0.01% THD / 4Ω and 8Ω				
Frequency Response	20 Hz-20 kHz, ± 0.2 dB | 8 Hz-50 kHz, + 0, -3 dB				
Damping factor (1 kHz and below)	> 500				
Input Impedance	10k ohms unbalanced, 20k ohms balanced				
Input Clipping	10 Vrms (+22 dBu)				
Cooling	Variable-speed fan, rear-to-front air flow				
Connectors (each channel)	Input: 1/4" TRS, 3-pin XLR and 3-pin detachable terminal blocks (one per channel) Output: Neutrik Speakon® and saftey shrouded barrier strip, including monitor ouput				
Controls	Front: AC switch, Ch. 1 & 2 gain knobs Rear: DIP switches for Ch. 1 & 2 | clip limiter on/off | LF filter on/off | LF filter freq select -30 or 50 Hz inputs parallel or stereo; bridge mode				
Indicators	Power-On: Green LED | Parallel inputs: Yellow LED | Bridged: Yellow LED Clip/Prot: Red LED | Level -10 dB: Green LED | Level -20 dB: Green LED | Signal -35 dB: Green LED (1 per channel)				
Amplifier Protection	Full short circuit, open circuit, thermal, ultrasonic, and RF protection. Stable into reactive or mismatched loads				
Load Protection	On/off muting, individual channel DC fault blocking				
Dimensions (HWD)	3.5" (8.9 cm) 2 rack spaces x 19" (48.3 cm) rack mounting x 14" (35.6 cm) from front mounting rails				
Voltage Gain	40x (32 dB)				
Weight - Net / Shipping	21 lbs (9.5 kg) / 27 lbs (12.3 kg)				
Optional Accessories	DCM Digital Cinema Monitors provide complete crossover and monitor functions Basis and QSControl.net for a complete networked audio solution, including DSP and control and monitoring of amplifiers and loudspeakers The XC-3 cinema crossover is for bi-amp applications with all commonly used cinema speakers The SF-3 subwoofer filter is an adjustable highpass filter for subwoofers The LF-3 low frequency filter is used with the XC-3 for tri-amp applications The DSP-3 and DSP-4 digital signal processors feature a fully programmable signal chain and includes crossover filters plus numerous additional dynamics processors				

** at 120 VAC, both channels driven; multiply current by 0.5 for 230V units*

Specifications subject to change without notice.

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