

DCA

4-channel

DIGITAL CINEMA PRODUCTS

Preliminary Specifications

The latest advances in sound system technology such as Dolby Digital Surround-EX and tri-amplification require more amplifier channels than ever before. That's why we designed our newest DCA amplifiers to give you four channels of power in a compact package that doesn't eat up precious rack space. And, compared to the cost of two stereo amplifiers, you'll find they leave more room in your budget as well. In addition to their superior performance we've packed these amps with useful features designed specifically for the cinema market.

Model	8Ω	4Ω	2Ω
DCA 1644	250x4	400x4 [†]	nr
DCA 1824	170x4	250x4	450x4*

20 Hz-20 kHz, .05% THD †1 kHz, 0.1% THD *1 kHz, 1% THD

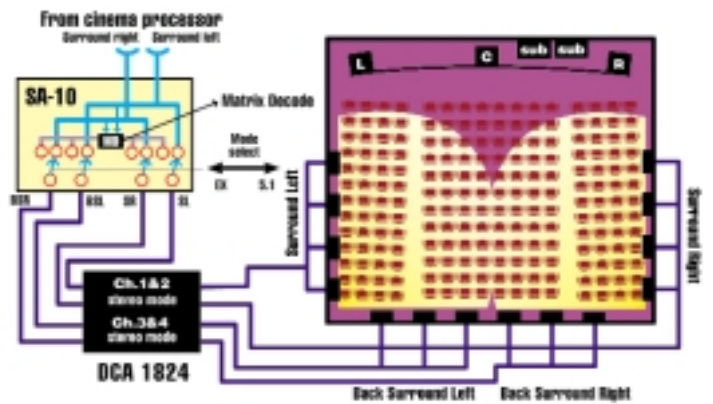


DCA 4-Channel Features

- The DCA 1824 is ideal for surround channels—each channel can power up to four 8Ω speakers in parallel for a total of up to 16 speakers.
- The DCA 1644 is perfect for powering screen channels in small to medium theatres, or for powering mids and highs in tri-amp systems for larger theatres.
- DCAs are equipped with a DataPort for use with QSC DCM—Digital Cinema Monitors, a total system solution that greatly reduces labor & wiring costs.
- PowerWave technology for the added dynamic range required by today's digital soundtracks.
- Compact size (2-RU, 14" deep) ideal for use in console-mounted sound systems
- Great for upgrading existing systems to Dolby Digital Surround-EX with no increase in rack space.
- All DCA models only 21 lbs. for easier racking & shipping.
- Active Inrush Limiting won't blow circuit breakers at turn-on.
- Gain control security cover protects amp from misadjustment.
- 3 year warranty plus optional 3 year extended service contract.

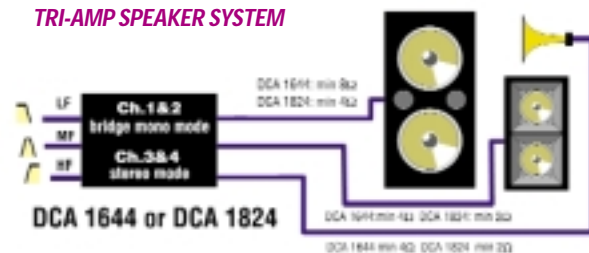
SURROUND CHANNELS

The DCA 1824 is suited for powering surround channels—each channel can power up to four 8-ohm speakers in parallel for a total of up to 16 speakers.



TRI-AMP SPEAKER SYSTEM

Using 4-Channel DCA amplifiers to power tri-amp speaker systems by bridging a pair of channels.



Hear the Power of Technology.

1675 MacArthur Boulevard
Costa Mesa, CA 92626
Ph: 800/854-4079 or 714/957-7100
Fax: 714/754-6174
www.qscaudio.com
email: info@qscaudio.com

DCA SPECIFICATIONS	4-CHANNEL DCA 1644	4-CHANNEL DCA 1824
Stereo Mode <i>Continuous Average Output Power Per Channel</i>		
8 ohms FTC 20 Hz-20 kHz 0.05% THD	250 Watts	170 Watts
4 ohms FTC 20 Hz-20 kHz 0.1% THD	400 Watts †	250 Watts
4 ohms EIA 1 kHz 1% THD	450 Watts	—
2 ohms EIA 1 kHz 1% THD	Not Rated	450W
Bridge Mono Mode <i>Continuous Average Output Power</i>		
16 ohms FTC 20 Hz-20 kHz 0.1% THD	500 Watts	340 Watts
8 ohms FTC 20 Hz-20 kHz 0.1% THD	800 Watts †	500 Watts
4 ohms EIA 1 kHz 1% THD	Not Rated	900 Watts
Signal to Noise (20 Hz-20 kHz)	-105 dB	-105 dB
Input Sensitivity @ 8 ohms	1.12 Vrms	0.93 Vrms
Input Sensitivity @ 4 ohms	1.00 Vrms	0.80 Vrms
Input Clipping	10 Vrms (+22 dBu)	10 Vrms (+22 dBu)
Voltage Gain (full rated output)	40x (32 dB)	40x (32 dB)
Output Circuitry	AB+B	AB+B
Power Requirements (1/8 power pink noise)	14A @ 4 ohms	10A @ 8 ohms
Distortion (SMPTE-IM)	Less than 0.01%	Less than 0.01%
All models	All models	
Distortion (typical) 20 Hz-20 kHz: 10 dB below rated power 1.0 kHz and below: full rated power	Less than 0.02% THD, 4Ω & 8Ω Less than 0.02% THD, 4Ω & 8Ω	
Frequency Response	20 Hz-20 kHz, ± 0.2 dB / 8 Hz-50 kHz, +0, -3 dB	
Damping Factor (1 kHz and below)	greater than 500	
Input Impedance	10 KΩ unbalanced, 20 KΩ balanced	
Cooling	Variable-speed fan, rear-to-front air flow	
Connectors (each channel)	Input: 3-pin detachable terminal blocks (1 each per channel) Output: Safety-shrouded barrier strip, including monitor panel output DataPort: One HD15 per pair of channels	
Controls	Front: AC switch, Ch. 1, Ch. 2, Ch. 3 and Ch. 4 gain knobs Rear: DIP switch for Ch. 1, Ch. 2, Ch. 3 and Ch. 4: clip limiter on/off, LF filter on/off, LF filter freq select-30 or 50 Hz; inputs parallel or stereo; bridge mode	
Indicators	PARALLEL INPUTS: Yellow LED (1 per pair of channels) BRIDGED: Yellow LED (1 per pair of channels) PWR-ON: Green LED CLIP/PROT: Red LED (1 per channel) LEVEL -10 dB: Green LED (1 per channel) LEVEL -20 dB: Green LED (1 per channel) SIGNAL -35dB: 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, DC-fault power supply shutdown	
Dimensions	19" (48.3 cm) rack mounting, 3.5" (8.9 cm) tall (2 rack spaces), 14" (35.6 cm) deep (from front mounting rails)	
Weight	21 lb (9.5 kg) net	
Optional Accessories	DCM Digital Cinema Monitors provide complete crossover and monitor functions	
Power Requirements	100, 120, 230 Vac, 50-60 Hz	

* @ 120 VAC, both channels driven; multiply current by 0.5 for 230V units FTC: all channels driven EIA: one channel driven † (0.1% THD 1 kHz)

