



RMXa Series

**RMX 850a | RMX 1450a |
RMX 2450a | RMX 4050a |
RMX 5050a**

Professional Power Amplifiers

Features

- Professional quality performance—incorporates road-proven QSC designs
- The 4000 watt RMX 4050a operates on a standard 15 amp plug (120V)
- Both the RMX 4050a and RMX 5050a feature a dual mono, high-current power supply for increased reliability and performance
- The RMX 4050a provides improved thermal performance yielding higher continuous power in 2 ohm stereo or 4 ohm bridged applications.
- Compact size – up to 2500 watts in 2 rack spaces or 5000 watts in 3 rack spaces
- High-current toroidal transformers for greater 2 ohm power and low noise
- Independent user-defeatable clip limiters reduce distortion
- Selectable low-frequency filters (30 Hz or 50 Hz) protect speakers and increase headroom
- Balanced 1/4" (6.3 mm) TRS, XLR, and barrier strip inputs
- Touch-proof binding post and Neutrik Speakon® outputs
- Front mounted gain controls for easy access
- Signal and Clip LED indicators to monitor performance
- Independent DC and thermal overload protection on each channel automatically protects amplifier and speakers
- 3-year warranty plus optional 3-year extended service contract

**RMX 850a | RMX 1450a | RMX 2450a |
RMX 4050a | RMX 5050a**



The RMXa Series amplifiers from QSC offer true professional-quality performance at an affordable price. Three 2-rackspace models range in power from 430 to 1200 watts per channel at 2 ohms. Two 3-rackspace models provide 2000 to 2500 watts per channel at 2 ohms. All five models feature a compact chassis less than 16" deep. RMXa amplifiers include a comprehensive set of features including XLR and 1/4" balanced inputs, Speakon® and binding post outposts for convenient connectivity. User-defeatable clip limiters and selectable low-frequency filters optimize sonic performance.

RMX 5050a

QSC's RMX 5050a power amplifier represents state-of-the-art in professional quality performance at an affordable price. Perfectly suited for a wide range of

sound reinforcement applications including professional touring, performing musicians, and mobile entertainers, the RMX 5050a is optimized to deliver high levels of sustained power, extraordinary audio performance and road-proven reliability.

RMX 4050a

The RMX 4050a is a "heavy duty" model designed to work as hard into 2 ohm loads as most competing amplifiers will at 4 ohms.

Both the RMX 5050a and RMX 4050a feature a three-tier, Class H design that is extremely efficient at real world power levels. Less AC current is wasted and more available current goes into producing useful audio power. 120 volt versions of the RMX4050a accomplish all this with a standard 15 amp plug.

RMX Power Amplifiers

Model	Watts per channel			
	8Ω	4Ω	2Ω*	Bridged 4Ω*
RMX 850a	200	300	430	830
RMX 1450a	300	500	700	1400
RMX 2450a	500	800	1200	2400
RMX 4050a	850	1400	2000	4000
RMX 5050a	1100	2000*	2500	5000

8 ohms: 0.1% THD, 4 ohms: 0.5% THD, 2 ohms and 4 ohms bridged: 1 kHz, 1% THD

RMXa Details

	RMX 850a	RMX 1450a	RMX 2450a	RMX 4050a	RMX 5050a
Stereo Mode (both channels driven)					
8Ω / FTC 20 Hz – 20 kHz / 0.1% THD	185 W	260 W	450 W	800 (650**) W	1050 W
8Ω / EIA 1 kHz / 0.1% THD	200 W	300 W	500 W	850 W	1100 W
4Ω / FTC 20 Hz – 20 kHz / 0.1% THD	280 W	400 W	650 W	1300 W	1600 W
4Ω / EIA 1 kHz / 0.1% THD	300 W	500 W (0.5% THD)	750 W	1400 W	1800 W
2Ω / FTC 20 Hz – 20 kHz / 1% THD	–	–	–	1600 W	2000 W
2Ω / EIA 1 kHz / 1% THD	430 W	700 W	1200 W	2000 W	2500 W
Bridge-Mono Mode					
8Ω / FTC 20 Hz – 20 kHz / 0.1% THD	530 W	800 W	1300 W	2600 W	3200 W
8Ω / EIA 1 kHz / 0.1% THD	600 W	900 W	1500 W	2800 W	3600 W
4Ω / EIA 1 kHz / 1% THD	830 W	1400 W	2400 W	4000 W	5000 W
Signal to Noise (20 Hz – 20 kHz) 8Ω	> -100 dB	> -100 dB	> -100 dB	> -100 dB	> -100 dB
Distortion (SMPTE-IM)	< 0.01%	< 0.01%	< 0.02%	< 0.02%	< 0.02%
Input Sensitivity at 8Ω	1.15V (+3.4 dBu)	1.15V (+3.4 dBu)	1.23V (+4.0 dBu)	1.42V (+5.3 dBu)	1.42V (+5.3 dBu)
Voltage Gain	31.6x (30 dB)	40x (32 dB)	50x (34 dB)	64x (36 dB)	64x (36 dB)
Output Circuitry	Class AB	Class AB	2-tier Class H	3-tier Class H	3-tier Class H
Power Requirements					
Typical, 1/8 power pink noise at 4Ω*	4.5 A	6.0 A	6.3 A	10.0 A	13.9 A
Severe, 1/3 power pink noise at 4Ω*	6.6 A	9.6 A	15.6 A	20.1 A	26.9 A
Supplied Plug Type, 100/120V	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-15	NEMA 5-20
Supplied Plug Type, 230V	CEE7/7	CEE7/7	CEE7/7	CEE7/7	CEE7/7
Weight					
Net	35 lb (15.9 kg)	40 lb (18.2 kg)	44.5 lb (20.2 kg)	68 lb (30.8 kg)	75 lb (33.1 kg)
Shipping	41 lb (18.6 kg)	46 lb (20.9 kg)	50.5 lb (23 kg)	77 lb (34.9 kg)	87 lb (37.2 kg)
Distortion (typical)					
20 Hz – 20 kHz: 10 dB below rated power	< 0.03% THD / 4Ω and 8Ω			< 0.02% THD / 4Ω and 8Ω	
1.0 kHz and below: full rated power	< 0.03% THD / 4Ω and 8Ω			< 0.02% THD / 4Ω and 8Ω	
Frequency Response					
20 Hz – 20 kHz: +0/-1 dB	-3 dB points: 5 Hz and 50 kHz (LF filter bypassed / 8Ω)				
Damping Factor (1 kHz and below)					
> 300 at 8Ω					> 250 at 8Ω
Input Impedance					
10k ohms unbalanced / 20k ohms balanced					
Input Clipping					
10 Vrms (+22 dBu)				6.4 Vrms (+18 dBu)	
Cooling					
Continuously variable speed fan, back-to-front air flow					
Connectors (each channel)					
Input: Active balanced / 3-pin Euro-style detachable terminal block and XLR (pin 2+) Output: Touch-proof binding posts / Neutrik Speakon®					
Controls					
Front: AC switch / Ch. 1 & 2 gain knobs Rear: 10-position DIP switch					
Indicators					
Power-on: Green LED / Signal: Yellow LED (1 per channel) / Clip: Red LED (1 per channel) Protect: Red LED					
Amplifier Protection					
Full short circuit, open circuit, thermal, ultrasonic, RF protection. Stable into reactive or mismatched loads					
Load Protection					
Turn-on/off muting / AC coupling (850, 1450) / Triac crowbar (1850HD, 2450, 4050HD, 5050) on each channel					
Dimensions					
3.5" (8.9 cm) tall / 2 rack spaces				5.25" (13.3 cm) tall / 3 rack spaces	
Power Requirements					
100, 120, 230 VAC, 50 – 60 Hz (factory configured)					

* 1.0 kHz sine wave, 1% THD, 1 channel driven

Specifications subject to change without notice.



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