RMX Series

Professional Power Amplifiers

RMX850 | RMX1450 | RMX1850HD | RMX2450 | RMX4050HD | RMX5050

The RMX Series amplifiers from QSC offer true professional-quality performance at an affordable price. Four 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 six models feature a compact chassis less than 16" deep. RMX 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.

RMX5050

QSC's RMX5050 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 RMX5050 is optimized to deliver high levels of sustained power, extraordinary audio performance and road-proven reliability.

RMX4050HD

Like its smaller sibling (the RMX1850HD), the RMX4050HD is one of two RMX "heavy duty" models designed to work as hard into 2 ohm loads as most competing amplifiers will at 4 ohms.

Both the RMX5050 and RMX4050HD 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 RMX4050HD accomplish all this with a standard 15 amp plug.

RMX Power Amplifiers

	Watts per channel			
Model	8Ω	4Ω	2Ω*	Bridged 4Ω*
RMX850	200	300	430	830
RMX1450	280	450	700	1400
RMX1850HD	360	600	900	1800
RMX2450	500	750	1200	2400
RMX4050HD	850	1400	2000	4000
RMX5050	1100	1800	2500	5000

*1 kHz, 0.1% THD *1 kHz, 1% THD*

Speakon is a trademark of Neutrik



Features

- Professional quality performance—incorporates road-proven QSC designs
- The 4000 watt RMX4050HD operates on a standard 15 amp plug (120V)
- Both the RMX4050HD and RMX5050 feature a dual mono, high current power supply for increased reliability and performance
- The RMX1850HD and RMX4050HD provide improved thermal performance yielding higher continuous power in 2 ohm stereo or 4 ohm bridged applications (a RMX HD exclusive!)
- Compact size—up to 2400 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 Series

Specifications

	RMX850	RMX1450	RMX1850HD	RMX2450	RMX4050HD	RMX5050
Stereo Mode (both channels driven)			Continuous average output power per channel			
8Ω / FTC 20 Hz - 20 kHz / 0.1% THD	185 W	260 W	350 W	450 W	800 (650**) W	1050 W
8Ω / EIA 1 kHz / 0.1% THD	200 W	280 W	360 W	500 W	850 W	1100 W
4Ω / FTC 20 Hz - 20 kHz / 0.1% THD	280 W	400 W	550 W	650 W	1300 W	1600 W
4Ω / EIA 1 kHz / 0.1% THD	300 W	450 W	600 W	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	900 W	1200 W	2000 W	2500 W
Bridge Mono Mode			Continuous average output power			
8Ω / FTC 20 Hz - 20 kHz / 0.1% THD	530 W	800 W	1100 W	1300 W	2600 W	3200 W
8Ω / EIA 1 kHz / 0.1% THD	600 W	900 W	1200 W	1500 W	2800 W	3600 W
4Ω / EIA 1 kHz / 1% THD	830 W	1400 W	1800 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	> -100 dB
Distortion (SMPTE-IM)	< 0.01%	< 0.01%	< 0.02%	< 0.02%	< 0.02%	< 0.02%
Input Sensitivity at 8Ω	1.15V (+3.4 dBu)	1.15V (+3.4 dBu)	1.16V (+3.5 dBu)	1.23V (+4.0 dBu)	1.25V (+4.1 dBu)	1.42V (+5.3 dBu)
Voltage Gain	31.6x (30 dB)	40x (32 dB)	46x (33 dB)	50x (34 dB)	64x (36 dB)	64x (36 dB)
Output Circuitry	AB	AB	Class H, 2-tier	Class H, 2-tier	Class H, 3-tier	Class H, 3-tier
Power Requirements						
Typical, 1/8 power pink noise at 4Ω*	4.5 A	6.0 A	6.1 A	6.3 A	10.0 A	13.9 A
Severe, 1/3 power pink noise at 4Ω*	6.6 A	9.6 A	11.2 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 5-15	NEMA 5-20
Supplied Plug Type, 230V	CEE7/7	CEE7/7	CEE7/7	CEE7/7	CEE7/7	CEE7/7
Weight						
Net	35 lbs (15.9 kg)	40 lbs (18.2 kg)	44.5 lbs (20.2 kg)	44.5 lbs (20.2 kg)	68 lbs (30.8 kg)	75 lbs (33.1 kg)
Shipping	41 lbs (18.6 kg)	46 lbs (20.9 kg)	50.5 lbs (23 kg)	50.5 lbs (23 kg)	77 lbs (34.9 kg)	87 lbs (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 bybassed / 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)					

** at 120VAC, both channels driven; multiply current by .5 for 230V units ** CE Rating*



Specifications subject to change without notice.

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