



RKB Series Eight Channel Power Amplifiers

RKB-850, RKB-D850, RKB-8100, RKB-D8100



RKB Series Eight Channel Power Amplifiers

Rotel has been designing and manufacturing award-winning power amplifiers for over 50 years. That considerable expertise has now been applied to a new generation of rack-mount custom installation amplifiers that are sure to set standards for performance, reliability, and ease of installation. The amplifiers come in two eight channel configurations (50 watts per channel and 100 watts per channel, all channels driven simultaneously.) There are two input versions, one with standard analog inputs and one with digital inputs feeding 24bit/192kHz capable DACs.

RKB-850



RKB-D850



RKB-850 and RKB-D850

The RKB-850 and RKB-D850 are rated at 8 x 50 watts RMS into 8 ohms all channels driven and can double that output into 4 ohms as a result of their sophisticated, efficient Class D design. The amplifiers are rugged and extremely reliable. Yet, Rotel has gone further to maximize long service life, utilizing dual thermostatically controlled fans to exhaust heat away from the output modules and power supply.

Both the RKB-850 and RKB-D850 feature input linking through input A on the rear panel allowing the analog or digital signal on input A to be routed to all three other channels saving time and additional wiring. Analog input A can also be summed to mono, allowing two channels of summed stereo-to-mono output. If input A is set to mono and the link through feature is used, all 8 channels will share the same mono signal – ideal for covering larger areas where normal stereo operation is not desired, for instance landscape audio or commercial applications. A rear panel RS232 connection allows connection to automation systems to provide control and feedback. The RKB amplifiers also include 4 front panel trim pots which allow easy level adjustment to balance zones.

Where the amplifiers differ is in the type of input options. The RKB-850 is an analog input only amplifier with four stereo pairs of RCA connectors. The RKB-D850 features four Toslink digital inputs with individual stereo DACs for each pair of channels in addition to the four analog inputs. When a digital audio source is detected on the Toslink input the unit will automatically switch to the digital input. If an analog input is connected, that source similarly will be detected. No user configuration is required. Each digital input supports up to 24 Bit/192 kHz LPCM audio.

The RKB-850 and RKB-D850 share many common features including 12-volt triggers, 5-way speaker binding posts, a buffered analog audio pre-output to connect additional RKBs, and an IEC power receptacle with detachable cord. Their 2U height takes up a minimal amount of rack space and the RKBs can be stacked together without the need for rack spacers to maximize rack efficiency.



RKBs are supplied with rack ears.

RKB-8100



RKB-D8100



RKB-8100 and RKB-D8100

It's no secret the typical long runs of speaker cable in custom installations present real challenges to amplifiers. The best way to maximize the sound quality of custom speakers is to give them high quality power. Identical in terms of features to their 50 watt per channel cousins but with a full 8 x 100 watts per channel, all channels driven at 8 ohms, the RKB-8100 and RKB-D8100 are Rotel's most powerful custom installation amplifiers. Yet, they maintain the compact, dual-fan cooled 2U chassis that makes them space efficient in the equipment rack. Either is the perfect solution for higher performance multizone audio systems. Sound quality and reliability have been

engineered throughout to make them truly set and forget designs. Dual SMPS power supplies partnered with a high efficiency, low heat, Class D operation and no compromise audio engineering set a new standard for the custom installation amplifier category. Choose either the analog-only input RKB-8100 or the digital + analog input RKB-D8100 as suits the system configuration. In either case, be prepared for an extraordinary audio experience.



RKB Series Eight Channel Power Amplifiers

	RKB-850	RKB-8100
Continuous Power Output (20Hz-20kHz, <0.1% THD, 8 ohms)	50 watts / channel (8 ch driven)	100 watts / channel (8 ch driven)
Total Harmonic Distortion (20Hz-20kHz, 8 ohms)	< 0.08%	< 0.08%
Intermodulation Distortion (60 Hz : 7 kHz, 4:1)	< 0.08%	0.08%
Damping Factor	> 150	> 150
Input Impedance / Sensitivity	100k ohms / 0.6V	100k ohms / 0.9V
Amplifier Gain	30 dB	30 dB
Frequency Response	20Hz - 20kHz, +0dB/-1.4dB	20Hz - 20kHz, +0dB/-1.4dB
Signal to Noise Ratio (IHF A)	108 dB	108 dB
Crosstalk / Separation	> 60 dB	> 60 dB
Speaker Impedance	4 ohms minimum	4 ohms minimum
Power Requirements:		
USA:	120 Volts, 60 Hz	120 Volts, 60 Hz
EC:	230 Volts, 50 Hz	230 Volts, 50 Hz
Power Consumption	150 watts Idle: 40 watts Standby: < 0.5 watts	300 watts Idle: 75 watts Standby: < 0.5 watts
Dimensions (W x H x D)	430 x 97 x 424 mm (17 x 3 7/8 x 16 3/4 ins)	430 x 97 x 424 mm (17 x 3 7/8 x 16 3/4 ins)
Front Panel Height	2U (88.1mm, 3 1/2 ins)	2U (88.1mm, 3 1/2 ins)
Weight (net)	9.3 kg, 20.5 lbs.	9.6 kg, 21 lbs.
Accessories Included	Rack Mount Kit	Rack Mount Kit



	RKB-D850	RKB-D8100
Continuous Power Output (20Hz-20kHz, <0.1% THD, 8 ohms)	50 watts / channel (8 ch driven)	100 watts / channel (8 ch driven)
Total Harmonic Distortion (20Hz-20kHz, 8 ohms)	< 0.08%	< 0.08%
Intermodulation Distortion (60 Hz : 7 kHz, 4:1)	< 0.08%	< 0.08%
Damping Factor	> 150	> 150
Input Impedance / Sensitivity	50k ohms / 0.6V	50k ohms / 0.9V
Amplifier Gain	30 dB	30 dB
Frequency Response	20Hz - 20kHz +0dB/-1.4dB	20Hz - 20kHz +0dB/-1.4dB
Signal to Noise Ratio (IHF A)	108 dB	108 dB
Crosstalk / Separation	> 60 dB	> 60 dB
Speaker Impedance	4 ohms minimum	4 ohms minimum
Digital Section		
Signal to Noise Ratio (IHF A)	95 dB	95 dB
Input Sensitivity	-10 dBFS	-7 dBFS
Optical Digital Signals	SPDIF LPCM (up to 192kHz 24bit)	SPDIF LPCM (up to 192kHz 24bit)
Power Requirements:		
USA:	120 Volts, 60 Hz	120 Volts, 60 Hz
EC:	230 Volts, 50 Hz	230 Volts, 50 Hz
Power Consumption	150 watts Idle: 45 watts Standby: < 0.5 watts	300 watts Idle: 80 watts Standby: < 0.5 watts
Dimensions (W x H x D)	430 x 97 x 424 mm (17 x 3 7/8 x 16 3/4 ins)	430 x 97 x 424 mm (17 x 3 7/8 x 16 3/4 ins)
Front Panel Height	2U (88.1mm, 3 1/2 ins)	2U (88.1mm, 3 1/2 ins)
Weight (net)	9.3 kg, 20.5 lbs.	9.6 kg, 21 lbs.
Accessories Included	Rack Mount Kit	Rack Mount Kit

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