



# RKB Series Eight Channel Power Amplifiers

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

Version 2



# 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.



## RKB-850 RKB-D850

### RKB-850, RKB-D850, RKB-8100 and RKB-D8100

The amplifiers come in two eight-channel configurations at 8 x 50 watts and 8 x 100 watts RMS per channel into 8 ohms, all channels driven. All RKBs can double that output into 4 ohms as a result of their sophisticated, efficient Class D design. The amplifiers are rugged and extremely reliable, but Rotel has taken additional further precautions to maximize service life by utilizing dual thermostatically controlled fans to exhaust heat away from the output modules and power supply.

The Digital versions (Designated by a "D" in the nomenclature) feature 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.

### All RKB amplifiers share common features such as:

Improved input linking. In the previous units, zones could only be linked from A. Now, a second input can source from any 'upstream' input - so B can source from A, C can source from B and D can source from C. You can create four individual stereo zones, two dual zones or three common zones plus an individual zone. In other words, two Sonos Connects (for instance) might be divided between kitchen and patio (A+B zones) and Master Bedroom and Bath (C+D).

### Ideal for use with Sonos Connect.

The new RKB amplifiers are not only improved in general functionality and flexibility, more importantly, they can now be tied into Sonos based systems seamlessly. A 3-way switch located on the rear of the amplifiers controls and operates Signal Sensing for both analog and digital inputs (on the "D" versions). In the case of the "D" versions, the signal sense is applied to the circuit post-DAC so it is not fooled by a clock signal. The amplifier stages and certain other circuits are shut down, but the DAC circuit needs to remain on for signal sensing.



RKBs are supplied with rack ears.

# RKB-8100 RKB-D8100

## Additional features:

- A rear panel RS232 connection allows automation systems to provide control and feedback. The RKB amplifiers also include four front panel trim pots, which allow easy level adjustment to balance zones.
- Never Turn Off - The RKB will always be on, never go into standby. (Obviously the amplifier can be turned off completely using the on/off button on the front panel).
- Trigger on/off – when the RKB receives a 12 volt trigger, it will turn on.
- NOTE - RS232 On/Off – Can also be turned on or off via RS232 command.
- As a safety feature and regardless of mode the amplifier will monitor its temperature. If it rises above a determined level the fans will come on until the unit has cooled down then return to standby operation.
- 5-way speaker binding posts
- Buffered analog audio pre-output to connect additional RKBs,
- IEC power receptacle with detachable cord.
- 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.

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



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

**Rotel of America**  
54 Concord St.  
N. Reading, MA 01864 USA  
T +1 978 664 3820  
F +1 978 664 4109  
[www.rotel.com](http://www.rotel.com)