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Reviewed by:
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Rotel RMB-1077 Multichannel Amplifier



Features Snapshot!

Description

Model: RMB-1077

Price: \$2499 USD

Dimensions: 17.13"W x 2.88"H x 16.38"D

Weight: 17.2 pounds

Warranty: Five years parts and labor

Features

- B&O ICEpower technology
- Rated by manufacturer at 100W x 7 into 8 ohms
- 4-ohm stable
- 12V trigger
- 90% efficiency produces low heat
- Controlled Oscillation Modulation (COM) and Multivariable Enhanced Cascade Control (MECC)
- Low-profile design
- Gold-plated five-way binding posts
- Black or black/silver finishes available

For years, power amplifiers favored brute force over grace. While loudspeakers were guaranteed clean, abundant power for crescendos and other musical punctuations, a good percentage of the electrical energy generated by these power supplies never reached the loudspeakers but was converted into heat.

In the last decade, audio engineers have embraced more efficient means of amplifying musical waveforms. Eschewing the use of gargantuan transformers and soda-can-sized capacitors, digital microprocessor technology has enabled amplifiers to supply power by dynamically tracking the demands of music. There are now many types of digital amplification circuits. Sunfire calls theirs the Tracking Downconverter power amplifier, while Audio Research and, at one time, Bel Canto built proprietary circuits based on Tripath Technology's DPP microprocessor, which is also known as class-T.

It took Rotel almost two years of research and development to refine Bang & Olufsen's ICEpower digital amplifier circuit into a product that satisfied their ears. The result is a family of digital amplifiers that includes the RB-1091 mono amplifier (\$1499), the RB-1092 two-channel amplifier (\$2499), and the subject of this review, the RMB-1077 seven-channel amplifier (\$2499).

No need to lift with your legs

The RMB-1077 comes in black or in black and silver; the latter gives the affordable Rotel a very classy, chic appearance. At 17 pounds, the slender chassis has a pleasing heft. The RMB-1077 uses good-quality RCA input jacks and very-high-quality five-way binding posts designed and made by Rotel. Although the inputs are slightly crowded, I had no problem locking down my massive Analysis Plus T1 spades to the Rotel's outputs. The pushbutton power switch engages with a solid click, while a blue LED indicating On status and a soft green glow from the internal electronics augment the RMB-1077's good looks. Only the slightly tinny steel cover detracts from the overall handsome and well-assembled appearance.

It's what's inside that makes this mighty mite special. Under the cover, well perforated for ventilation, sit seven coaster-size ICEpower modules. According to Rotel, the RMB-1077 is capable of delivering 100, 200, or 400W of continuous power into 8, 4, or 2 ohms, respectively, all seven channels driven simultaneously. (Rotel's larger, heavier, analog RMB-1075 and RMB-1095 aren't rated into 2 ohms at all.) Even more impressive, the RMB-1077 delivers this power while drawing less electricity from the wall; it generated little heat, never getting more than lukewarm no matter how hard I pushed it.

B&O's ICEpower reportedly improves on class-D by removing distortions created during the analog-to-digital and digital-to-analog conversions of the musical signal. To sufficiently describe both technologies would tax the space limitations of this article. Visit www.icepower.bang-olufsen.com for a more detailed description of how Controlled Oscillation Modulation (COM) and Multivariable Enhanced Cascade Control (MECC) operate.

Sound

The RMB-1077's defining characteristics were its broad, refined frequency response and shocking dynamic range. It reproduced bass with excellent definition and depth. During chapters 9 and 10 of *The Core*, the Rotel revealed more of the low-frequency effects' textures than many higher-priced amplifiers I've owned. This rippling bass energy heightened the tension as a gigantic lightning bolt ripped through the streets of Rome and an undersea earthquake agitated the Virgil's crew.

I've rarely experienced as exciting a combination of punch and resolution from an amp at this price. The shotgun blasts in chapter 11 of *Four Brothers* made me feel as if I was in the middle of the vicious gun battle between the Mercer family and drug kingpin Victor Sweet. Lightning-quick dynamics slammed me in the chest with concussive snaps as bullets were expended. Scenes involving gunfire or explosions always took me by surprise. For such an unassuming amp, the Rotel's power reserves seemed limitless.

The RMB-1077 delivered film dialogue with persistent clarity. *Snatch* showcases one of Brad Pitt's better roles, and the Rotel extracted the most from wise-cracking Mickey O'Neil's thick accent. The RMB-1077 not only excelled with vocal articulation, but easily separated voices from the mayhem of dense surround mixes. Words were never upstaged by the shellshock of the opening beach scene in *Saving Private Ryan*, or the onslaught of the Martian tripods in

chapters 14 and 15 of War of the Worlds.

But excellent frequency response would mean little if a component didn't suspend disbelief by seamlessly replicating a film's aural ambiance. Wetness, sweetness, atmosphere -- call it what you will, the RMB-1077 reproduced the dense atmospheres of high-frequency harmonics that give context and realism to stories, immersing my head in the splendor of well-crafted soundtracks.

I then listened to music and made much the same observations. Soundstages and timbres were universally excellent. Stereo images were both diffuse and accurate, spreading out beautifully between and to the sides of my Thiel CS2.4 loudspeakers. I've owned both the RMB-1075 and RMB-1095, and the RMB-1077 sounded more natural than either. The deliciously desperate "Aimee," from De/Vision's 6 Feet Underground [CD, A Different Drum 1214], possessed an ease and warmth that drove me to listen to it repeatedly, while the percussion and guitar in Paul Simon's You're the One [CD, Warner Bros. 47844-2] sounded unrestricted and tonally accurate. Commonly heard instruments such as guitar and piano possessed excellent clarity and decomposition, with a slight softening of extremely high frequencies, though the dynamic ranges of orchestral recordings were ever so slightly compressed. Later, I discovered that these shortcomings were more faults of my ancillary equipment than of the RMB-1077.

Much of my evaluation was done with Rotel's RSP-1068 surround-sound processor, but replacing the RSP-1068 with my McCormack MAP-1 multichannel preamp opened up the dynamic range. I was playing with my son in an adjacent room when Bernstein's Candide Suite, from Eiji Oue and the Minnesota Orchestra's Showcase [CD, Reference RR-907CD], drew my attention. The dynamics and slam I heard during the more chaotic segments were breathtaking, while the delicate nuances of quieter moments kept me involved until the very last note.

It seemed that the RMB-1077 needed better upstream components than Rotel's own RSP-1068. The combination of the McCormack MAP-1 and the Integra DPS-10.5's internal surround-sound processors increased the perceived ambience and consistency of surround images. Seal's wonderfully produced fourth studio album, IV [DVD-A, Warner Bros. 47947-9], sounded fantastic. Seal's voice benefited from the RMB-1077's slight warmth, but his crisp delivery wasn't suppressed. Trevor Horn's involving, densely packed arrangements integrated seamlessly without sounding tacked-on or artificially layered. The RMB-1077 delivered extremely well-integrated sound without the slightest evidence of harshness or other digital aberrations.

Comparing new and new

Transparency means slightly different things to different people. For me, the word means that a component gets out of the way of the music. Whether because of the software or the lack of a noisy power supply, I've found some digital amplifiers are more transparent than their analog cousins. My favorite has been Audio Research Corporation's sublime 150M.5 (\$7495). Like other ARC products, the 150M.5 makes you forget you're listening to an amplifier. Although I've been without the ARC for several months, its sound still sticks with me -- so natural and effortless that listening takes priority over analysis.

A friend of mine purchased ARC's two-channel 150.2 (\$2495), which allowed me to reacquaint myself with the siren song of this class-T design. The Rotel offered similar qualities, though not at the ARC's absolute levels of refinement or resolution. The ARC's high frequencies were sophisticated and open, while the Rotel sounded slightly reserved and rounded on top. But the

Rotel never sounded strained or etched, and both possessed impressive midrange weight and resolution. The ARC was simply a model of smoothness and palpability. Bass was remarkably similar; both amps had the same incredible resolution of harmonics and slam. The ARC's bass sounded more weighty and warm, while the Rotel's was on the leaner end. Both amps were champs at delivering astonishing dynamics and a nicely open and consistent soundstage.

What you won't find in the Rotel is ARC's impeccably build quality and extensive use of top-shelf parts. Rotel builds a solid product with nice touches of quality where they count (e.g., the RMB-1077's excellent five-way binding posts).

The future is a knockin'

As much as audio designers try to improve on traditional analog circuits, the basic design elements are the same as they were 30 years ago. Digital amplification is an entirely new approach to amplification and will succeed as long as there are excellent products like the RMB-1077.

When I first received the Rotel, my bias (fueled by testosterone) made me skeptical of its abilities. I thought for sure that my Thiel CS2.4s' difficult load and brutally revealing nature would rip the poor RMB-1077 apart. Boy, was I wrong. After living with this diminutive box for a few months, I looked beyond its size and took pleasure in its considerable musical abilities. In terms of bang for the buck, there isn't a seven-channel amplifier that I'm familiar with that can touch the power, refinement, and cool-running operation of the RMB-1077. Above all, it's a great amp with which to sit down and listen.

Review System
Speakers - Thiel CS2.4 (mains), MCS1 (center), PowerPoint (surrounds), SS2 (subwoofer)
Amplifier - Linn Model 10
Preamplifier-Processors - McCormack MAP-1, Rotel RSP-1068
Source - Integra DPS-10.5 universal audio/video player
Cables - Analysis Plus, Stereovox
Monitor - Mitsubishi WT-46809 rear-projection widescreen monitor (with Duvetyne modification and full ISF calibration)
Power Conditioner - Balanced Power Technologies BP-10.5 Signature Plus