

Rotel RMB-1095

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One of the most difficult things for a manufacturer of a wide range of audio equipment to maintain is *consistency*. By this, I don't mean sample-to-sample consistency—although that, too, is very important—but consistency of sound quality and value among the different types of products offered and among the various products in a line.

What consumers and dealers want is a consistently high level of quality and the same type of sound among different products from the same manufacturer. If you like one of a company's CD players, there should be a good chance that you'd be equally pleased with one of their amplifiers as well. Amplifiers with different power outputs from one manu-

facturer should have a similar sonic character. What dealers like to avoid most of all is a situation in which some products in a manufacturer's line are really excellent and others are mediocre or worse. This leads to—if the manufacturer's policy allows it—an ordering pattern known as “cherry-picking.”

Perhaps more than any other major audio manufacturer with whose products I'm familiar, Rotel has impressed me with the consistency of its product quality. Over the years, I've had in my system various Rotel CD players, surround processors, and amplifiers, and what they all had in common was excellent sound quality for the price. The Rotel RMB-1095 did nothing that

would make me qualify this generalization.

Description and Design

Other than having more connectors in the back and three additional LEDs in the front, the RMB-1095 looks exactly like the Rotel RB-1090 stereo amplifier that I reviewed in the January 2000 issue of *Stereophile*. The RMB-1095 is 9½ inches high and weighs almost 100 lbs, so the best place for it is on the floor or on a dedicated amp stand. Casters instead of feet at the amplifier's rear make it easier to move around than other amplifiers of comparable weight.

The 2-channel RB-1090 is rated at 380Wpc into 8Ω, whereas the RMB-1095 is specified at a “mere” 200Wpc, which still puts it in the high-powered category—and the THX seal of approval means that that specification is conservative. The RMB-1095's power supply is built around two 1.2kVA toroidal transformers, with eight slit-foil 80V/15,000μF capacitors. Each channel has three pairs of power transistors rated at 15 amps. To keep all this power under control, there's a soft turn-on circuit, and “overcurrent” protection with front-panel LEDs for signaling any problems with the RMB-1095's operation. There are balanced XLR as well as unbalanced RCA inputs, but the RMB-1095 is not a truly balanced design, so there's no real advantage to using balanced connections unless you have very long interconnects. (I know of no

SPECIFICATIONS

RMB-1095 5-channel power amplifier

Continuous power output: 200Wpc into 8Ω, 20Hz–20kHz, <0.03% Total Harmonic Distortion (THD)

Total harmonic distortion: <0.03%, 20Hz–20kHz

Intermodulation distortion: <0.03%

Frequency response: 15Hz–100kHz, ±1dB

Damping factor: 400

Speaker impedance: 4Ω minimum

Signal/noise: 116dB, A-weighted

Input impedance/sensitivity: 33kΩ/1.5V unbalanced, 33kΩ/±1.5V

balanced

Dimensions: 17¾" × 9½" × 15¾" (W×H×D)

Weight: 88 lbs.

Price: \$1995

Manufacturer

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moderately priced multichannel amplifier or surround preamp-processor that uses a fully balanced circuit topology.)

The RMB-1095's appearance is dominated by the two large heatsinks in the front. In this price range, you don't expect the quality of fit and finish of a Krell, Rowland, or Mark Levinson, and you don't get it in the Rotel. What you do get is an amplifier that looks neat and well-made, without a large part of its cost having been spent on cosmetics. The RMB-1095 is not a particularly hot-running amplifier; I could place my hand on any part of its chassis (including the heatsinks) and feel only a bit of warmth. It's also mechanically quiet, which attests to the quality of its big toroidal transformers and the effectiveness of vibration control in its construction.

Sound

The most demanding test of a home-theater audio component is to use it in a high-end 2-channel stereo system. To begin with, this is an audio-only test, so the listener's attention is focused on the sound, without competition from video. There are no surround effects, which means that any deficiencies in basic sound quality are more likely to be noticed. The system typically consists of equipment that is more revealing of sonic differences than most home-theater systems, making problems with the sound more apparent. Yes, it's a tough test, and perhaps not entirely fair—a moderately priced 5-channel amplifier is not really intended for use in a 2-channel high-end system. But, to quote Ol' Blue Eyes (Kander & Ebb, actually), if an amplifier can make it there, it'll make it anywhere.

For the RMB-1095, the test was even more difficult than usual because of the new speakers in my listening room: Series Two Avantgarde Unos (see my review in the September 2000 *Stereophile*). These horn/dynamic hybrids have extraordinary resolution, and their 100dB+ sensitivity is a good 13–15dB higher than that of the typical audiophile speaker, which effectively places the amplifier's performance under a magnifying glass. Beefy transistor amplifiers are not at their best in this type of application, and if the RMB-1095 had sounded harsh and unmusical here, I was prepared to suspend judgment until I'd installed it in my home-theater system, which has more conventional speakers.

As it turned out, the sound with the RMB-1095 was surprisingly smooth and listenable, though it lacked the liquidity and natural ease of the Cary CAD-2A3 SE single-ended triode tube amplifiers with which I normally drive the Avantgardes. Bass and dynamics were outstanding, and, as one might expect, the RMB-1095 sounded quite comfortable at ultra-high levels that give the 5Wpc Carys difficulty. While the RMB-1095 would not be my first choice to drive these speakers, the fact that it was credible in this application means that this amplifier offers a lot more than just raw power.

But where the RMB-1095 really came into its own was in its intended application: the home-theater system. The speakers here are Dunlavy SC-Is: 2-way dynamics, with a highish sensitivity for this type of speaker (91dB) but fairly low impedance, which makes them more difficult to drive than the

Avantgardes. The system as a whole, while not as highly optimized for sound quality as my audio-only system, is still sufficiently revealing that differences in the sounds of amplifiers are not glossed over or obscured. The amplifier on regular duty in this system is the Bryston 9B-THX, a 5-channel (120Wpc) amplifier rated Class A in *Stereophile's* "Recommended Components." The 9B-THX is a superb amplifier, good enough that I've used one of them in my main audio system to drive various high-end speakers that I've reviewed for *Stereophile*. I actually prefer its sound to the similarly specified 2-channel Bryston 3B-ST and the higher-powered 7B-ST monoblocks.

Changing over from the Bryston 9B-THX to the RMB-1095, watching/listening to a variety of DVDs, I heard nothing to make me think that there had been a switch from an amplifier costing nearly twice as much (\$3495). Like all good amplifiers, the RMB-1095 seemed to impose little character of its own on the sound, doing its best to get out of the way of the program material. This was true with musical soundtracks as well as with sound effects and dialogue. Vocal sibilants were smooth and well-controlled, avoiding the brittle emphasis that is the calling card of many solid-state amplifiers. The RMB-1095 had excellent timbral accuracy, instruments having a natural quality rather than sounding synthesized.

Although the RMB-1095 provided plenty of detail, this was not at the cost of the upper-midrange/treble emphasis that leads to listening fatigue. Any deviations from the ideal of a "straight wire with gain"

were in the direction of sweetening and softening the sound—the type of tonal balance that provides a good complement to the often over-hyped soundtracks of DVDs. As such, the sound of the RMB-1095 evinced a strong family resemblance to that of the RB-1090. *SGHT* readers might also note similarities between my comments about the RMB-1095 and Michael Fremer's review of the RB-985 Mk.II (October 2000). See what I mean by consistency?

Although the sound of the RMB-1095 was not an obvious step down from that of the Bryston 9B-THX, switching back and forth between them showed that while each amplifier did its job in a most capable manner, they certainly didn't sound identical. The Bryston's top end sounded more open and extended, and there was a greater sense of transparency to the source. The Rotel was sweeter on top, at times sounding a bit soft. It was a very *comfortable* sound that was easy to live with, and might even be preferable if the associated equipment is on the hard-edged side. The Thule Audio PR250B surround processor/preamplifier currently in my system has a top end that's exception-

ally clean and open, providing an excellent match with the Bryston 9B-THX. Surround processors with a brighter, more aggressive presentation, like the Theta Casa Nova or the Myryad MDP 500 (neither of which was on hand for direct comparison), might be a more synergistic match for the RMB-1095.

I have every reason to believe that the RMB-1095 had no problems in the bass area, but my home-theater system uses main speakers with limited bass potential; the powered subwoofer takes care of whatever comes along below 50Hz or so. Actually, even my stereo system has powered subwoofers, but in that system the subwoofer amp gets its signal from the main amplifier, and using the RMB-1095 in that system showed that its bass quality was excellent.

As for dynamic ceiling, the Bryston 9B-THX's 120W provides sufficient power for the levels that I—and the speakers—can tolerate, and the RMB-1095 was certainly able to match that. In theory, given that the RMB-1095 has 200Wpc, it should be able to drive speakers to a peak SPL almost 3dB higher (each doubling of power is equivalent to a 3dB increase in SPL), but that's more power than the Dunlavy SC-Is can handle without audible distress. However, in a large room, with less sensitive speakers, and especially if you want to reproduce the levels of THX-approved theaters, the RMB-1095's 200Wpc could make the difference between sound that's *almost* loud enough and sound that's exhilarating in its dynamics.

Conclusion

Rotel has done it again. Like the 2-channel RB-1090, the RMB-1095 offers not just raw power, but considerable finesse to go along with that power. There are amplifiers out there that sound even better, but to get one of similar power output would require a financial outlay several times the price of the RMB-1095—money that, in most cases, would yield greater overall sonic improvement if spent on other parts of the system. If you wanted to trim your home-theater amplifier budget further while still maintaining the sound quality of the RMB-1095, the amplifier to consider is Rotel's RB-985 Mk.II, which delivers roughly half the power at half the price. Either way, you'd have one of the best buys in a multichannel power amplifier.

REVIEW SYSTEM

Music Room

Sources

PS Audio Lambda II CD transport
Bel Canto DAC 1 digital processor
MSB Link III digital processor (with upsampler board, Full Nelson option, P1000 power supply)

Preamp

Convergent Audio Technology SL-1 Ultimate

Power Amps

Cary CAD-2A3 SE monoblocks

Speakers

Avantgarde Acoustic Uno Series Two

Cables

Digital: Illuminati Orchid, Kimber Illuminations D-60

Interconnect: Nordost Quattro Fil
Speaker: Nordost S.P.M. Reference
AC: TARA Labs Decade

Misc.

Argent RoomLenses (4)
PS Audio P300 AC synthesizer with Multi-Wave (used with preamplifier and digital sources)

Bright Star Little Rock (atop CD transport)
Nordost PP4 Ti and PP4 AI Pulsar Point component supports

Arcici Suspende Rack
PolyCrystal amplifier stand
Furutech RD-1 CD demagnetizer
Auric Illuminator CD treatment

Home Theater

Sources

Sony DVP-S7000 DVD player
Pioneer DV-09 DVD player
Pioneer CLD-604 LD player
JVC HR-4700U VCR

Surround Processor

Thule Audio PR-250B

Power Amp

Bryston 9B-ST

Speakers

Dunlavy SC-I (5)
Velodyne HGS-10 subwoofer

Cables

Digital: TARA Labs RSC Digital 75
Interconnect: assorted AudioQuest
Speaker: AudioQuest Type 6+
Video: Monster M1000v

Misc.

Chang Lightspeed CLS HT1000 power-line conditioner
AudioPrism QuietLine LF-1 Mk.II parallel power-line filters

MEASUREMENTS

All of the measurements were made into the single-ended inputs, except as noted. The measurements were made on the left channel. The powerline voltage ranged from 114V to 115V.

The frequency response of the Rotel was flat within 0.15dB from 20Hz to 20kHz. THD+noise at low power remained under 0.018% (1W into 8 Ω) and under 0.031% (2W into 4 Ω) across the same range. The Rotel's gain measured 28.9dB.

With two channels driven at 1kHz, the Rotel generated approximately 235Wpc into 8 Ω and 278Wpc at 4 Ω . With five channels driven, this dropped to 170Wpc into 8 Ω at 1kHz and 165Wpc into 8 Ω at 20Hz. The protection circuitry tended to shut the amplifier down at clipping, making these measurements difficult. It reset almost immediately when the input level was reduced. RD did not experience any problem in this regard; our experience has shown that this sort of behavior with sensitive protection circuits is unlikely to be a problem in normal use.—TJN