

Rotel RB-976 Six-Channel Amplifier

Read on for a dose of some good information.

by Jeff Cherun

Multichannel amps are like satellite TV: The more channels you have, the better. In the case of satellite TV, though, you can't have quite the same bragging rights



- A. With front-panel volume controls, you can adjust channel pairs separately.**
- B. Versatile bridging capability enables you to configure the RB-976 any number of ways.**

that you can with a nice piece of new gear. Sure, the sheer number of channels may impress the ladies, but it's all about content, especially with all the crap on TV these days (and *Seinfeld's* departure from our lives). With good multichannel amps, it's what's inside that counts. Now, some of you may not be able to use a multi-

channel amp because you did what I did.

Let me give you some tangible advice from my sad tale: Seven years ago, I owned a Denon Dolby Pro Logic receiver. Four years ago, I moved up to

separates for home theater, and my life changed. All of a sudden, I had better sound, more pieces of gear, and the future upgradability that I lacked when I had a receiver. Sure, receivers are cool because they have everything in one box. They're convenient, they probably only need one remote, and they're certainly ergonomically friendly. On the other hand, in many cases as soon as something new comes out and you don't have it, you're screwed. Lots of Dolby Digital receivers on the market haven't any inputs to accept other formats such as DTS or DVD audio. As my father used to say to me, "If you want to protect yourself right, go separates." Some of you may have gotten somewhat different fatherly advice, maybe regarding girls, but my dad's got plenty of good information about that, too.

Anyway, if you want a good separates-based system, you'll need a couple of things: a good processor (DTS, Dolby Digital, Pro Logic, stereo), some source components, and amplification for your sound. When it comes to multichannel sound, you have a couple of options. You can go with five or six mono amplifiers (you'd need a sixth if you have a passive subwoofer, which requires an external amplifier), a three-channel amp supplemented by a two-channel amp, or you can use a five- or six-channel amplifier all in one chassis.

This brings us to our latest review product: Rotel's RB-976 six-

channel amplifier. Rotel has become known over the last five years or so as a company that offers amazing value and performance in the home theater arena. As the owner of so much Rotel gear, I've loved it since I purchased the 976's predecessor, the venerable 956. I always appreciated the 956's bridging capability, which allowed you lots of flexibility to configure your system in any number of ways, and Rotel wisely included this feature in the 976. Therefore, you can make this a five-, four-, or three-channel amp, and if you make it a three-channel amp, the specs say that you get a whopping 150 watts of

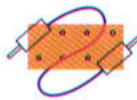
TESTING SYSTEM

- Rotel RSP 960AX pre/pro
- Marantz DP-870 Dolby Digital processor with DTS upgrade
- Definitive Technology ProCinema speaker system
- Linn Karik CD transport
- Linn Numerik D/A converter
- NHT VT-1.2 speaker system
- Pioneer DVL-91 LD/DVD combi player
- Aragon 8008ST stereo amp

power for each channel, which is a very respectable number. The 976 improves on the 956 in a number of key ways, however. First, it's got more power. Where the 956 had 40 watts per channel, the 976 packs 60. Also, the 976 features Input Link—a great idea that lets you hook up just one pair of RCA interconnect cables to the amplifier—and that stereo signal

HIGHLIGHTS

- An exceptionally good value for any home theater nut
- Great build quality that is the norm for Rotel
- Many possible configurations for almost any home theater install



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will be directed to more than one pair of amps, which is useful for multiroom audio. Another notable benefit is Rotel's inclusion of printed circuit boards with symmetrical circuit traces. This allows the precise timing of sound, because when circuit traces of different lengths are used, the timing between channels is changed slightly, something that the engineers at Rotel feel is unacceptable. The last really cool feature worth mentioning is the pots on the front panel that allow you to control the volume of each pair of channels, if you feel so inclined. I actually installed one of my 956s at my parents' summer house as a multizone multichannel amp, whereby each pair of channels

powers a pair of in-wall speakers in a different zone. This makes for a very convenient way of doing things, and my parents have no trouble at all using this amp to its full potential. Of course, if you just use this amp either bridged or in full six-channel mode, you'd turn the levels all the way up. These relatively high-end features are spectacular in a mid-priced amp. As a proud owner of the distinguished 956 for so many years, I have

to admit that I was drooling when I heard that the 976 was coming out.

The manual is pretty extensive.

Overall, I have no complaints, as it outlines setup procedures and explains features in a fairly easy way, continuing the usual Rotel dedication to excellence in this department.

Setting up the 976 was a breeze. My first listening sessions were in six-channel mode, giving me 60 watts per channel. Using the Definitive Technology ProCinema system, one of my favorite speaker systems all around, I instantly fell in love with the 976. Of course, I only used five of the six channels in this configuration, but that's fine in this case. Its crisp, forward sound reminded me of my beloved 956, only it seemed to have more *oomph* behind it. Also, it plays louder and more robustly than the 956, making for a better overall amp. Listening to some favorite recordings, like Jewel's "Foolish Games," from the *Batman & Robin* soundtrack, I experienced excellent imaging and good bass extension, which sounded almost as good on the Definitives as the B&K AV5000 amp we keep around here as a reference. Of course, the 976 is about half the price of the B&K, at slightly under \$600.

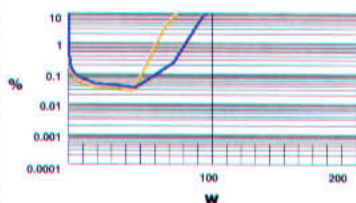
On home theater sound, my results were the same. In six-channel mode, there was plenty of juice for either the Definitives or the NHT systems I listened on, which actually surprised me. The power supply inside this baby never

seemed to strain, always giving up the goods. The NHT VT-1.2s are demanding speakers, but the 976 was up to the task, especially during the gunfight scenes in *Desperado* and the battle scenes in *Braveheart*. I had such a good time

with this amp that it brought me back to the days when multichannel separates were new and fresh to me, profoundly changing my life forever.

I also listened to the Definitive Technology ProCinema system in bridged mode, using my Aragon 8008ST stereo amp for the rears. Well, what I heard was even better than in six-channel mode. While it didn't feel like I was hearing 150 watts in each channel, it *did* feel like I was hearing 100, very similar to the B&K. I'd say that bridging is a good idea, if you can spring for an extra stereo amp. Otherwise, in six-channel mode, you'd also be doing very well, especially at the cheap admission price Rotel asks for such a great piece of gear.

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CFG Labs Measures: Rotel RB-986

This chart shows the power output (in watts) versus distortion plus noise of the RB-986 when driving an 8Ω load resistor. The line farthest to the right is the output power of a single channel, with the other channels disconnected. It begins clipping at 46.0 watts, and reaches 1% THD+N at 81.1 watts. (Into 4 Ω, the numbers are 56.9 and 105.5 watts.) The next line from the right is the output of the same channel when all other channels are driven; it begins clipping at 45.5 watts, and reaches 1% THD+N at 60.6 watts. (Into 4 Ω, the numbers are 56.2 and 82.2 watts.) The RB-986 blew a fuse immediately when we tried using it to drive a 2Ω load resistor.

Total harmonic distortion plus noise at 10 volts RMS output measures from 0.072% to 0.062% from 20 Hz to 20 kHz. Frequency response measures +0.002/-0.24 dB from 20 Hz to 20 kHz, -0.72 dB at 10 Hz, -0.18 dB at 50 kHz. Crosstalk measures -53.8 dB worst case at 1 kHz. A-weighted signal-to-noise ratio measures -58.6 dB. All of these measurements are good except signal-to-noise ratio and crosstalk, which are somewhat below average.

Rotel RB-976 Six-Channel Amplifier \$600

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If you want to get into the separates game and need a multichannel amp, check out Rotel's 976. It's easily recommendable for a midrange system that will give you better quality sound than many receivers' internal amps will—and better your life in the meantime. Also, if you've got a receiver with line out jacks that will allow you

to bypass the internal amps in the receiver, adding one of these, which is a relatively inexpensive tweak, may just be what the doctor ordered. 🎧