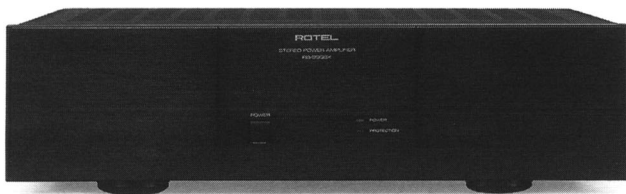


Rotel RB990BX Power Amplifier

Mark Block



This unassuming black box, average of size and moderate of price, houses under its thin sheet metal a hulking, snarling brute: 200 watts of immutable power into 8 ohms, with an instantaneous output of over a thousand watts into 1 ohm accompanied by a peak current of over 200 amps! It seems Rotel has bagged a wild beast and served it up to audiophiles as an almost free lunch. At an asking price of \$1000, there's got to be a catch. Right? Let's find out.

My time with the 990 began inauspiciously. Two samples were *apparently* dead out of the box, and I was ready to give up when Rotel's Mike Bartlett offered to come over with a freshly QC'ed, absolutely-positively working amp. We fired it up Nothing. A look under the hood revealed 4 blown fuses. In went new fuses, which again failed immediately. The amp uttered not a peep. At that point Mike suggested we try a different speaker cable (I was using a triple run of Ocos). Out went the Ocos, in went my old Meitner wire, along with yet another set of fuses. Success! Mike later sent along a run of Rotel's excellent "six nines" copper cable, which I used for the remainder of the review.

I finally read a good technical explanation for the fuse blowing (just as I was finishing up this review) in Edward J. Foster's *Test Bench* lab report: "The RB-990BX might prove skittish driving highly reactive loudspeakers (perhaps certain electrostatics) or high capacitance speaker cable. It's not that the amplifier balks at driving these loads: quite the opposite. When asked to supply very large, reactive currents, it tries valiantly — to the point where it may blow its internal fuses or worse." The thing that strikes me as odd with explanation is that my amps blew their fuses seemingly immediately; they wouldn't even play music at a low level. I own Acoustat Spectra 22 electrostatic speakers, and the Rotel drove them beautifully. It just wouldn't drive the Ocos cable. I've been tempted to put larger value fuses in there and try out the Ocos again, but I didn't — for reasons I'll get to later.

REVIEWER BLOCK

Now, with my fascinating "blown fuse" story out of the way, I have to start actually "reviewing" this amp, and it's hard. Amp reviews are always hard. I can't talk about ergonomics, because there's nothing much to talk about: It's just a typical solid-state power amp. You've got a power switch on the front, a pair of RCA single-ended inputs at the back, and a pair of five-way binding posts to hook the speaker up with. Nothing to it. Input impedance is 33,600 ohms, and sensitivity is about 1 V for rated output — higher than most Ameri-

can amps, but typical of amps made Across the Pond. It would be nice if the impedance were higher, but it'll probably work OK with a passive preamp if you want to keep sound quality high and costs low.

So let's talk sound quality. I've listened to this amp steadily for over six months now, and I still have very little to say about its sound. Oh, god, I'm blocked! I can't find anything wrong with it! I'm a bad audiophile! *I'm a lousy reviewer!*

Wait a minute (sound of palm slapping forehead). Maybe I'm *not* a bad audiophile. (no cracks about the reviewer part.) Maybe this is a damned terrific amplifier. maybe it's a sensational amp for the money. My "real" amp is a Jadis Defy 7 worth over six grand, and I've lived with this Rotel thing for quite a while now without once feeling that I was missing something. Now *that's* something to write about!

I FEEL BETTER NOW

After warming up the Defy 7, which had been refurbished with a new, up-to-date circuit board and Sovtek 6550 tubes several weeks prior to its Rotel-induced hibernation, I spent a few days swapping the two amps in and out of the system, and y'know what? I really wasn't missing much with the Rotel. If I were doing a blind test I'd swear the 990 was a Class-A amp in the plus three grand bracket.

OK, it's not perfect, and since it's easier to describe what an amp does wrong than what it does right, I'll start there. The thing I miss most with the 990 is depth and dimensionality extending into the rear corners of the soundstage. The Rotel is afflicted (if that's not too strong a word) with the infamous "Arcing Soundstage" disorder. Instruments at the far left and right come forward slightly, making the speakers more obvious as sound sources. Width is excellent — as good as I've ever heard — but depth is reproduced better in the middle than at the edges of the soundstage.

Other nit-picks: High frequencies are just a tad homogenized. Detail on cymbals is softened a little, with the metallic overtones toned down a bit. Notice the "weasel words" I just used: "a tad...a little...a bit." I hate that kind of wishy-washy language, but it accurately reflects what I heard. I was simply hard-pressed to find fault with the Rotel.

Now we come to the more subjective, flighty criticisms — the criticisms that compel I to color their prose purple with words like *liquidity* and *texture* and *bloom*. My very personal reaction is that the Defy 7, along with the megabuck amps like Shannon Dickson's Rowland (on batteries, of course) has a sense of effortlessness that the Rotel can't quite match. The effortlessness has nothing to do with pace or punch or macro dynamics — the Rotel has those qualities in spades. The effortlessness I'm talking about is more subtle, harder to pin down. Perhaps I have to dispense with the audio jargon and use a more figurative description here.

When listening to music through the Defy 7, I often find myself lazily floating downstream on the musical currents if I'm doing "that reviewer thing" and concentrating on the sound, I usually think to myself, "Nice, but what's the big deal?" Soon, however, without even being consciously aware of what's happening, I find myself on the edge of my seat, squeezing the armrests, bracing my feet, realizing that the lazy stream has turned into Niagara Falls and I'm on the ride of my life. to mix metaphors: one minute you're relaxing on the porch; next thing you know you're caught up in a vortex on a trip to Oz.

I can't pinpoint anything distinctly wrong with the Rotel in that regard, but neither does it take me on that kind of trip. With the right music, the transition from easy-going to intense, or from gentle lull to roaring climax, should happen with a shocking ease — like a force of Nature. The Rotel makes the transition more mechanically. To open up yet another can of wormy metaphors; the Rotel takes you on a terrific roller coaster ride, but you don't leave Kansas.

Again, the character of my reaction to the Rotel — the kind of subtle, nuance criticisms I'm making here — are more appropriate to a review of a \$5000 amplifier. Let's not forget that we're talking about a very modestly priced product here. It really has no business being as good as it is.

That goodness primarily manifests itself as a sense of awesome power in the bass along with a seductive sweetness in the highs — a combo that's very hard to find in a solid state amp unless it's big and expensive and heavily biased into class A. Hooked up to the Snell B-minors, the Rotel seemed to draw an extra measure of low end response out of these speakers. I played "Feel No Pain" and "Cherish the Day" from *Love Deluxe* (Epic EK 53178) and I realized that the speakers are capable of more impact and tunefulness than I had previously assumed. On Wille DeVille's *Live* album (Fnac Music 592254), bass lines were easy to follow, tight and full of good, growly texture. Hall ambiance was detailed and airy without being bright. Similar effects were heard on the Spectra 22 electrostatics: The Rotel helped tighten up a midbass bloat without sacrificing extension.

Although I noticed a slight edge on Sinatra's voice (*Only The Lonely*, Capitol CDP 7 484712), for the most part vocals were reproduced with good detail but without any emphasis on sibilants. Boz Scaggs' great new "comeback" album, *Some Change*, has a few ssssplahsy ssssounds on the vocal — sounds that are annoying on cheap equipment (for instance, in my car and on my video system). The Rotel controls the sibilants well — just as well as the Defy 7 — but maintains a little more crispness; everything is quick and clean, without any slurring of the transients.

Vocal nuances, which are fundamental to an appreciation of pop music, are reproduced beautifully — and in some cases accurately but not so beautifully. For example the wealth of inner detail on Bonnie Raitt's *Longing in Their Hearts*, courtesy of the Rotel 990, allows Bonnie's vocal technique to grab my attention, but it also reproduces a "double breath" (indicating a bad edit or a punch-in) at :45 into "Feeling of Falling." Systems lacking in transparency — like the one the album was mixed on, apparently — gloss over these nuances. The Rotel portrays them in sharp relief, but without ever seeming ugly or unmusical. With the Rotel amp in the system, I used Dave Mason's classic *Alone Together* (Mobile Fidelity Sound Lab UDCD 573) as a reference when comparing my old Phillips 960 to a Museatex transport. The presentation became more transparent, more detailed, deeper, and much more dynamic. Particularly impressive were the inner, micro dynamics — the subtle ebbs and flows of energy that give music life and power. A vague fogginess was revealed to be tape noise — I felt like I could count the ferrite grains on the tape emulsion. Fuzzy, overdubbed vocals disentangled themselves into individual strands. Lyrics became clearer. Smearing on sibilants sharpened up. My point here is not only that the Museatex is a great transport, but also that the Rotel 990 allowed these improvements to come through; it was not a limiting factor at all.

Want classical? You got classical. Rossini's "Il Signor Brushino" from the Orpheus Chamber Orchestra (DG415363-2) is a wonderful piece featuring the violinists slapping their bows against their instruments. If your system's transparency is all that it should be, you'll hear a clear rear wall echo, and the Rotel gets it right. Pace and dynamics come across well, as does transparency; individual instruments within the ensemble are clearly delineated. Low frequency weight is impressive, yet obviously leaner and tighter than with the Defy 7.

The question I'm left with is: Why? Why does the Rotel sound so good? The *Test Bench* report again provides possible explanations. The excellent soundstage width may be due to the dual-mono construction. The big toroidal transformer "has separate secondary windings for each channel, and all the circuitry for each channel is independent of the other from that point on. The circuit boards for the two channels are actually mirror images, which costs more but allows each component its optimum placement in each channel." Further, the smoothness and transparency I heard may be the result of heavy copper plates being soldered on to the circuit board in crucial high current paths. Peter Aczel, in his otherwise favorable *Audio Critic* review, calls this a "kludge to reduce trace resistance." Kludge or not, it seems to work.

Again, my main complaint is with the amp's propensity for blowing fuses when hooked up to the wrong cable. I mentioned earlier that I decided not to bypass the fuses or try higher values, and that's because I now own the amp. I may risk blowing up a review product, but not one that I paid good money for. Will it replace the Defy 7 for everyday use? Not likely, but for speaker reviewing it's nice to have a solid state amp around for comparison, and this is a solid state amp I could live happily with. Thinking back on the amp I used to own before the Defy 7, a Krell KSA-80B, on sonic grounds I'd choose the Rotel over the Krell any day. Whoa, that's a scary thought — but great news for audiophiles on a budget.

Rotel RB-990BX amplifier, 200 watts per channel into 8 ohms, \$999.

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Reference System: Theta DS Pro Generation II and Sonic Frontiers SFD-2 digital processors; Museatex transport; Well-Tempered Turntable and arm, with Marigo Labs arm clamp and mat with AudioQuest 7000 cartridge; Jadis Defy 7 amp; Convergent Audio Technology SL-1 Signature and Sonic Frontiers SFL-2 preamps; Acoustat Spectra 22, Snell B-Minor and B&W 802 Series II speakers; Cardas Hexlink V and Rotel RHCC-10 interconnects; Ocos, Meitner, AudioQuest Midnight and Rotel RHSC-10 speaker cables; Bright Start Big Foot bases; Power Wedge II & Power Wedge V isolation transformers and conditioners; ASC SuperTraps; TDK and Radio Shack ferrite noise filters; Sims Navacome feet; AudioQuest UltraConnect cleaner; Harmonix/Combak feet; Nitty Gritty Model 2 record cleaner, DBX 14/10 analyzer.

