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# AudioAdventure™

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## MANUFACTURER OF THE ADVENTURE YEAR

*Rotel's  
Mike Bartlett  
Savors  
The Sweet  
Moment  
of Success*



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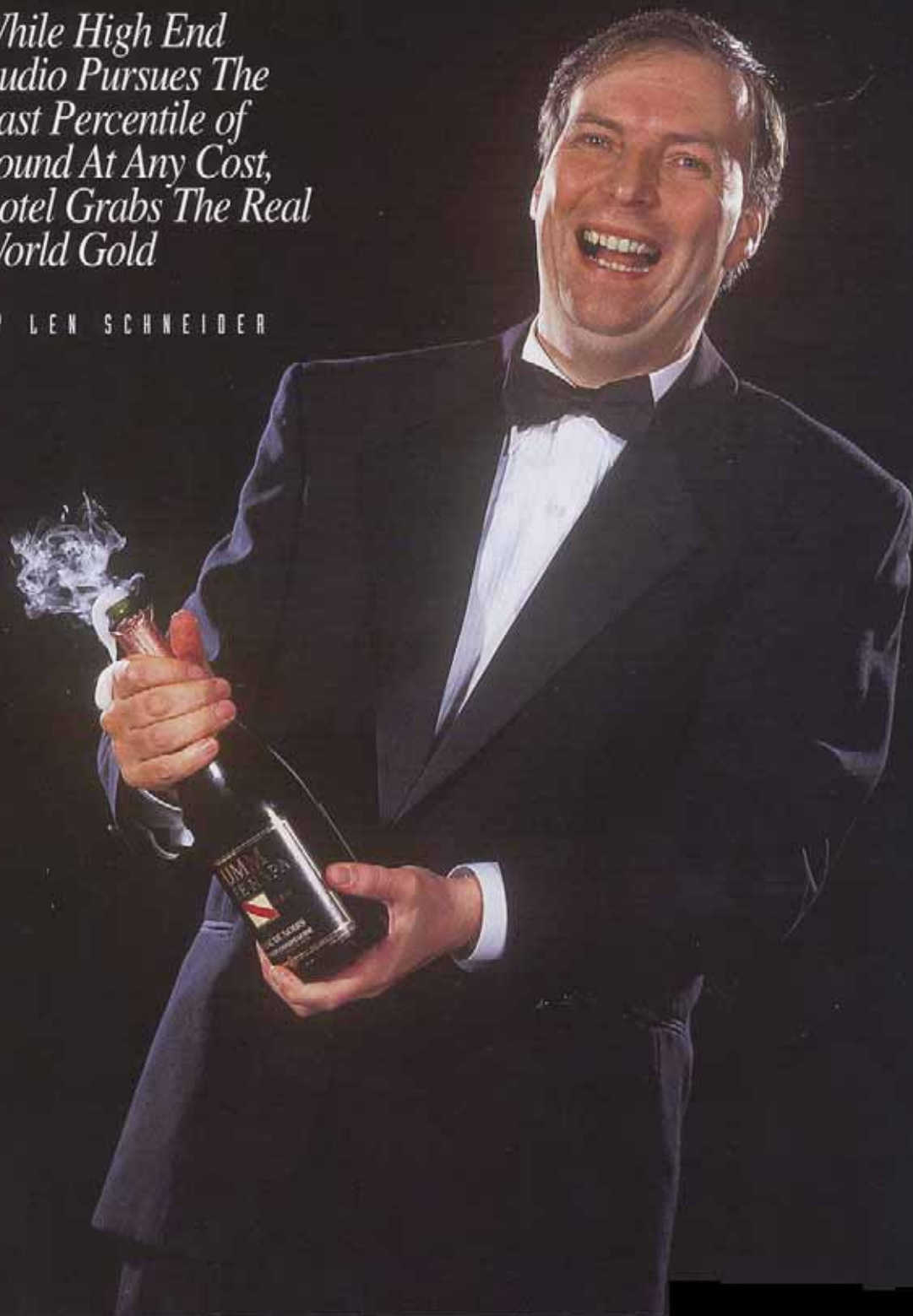
*The Five Scariest Movies  
Haunting Your Home Theater*

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# MANUFACTURER

*While High End Audio Pursues The Last Percentile of Sound At Any Cost, Rotel Grabs The Real World Gold*

BY LEN SCHNEIDER



# CTURER OF THE ADVENTURE YEAR: Rotel

**I**n the beginning," said Bob Tachikawa, "there were TVs." *Sounds of dismay and minor cardiac palpitations among the audio fanatics reading these pages.* "Omigod," someone gasps, "Did I hear him say TVs? This is Rotel, isn't it?"

Yes, you did and yes, it is. Lest you think it a somewhat déclassé beginning for a company now enjoying the enviable reputation of producing affordable, great-sounding audio and audio/video components, just remember that Sony's first product, a comically unreliable electric rice cooker, never even made it to market!

Who is this Bob Tachikawa anyway? Well, he's the son of Rotel's founder and now sits behind the big desk — or at least what passes for one in Rotel's crowded Tokyo headquarters. Rotel is a family-owned business and that's an important factor to consider. There's a refreshing absence of committee meetings here. You want a decision? See Bob.

This may come as a surprise to those who believe that corporate success automatically elevates the people responsible to some kind of high-profile prominence. Not true. From an outsider's perspective, Bob's a bit hard to find. While hardly antisocial, he just doesn't court publicity. Although he was born in China, spent his early life in Taiwan and received his primary and secondary education in Tokyo, you can't attribute this hesitation entirely to Asian propriety. Equally important is his belief that running a company, particularly a multi-national organization like Rotel, is largely a matter of focus. Sometimes public recognition gets in the way, so he avoids it.

## Early Days

So Rotel began with TVs. Of course, the company wasn't even called Rotel then, but went under the name Roland. Back in the 1950s, when this all

started, the world market was so different that Roland distributed U.S.-made Sylvania televisions in the Far East! (For those of you enamored of time-line history, this was before the major manufacturers we know today — Sony, Toshiba, Matsushita, etc. — had the capacity to roll their own.)

With distribution rights came the need for engineers and service techs to make sure those sets stayed working. Roland took the next logical step and began manufacturing sets themselves. But competition eventually got so fierce that Roland decided to get out of the television business altogether. So, in 1961, Bob Tachikawa's father reorganized the company to manufacture only audio products. The first project was a small table FM radio (mono, of course) made for an off-shore OEM customer.

Gradually, the business grew and Roland became a favorite cost-effective OEM source for many American high-fidelity companies. Harman Kardon and Fisher, two of the strongest names at the time, used Roland's manufacturing facilities for a number of very well received products. In fact, an entire series of receivers using twin power supplies (including separate transformers for each channel) came out of the Roland factory, and a major hi-fi retailer of that time, E.J. Korvette's, also sourced some private label components there.

## Personal Time Out

As the business was growing, Bob Tachikawa, inspired by his early affection for science fiction, pursued (and captured) his Bachelor's degree in aerospace engineering from the University of Virginia. To help pay the bills, and also get a different perspective on the family enterprise, he worked at retail, selling high-fidelity components in Portchester, New York. After graduation, he moved to Yonkers to run a combination hi-fi store

and repair facility. It was the beginning of an unusual combination — engineering and marketing/sales — that eventually led to some very careful decisions as Bob moved up the company ladder over the next two decades.

## Meanwhile, Back Home . . .

Back east (far, far east in this case), Roland opened a new manufacturing facility in Taiwan in 1969. A significant step in that it was one of the first signs that Japanese manufacturing would eventually get very expensive, the new factory was soon rolling at full speed.

Just after this opening, Roland made another strong move to become an important brand name on their own. As the name "Roland" couldn't be trademarked in the U.S., the company and its U.S. distributor, Martel, combined both names and incorporated under the name Rotel of America, Inc., in 1971. The new company's mission was to establish the Rotel brand name domestically, as its Far Eastern parent moved from supplying OEM products almost exclusively to designing and manufacturing a complete line of Rotel-branded products.

By 1973, things were rolling. *Consumer Reports* (remember, kids, this was before we had *The Audio Adventure* to read!) rated Rotel's RX-402 receiver a Best Buy. What CU didn't know (and what nobody bothered to tell them) was that the two runner-up receivers (sold under two other brand names, of course) came out of the same Taiwan factory!

But things weren't entirely rosy. For one thing, the U.S. market was being increasingly driven by "feature pack" engineering, in which sound quality took a distant second place to "LED per dollar" designs. The Tachikawa family took strong exception to this. Bob's father had already lived through enough transitions to know how temporary

they could be. Bob, as a professionally trained engineer, knew that there was no such thing as a free lunch — every dime spent on bright lights is one dime less for critical circuit parts.

By late that decade, perhaps in recognition that something was amiss, the U.S. hi-fi market contracted sharply. Rotel put its American subsidiary in suspended animation in 1980 and looked for a new way to sell the components it knew would provide better performance.

### The Brits Have It . . .

The year before, 1979, another person had entered the Rotel picture, this time on the other side of the Atlantic. Michael Bartlett, who had previously spent six years in advertising and product development for the audio division of Sanyo U.K., joined Rotel's new sales organization in Britain.

Formed when Rotel's original U.K. distributor, the Rank Organisation, dissolved its relationships with many brands (Wharfedale, Akai, Nikon, Pentax and others), Rotel U.K. got off to a bit of a jerky start. For one thing, its headquarters were in the quaintly named city of Milton Keynes, an experimental metropolis hastily constructed in the early Seventies to relieve overcrowding in London. According to Bartlett, "Every demented aspiring architect was permitted — or so it seemed — to design their fantasy village. Among other things, Milton Keynes had Europe's largest indoor shopping mall, ample car parking — and no customers." Getting to Rotel's new two-story Quonset hut headquarters was easy, though. "You drove to Stacey Bushes — lovely name, really — and turned right at the concrete cows," explained Bartlett. Without Rank's support, large dealers weren't as interested in the Rotel line and smaller dealers wanted a type of product different from the company's previous middle-of-the-road offerings. After one disastrous attempt to transform a rack-system amplifier into an audiophile product, and a lot of skull sessions with some of Britain's best independent dealers, Bartlett began to develop products more in keeping with his customers' expectations.

It was during this trial-and-error period that several things became clear. First, an off-shore brand, however reliable or well-manufactured, would never be accepted by the tightly-knit U.K. audiophile community unless the basic designs came from English engineers. To that end,

Bartlett enlisted the services of Tony Mills, a noted circuit specialist. Although Mills came on as a part-time consultant at first, his efforts were soon felt in Rotel's Japanese and Taiwanese facilities. (In fact, Bob Tachikawa later sent one of his most capable younger engineers, Y. Suda, to England to study with Mills and learn

some of the circuit-tuning tricks Mills had accumulated over the years.)

After one long back-and-forth discussion of which circuit implementation should be used in a critical new product, a British- or a Japanese-designed PCB (printed circuit-board), Tachikawa eventually went with the smaller, simpler and less expensive British version. The resulting RA-820 integrated amplifier turned a corner for Rotel, despite its strange champagne-and-chocolate finish.

Its successor,

the RA-820B, devoid of tone controls but benefiting from even better parts and a black finish, was an enormous critical and commercial success. It established, almost overnight, Rotel's position as a manufacturer of affordable components with an extraordinary level of sound quality. In addition, the RA-820B provided the foundation for a number of popular models yet to come.

With the problem of suitable product under control, Bartlett concentrated on the business side of the equation. Good products without good distribution, he reasoned, would be lost in the shuffle. So, with the help of Gerry Duffy, Peter Taft and Richard Taunton, he built a network of sup-

portive dealers who were comfortable with both the product and the commercial realities of selling it. One of the principal activities that won dealer loyalty was continuous support of the almost endless stream of weekend dealer-sponsored shows.

### And Now In America

After a number of years, Bartlett left Rotel U.K. to take a marketing position in the States with a different company. But his relationship with Tachikawa continued, as his new employer distributed products in Japan through Rotel's domestic dealer network. In 1991, Tachikawa made Bartlett an offer he couldn't refuse and Michael joined a reconstituted Rotel of America as its Vice President and General Manager.

Since then, Rotel has grown substantially in the U.S. Capitalizing on a unique combination of meticulous basic circuit engineering in Japan, British evaluation and revisions and production engineering at the company's ISO-certified factory in Taiwan, Rotel products have earned numerous international awards over the years.

Reviews in many publications, including this one, have generally been excellent and highlight sound quality and value as prime reasons for recommending the brand. From a dealer's perspective, though, sound quality isn't quite the be-all and end-all audio reviewers would like. In the cold light of retail reality, *reliability* is a prime reason to recommend a product to a customer. After all, why should a dealer sell something that's going to bounce back into the shop in a few weeks? The Rotel line seems to be on a roll here, too, as dealers we spoke with praised the line's out-of-the-box functionality and long-term dependability.

### A Balancing Act

Are there specific reasons why Rotel excels in making affordable audio and audio/video components? We think there are two. Parts and sub-assembly selection is important. So is manufacturing.

As you know, we've looked at a number of Rotel products in recent issues. At first, we were

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Rotel's Owner and President, Bob Tachikawa



Milton Keynes' Concrete Cows

somewhat befuddled by the fact that there wasn't a lot of continuity in some product categories. One CD player, for example, would use a three-beam laser assembly, another would use a single-beam unit. We'd see multi-bit conversion in one and various single-bit architectures in others.

When we asked Bob Tachikawa about this, he pointed to the advantages of not having a vested interest in any one technology. "We pick individual components only after we've compared what's available. We don't need to use something just because a 'sister company' developed it. We look for what's best for a particular product at a particular price. We're integrators, getting things working well together, rather than developers who spend a lot of R&D dollars on something totally new."

Indeed, Rotel parts are an eclectic lot. We've seen British-made BHC "slit foil" capacitors in a number of products. They have very fast charge/discharge characteristics and low ESR (Equivalent Series Resistance). In other units, we've noted LCR polystyrene caps



*Rotel of America's listening room at their new North Reading, MA, headquarters. Sandwiched between the B&W Nautilus speakers are eight channels of Rotel's high end R11B-10 200 watt-per-side dual mono power amps.*

from Wales and Rubycon "Black Gate" electrolytics. We've also noted 1-percent metal-film resistors (some by Germany's Roederstein, others by Vishay) in a surprising number of circuits, and high performance op amps from Analog Devices and Signetics here in the U.S. Rotel also makes some parts, like power-supply transformers, themselves. Rotel calls this approach "Balanced Design." While not the most original phrase we've heard, it certainly seems to result in some real values in the hi-fi and home-theater world.

### *The Taiwan Connection*

Another critical ingredient is Rotel's assembly facility in Taiwan. This isn't just another "smack them sub-assemblies together and hope they work" factory. With a core of 20 qualified engineers and over 200 employees, Rotel's facility specializes in translating sometimes obscure circuit and layout requirements into an easily manufactured design.

This isn't as easy as it might appear at first, as moving critical components even a fraction of an inch can change a circuit's performance in audible ways. So there's constant communication between the Taiwanese production staff and the main engineering offices in Tokyo and Rotel's U.K. "tweak shop."

Occasionally, this "triangular participation" delays product availability. When this happens, tensions between the marketing/sales arm and the engineering factions bubble to the surface. But with the Tachikawas in control, engineering has the upper hand. The marketing/sales folks grumble a bit about missed opportunities, but when they finally get something, it works!

### *ISO: What's In A Name?*

That's a tribute to precision manufacturing and part of the reason for the factory's recent ISO 9000 certification. ISO stands for the International Standards Organization and its "9000" quality certification program is an international standard for everything that contributes

to product quality: incoming-parts inspection, assembly techniques, test-instrument calibration, internal-quality audits, etc.

Rather than being satisfied with a basic "9003" certificate, Rotel went after the more demanding "9002" status. This added strict production tolerance limits and high service standards to stringent requirements for final inspection and testing.

Perhaps a mark of Rotel's pre-ISO expertise

is the fact that the factory got its 9002 status the first time out. Most certifications take two or three inspections before the ISO says "Okay."

### *And Down To The Wire*

That's about it. Now you know more about Rotel than practically anyone in the business! Given the success and critical acceptance their products have received over the years, we're pleased to present this first "behind the scenes" look. Rotel deserves it. In following its own path, the company has served music reproduction and its customers well. It's bringing the same sensibilities to the world of home theater. And, here in the real world, we can even afford their stuff. Huzzah!

We take great pride in naming Rotel our "Manufacturer of the Adventure Year." ■