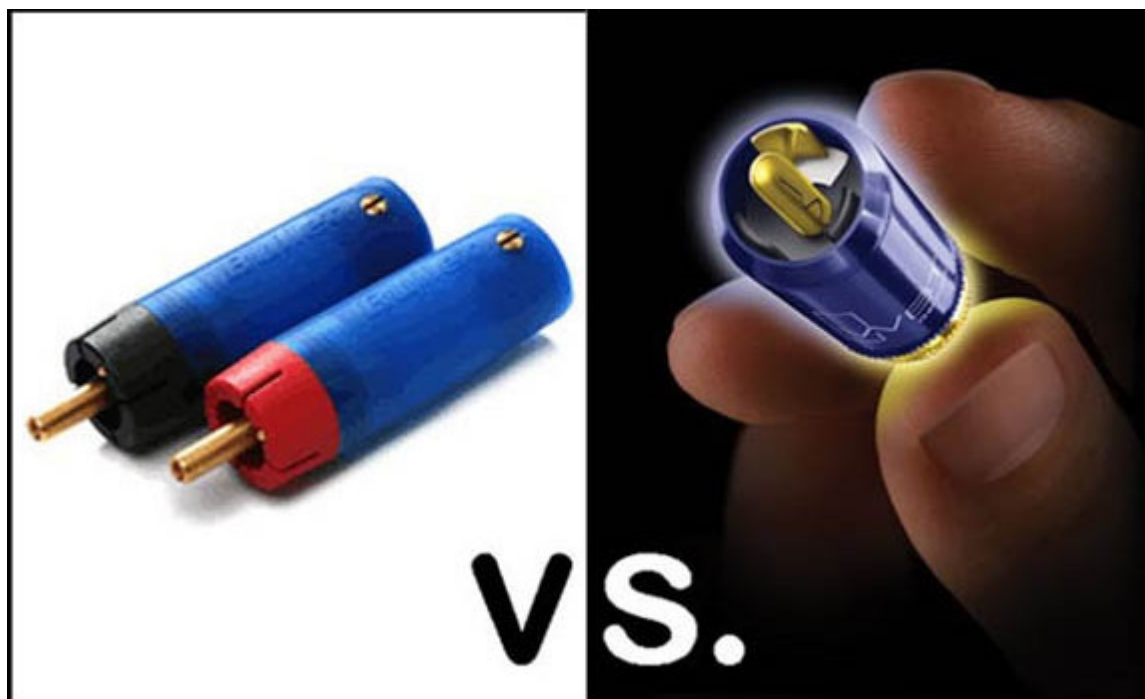


Little Things Mean a Lot - A Followup

The Eichmann Bullet and WBT NextGen RCA plugs go head-to-head

by Steve McCormack



The first installment of this article dealt with the superb WBT NextGen panel-mount RCA connectors. However, this is only half of the connector system: you have to use an RCA-style plug to complete the circuit. Who, then, offers the best plug? My article included the following paragraph:

“Credit must be given here to Keith Eichmann, inventor of the Eichmann “Bullet” cable-mount RCA connector (www.eichmanncables.com). The Eichmann Bullet was the first successful attempt that I know of to eliminate most of the metal from the RCA connector... The Eichmann Bullets have enjoyed substantial popularity among discerning audiophiles... For the moment, they remain the performance standard by which other cable-mount connectors are judged. However, the WBT NextGen cable-mount connectors may be poised to challenge their supremacy.”

Since writing that, the folks at Eichmann were kind enough to offer me the opportunity to evaluate 2 matching sets of cables, one prepared with their Bullet plugs and the other with the WBT NextGen plugs. The cable used was the DNM “Reson” Single Solid Core (www.dnm.co.uk/cables.html)—not the last word in wire technology, perhaps, but a simple, unshielded design that was easy to match accurately across the 2 interconnect sets. This was important as it allowed me to focus on the performance of the plugs and not worry about possible variables in the wire itself. I must add that Rob at Eichmann Technologies was very relaxed and casual about the

whole affair—he never attempted to influence my feelings one way or another, almost as though the outcome was never in doubt...

Some background about these plugs is useful here.... The WBT NextGen connector system (www.wbt.de/engl_home.html) is promoted as delivering a true 75-ohm characteristic impedance across a wide bandwidth—very important in digital and video connections. In fact, WBT calls it “The perfect match for all digital connections.” I have no reason to doubt any of their claims, and I daresay they are excellent in this role. However, my primary interest lies in how they perform as good-old analog connectors. My interest stems from the fact that much of the metal we usually see in connectors has been eliminated from these designs, and I believe that this plays a beneficial role in delivering excellent audio performance. I have already commented on how much I like the panel-mount female jacks, so I was very curious to see how the cable-mount plugs would stack-up against the competition.

And speaking of the competition... the Eichmann Bullet RCA plug was the first successful design that I know of to systematically eliminate as much metal as possible. In fact, most of the plug is constructed of tough plastic. It's a 2-piece system, and the plastic tip holds 2 small gold-plated tellurium-copper electrodes, one of which is a central tube that carries the positive conductor (refer to the Eichmann website for full details). Because the center conductor is a hollow tube, it is possible for the positive wire to be soldered right at the open tip. This brings the positive conductor as close as physically possible to the corresponding positive electrode in the mating plug.

The Bullet is clearly a performance-driven design that pursues the idea of eliminating metal close to its logical conclusion. It is available in both gold-plated copper and high-purity silver versions, and it's about as close as we are going to get to the ultimate goal of eliminating all metal until we are able to replace the metal electrodes with carbon, or some variation on that theme. Some audiophiles have had a little trouble with the fact that plastic is, inevitably, not as strong as metal, but the Bullet has found its way into more and more high-end cable designs. It is considered by many to be the “gold standard” in RCA plug performance.

So, the stage is set... the contenders are ready to duke it out... what do we hear? Since I am not usually given to long-winded histrionics, here is the answer: the Eichmann Bullets definitely come-up winners in my book. In fact, I was a bit surprised that the NextGens didn't put up a stronger fight, and this leaves me wondering what in the heck can account for the sonic differences between these two minimalist plugs. The Bullet plugs presented a quick, clean, transparent sound that was well balanced tonally and dynamically lively. They presented low-level detail naturally, without hardness or glare. The NextGens, on the other hand, sounded a bit soft and defocused. The overall presentation was very smooth and musically lyrical, but low-level information and subtle spatial cues were masked. The music emerged with a pleasantly softened warmth, but without the degree of transparency that I value so highly, and that the Bullets delivered so well. Out of curiosity, I removed the outer metal shell from the WBTs (a very thin, non-ferrous alloy) which eliminated the locking collar but still allowed them to make a solid connection. This resulted in a just-noticeable change that I judged to be positive, but it was a very small shift and did not change the basic sonic character. Please note that both sets of plugs used in this test were the “gold-plated copper” versions—the silver versions would have changed the result somewhat.

So, there you have it—I prefer the combination of the WBT NextGen panel-mount jacks and the Eichmann Bullet plugs... right? Well, yes... but this does lead to a small dilemma. It turns out that this combination just happens to have some mechanical interface problems. Rats! The internal (positive) electrodes in the WBT socket have a set of 4 knife-edges that are spring-tensioned and designed to be pushed aside by the entry of the rounded end of the mating plug (we're all adults here, right?). This works just fine with most RCA plugs because they use a solid center conductor pin, but the Eichmann Bullets do not—they use a hollow tube. This tube, by definition, is open at the end, which means that it cannot have a rounded, hemispherical end. In fact, Eichmann have rounded the tube's end as much as possible, but it still has a tendency to catch on the sharp knife-edges in the WBT socket. This might not be so bad, except that the design of the NextGen socket allows the central plastic core-and-electrode assembly to be pushed straight out the back if enough force is applied. And guess what happens when the average audiophile meets with a bit of resistance when inserting a plug... That's right—"enough force" is usually applied ;-). This is not helped by the fact that the Bullet plugs tend to be a tight fit under the best of circumstances, meaning that users are *expecting* to need a bit of force to get them on in the first place. It's actually not so hard to get this combo to mate properly, but you do have to pay attention to the feel of the center pin catching on the knife-edge, then sliding past as you rotate it a bit. If you do happen to push the core out of the WBT socket, it can be pushed back in, and a bit of "superglue" will help it stay in place.

To sum-up, I think that Eichmann have produced a truly outstanding RCA plug in the Bullet series. They have also produced a variety of other connectors and cables that appear to be excellent, as well. I am particularly intrigued by their "Bayonet Plug" speaker cable termination, but that's a story for another time! If you are a DIY audiophile, I urge you to take a good look at their product line. I continue to be impressed with the WBT NextGen panel-mount RCA sockets (and the silver version is even better than the gold/copper), but a bit disappointed and puzzled by the plug. Keep in mind that the WBTs were purpose-built for the world of 75-ohm digital and video connections, and I have not addressed their performance in this role. If you have tried them (or the Eichmanns) and would like to comment on your experience, please drop us a line.

News Flash: Not to take anything away from Eichmann, but I feel compelled to point out that Serguei Timachev of Stealth Audio Cables (www.stealthaudiocables.com) is now experimenting with cables *and connectors* made entirely from carbon! This is exciting news (to me, at least) and I look forward to hearing these in action. Way to go, Serguei!

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