HEIMKINO

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Gran Finale

WBT 0110 RCA plug and WBT 0210 socket

Well Connected

WBT, the Essen-based specialist for audio connections, has launched its "nextgen" range following high-level investment and wide-ranging development activities. The RCA 0110 plug and 0210 socket are the culmination of almost 20 years of experience and expertise. High time for re-soldering?

Advances in the field of connection technology are generally confined to changes to the material mix, generating – if at all – minimal improvements in sound reproduction quality. Not so with the new WBT nextgen range that boasts a whole series of design modifications. RCA plugs are a key element in the transmission chain and are indispensable for connections without intrinsic sound properties. To date, the prevailing school of thought has been that this is a job for big, heavy plugs creating contact under high pressure. As a result,

Positive contact

Negative contact

Negative contact

The diagram clearly shows that the negative contact consists of just one lug. The plastic material that holds the lug underwent numerous trials and modifications before an optimised version was finally developed.

there are many quality connectors on the market that differ only marginally in terms of appearance and design.

Around two years ago, however, a connector with the name "Bullet Plug" mostly made of plastic came onto the market. The real innovation, however, was that the earth contact was no longer comprised of solid, all-round metal clamps but a narrow sheet metal lug on a plastic base. WBT boss Wolfgang Thörner naturally noticed this plug too, but instead of shooting from the hip with a copycat product, Thörner sat down with his team of engineers and designed a totally new connection system. The result: a plug and socket range called "nextgen" that has been on the market since December 2003. The copper signal conductors are the only metal elements in the 0110 plug. Earth contact is via a single lug held by a non-metallic guide piece inside the plug. The mechanical stability of the connection is assured by two plastic lugs which, together with the contact, generate a uniform pressure on the socket once the familiar and proven screw-type sleeve is tightened. The connection between the cable and the plug is the same as it was before.

Sound

For our trials, HMS supplied "Gran Finale" audio cables – one fitted with conventional plugs, the other with the WBT 0110. After a suitable warm-up phase, we began our listening test. After just a few beats from Heather Nova's new album, we were nothing short of astounded. The impact on the sound quality was dramatic, despite the fact the conductors were identical – meaning that it had to be the plug! Heather Nova's voice was richer, more transparent and of superb clarity.

Precision always takes top priority for Wolfgang Thörner, and the tools for production of the high-grade plugs are designed accordingly.





Each individual plug is tested after assembly – only after it has been put together can it be determined whether the plug meets the WBT standards.

Heimkino: Mr. Thörner, what distinguishes the 0110 RCA plug and the 0210 RCA socket from conventional plug and socket connections?

Thörner: The "open-plan" design and the resulting freedom from eddy currents, which obviously play a bigger role than was previously thought. And it was of course this design concept that paved the way for a more favourable characteristic impedance. Today. there are more and more digital signal connections that - totally in contrast to conventional analogue signal connections - are standardised to 75 W characteristic impedance. And this calls for matching cables and plug-and-socket connections. 75 W cables have long been available on the market in a wide range of versions. Plug connections were a different matter, however. There were some 75 W connectors, like BNC, but either they weren't suitable for all cables. were difficult to customise, or were not compatible with the other analogue signal connections based on the RCA system. The characteristic impedance levels of the RCA plugs and sockets that have been available to date were far too low - although in fairness it must be said that when they were first developed, they were designed to handle analogue signals and therefore only for audio frequencies from around 20 to 20,000 Hz. The frequencies for the transmission of digital signals are in the region of 800 MHz, which is a totally different proposition. With the "nextgen" RCA connectors, WBT has integrated this broadband capability in the "good old" RCA connections for the first time. This means that both the plug and the socket are geared up for the required 75 W. Not only that; they're also fully reverse compatible with all previous RCA plug connections. Moreover, the new nextgen plugs also offer excellent stability, easy customising

and the WBT clamp-type lokking mechanism that ensures optimum contact pressure features that the "old" and new generation of WBT products have in common.

Heimking. Do these new designs mean that WBT is departing from its previous product strategy?



Wolfgang Thörner, Managing Director of WRT

Thörner: On the contrary.

Precision of design and production coupled with the use of high-grade materials have always been guiding principles for WBT. All we have really done is to take another step forward by systematically choosing the optimum materials and production techniques for each individual function of the plug: pure copper or fine silver for the contacts, high-tech plastics for stability and an adjustable aluminium outer sleeve for optimum contact pressure.

Heimkino: What does the claim "Made in Germany mean to you?

Thörner: It's become no more than a designation of origin - more's the pity. From a personal point of view, however, and in the interests of WBT, I'm extremely happy that we have a team of qualified employees and efficient high-tech suppliers in Germany. And, as the products show, the overall operation functions superbly - although it's certainly conceivable that it might work just as well or even better in a different country. In my next life, I like to try my luck in Japan or America.

The differences were just as marked when listening to the Lord of the Rings score; the orchestral soundtrack gave us goose pimples. The amazing sound quality was underpinned by precise drum beats and the especially radiant tone of the horns.

Conclusion

WBT"s nextgen range is a major advance. Due to the complex design, the plugs are naturally no bargain, but lovers of high-quality sound reproduction shouldn't hesitate for a second to invest the extra cash in exchange for



The WBT 0110 RCA plug consists of a high number of individual parts. This picture shows the splayed positive conductor. The Y-shaped tip is closed to form the tip of the plug.

the acoustic advantages of the new WBT products: the 0110 simply belongs on the end of high-grade audio cables, regardless of

whether they are transmitting digital or analogue signals.

Olaf Sturm



issue no. 12/2003 excellent Price/Performance:

nextgen.

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