

Tuneful sound experience
Issue 01/2010

WBT



THE HIGHLIGHTS:

Quality will be identifiable!

Protection against piracy with the new WBT-signet ...

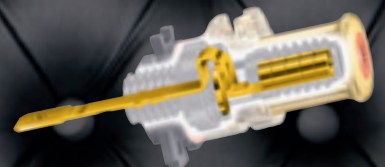


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nextgen.

The innovation from WBT

Learn more about the birth and background of this new technology ...



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Dear friends of good sound,

“Tuneful sound experience” – a title which certainly has made you curious. After all this is exactly what you as a high-end enthusiast are striving for.



Wolfgang B. Thörner

BRIEF VITA

Stop working? This is for the mechanical engineer and business economist, Wolfgang B. Thörner even at the age of 63 beyond all question. “I dedicate myself to my hobby with great enthusiasm. Spending every day on developing new products, making technological progress and delivering tuneful sound experience - can there be anything better for me than this?”

Exactly this passion of a man whose hobby is a profession and his profession a vocation can be recognized in WBT innovations.

How to get even clearer and better sound – this is what you can read in our magazine being published half-yearly, the first issue of which you are holding in your hands.

On 32 pages we offer you some informative, technical and entertaining articles. It is all about high-end sound and the innovative WBT technology.

What is the new WBT-signet and which benefits does it offer you? How does the new WBT-0718 impact sound interrupter manage to keep on refining the pure sound of your speakers? What is actually so special about the multiple-awarded WBT nextgen™ technology? These are all questions which we answer in this issue of **“Tuneful sound experience”**.

Some of you, dear readers, are maybe not so much interested in technical details. You might be looking for speakers which make the music sound clear and in fine nuances. Or for an amplifier which makes clear and resonant sound. Or a record player which reveals all details of a good recording. Even if you are interested in good sound and not so much in technique, **“Tuneful sound experience”** still offers some interesting articles to you.

We present some well-known manufacturers who equip their products with WBT technology. What counts for those professionals is that the innovative WBT connectors are a central and indispensable component part of high-end equipment.

We ourselves are high-end enthusiasts. This is why we have been researching and developing as well as manufacturing high technology. What we want is even better sound - for you, for us, for all high-end gourmets. You can read in **“Tuneful sound experience”** how we achieve this.

Enjoy reading this issue!

Wolfgang B. Thörner



WBT presents:



THE REPRODUCTION OF AUDIO AND VIDEO IS OUR LIFELONG PURSUIT

Ray Kimber of Kimber Kable has more than 30 years experience designing, manufacturing and testing cables.

One of the most important ingredients in cable design is which connector to use. For nearly 15 years of Kimber Kable manufacturing, we have been using WBT connectors for several reasons...

- Quality of the sound
- Long term stability of performance
- Construction craftsmanship
- Measured electrical performance
- Reputation of the brand
- Perceived value for the price
- The raw materials

Our passion for cable is rooted in a simple philosophy: develop and manufacture cables that offer the highest correlation of performance and price.

There is nothing like experiencing a musical performance presented with all of music's natural timbre, lifelike tonality and image. These experiences have changed our lives and persuaded us to make the reproduction of audio and video our lifelong pursuit.

Kimber Kable
www.kimber.com

Would you like to find further manufacturers whose products are equipped with WBT technology?

Ask your WBT specialized trade dealer. He will be happy to inform you and to make the right decision.

nextgen™ – Innovative technology and stylish design –

Innovative technology, stylish design, and superior audio quality – the WBT nextgen™ range of products convinces both manufacturers and high-end enthusiasts alike.



nextgen™
RCA plug
WBT-0110

In 2003 the first nextgen™ RCA plug WBT-0110 and the nextgen™ RCA socket WBT-0210 revolutionized the market for high end connectors. Today WBT provides its entire range of products in nextgen™ designs.

But what actually is nextgen™? What makes the nextgen™ principle so successful?

In the beginning there was a vision: clear, authentic, and noise-free sound. "What factors disrupt signal transmission?" This was the question the developers at WBT asked themselves, and two factors immediately became apparent: eddy currents and mass storage effects.* How can these phenomena be brought under control? Eddy currents and mass storage effects are generated in all current-carrying metal conductors and increase with increasing circumferences. The higher the number of conducting materials used, the greater the potential for eddy current and mass storage effects.

Noise can be suppressed with a selection of materials whose single purpose is to transmit signals free of loss. Less is more – this is the basis of the nextgen™ principle. "In retrospect it's quite simple and logical. We could scarcely believe that we were the first to have seen this approach right through to the end!" explained WBT founder Wolfgang B. Thörner.

Standard connectors manufactured as turned parts are committed to metal mass. A conventional production which neglects the essential principles of the contact flow. The nextgen™ principle is committed to a combination of light, however effective functional materials. The contact elements and the plug body fulfill strict separate functions.

Molded to the highest precision, the efficient internal copper conductors transfer signals with the minimum of loss, and the maximum stability is provided by the mineral- and glass-fiber-reinforced plastic sheath. Mass storage effects and eddy currents therefore don't have a chance (Fig. 1).

This technology for success did not of course arise over night, but was preceded by a long series of tests and prototyping, research into the ideal materials, and experiments on mechanical stability for obtaining and safeguarding the maximum audio quality.

What sounds so good may – and must – look equally as good too, and the nextgen™ products all bear a distinctive design. After all, an innovative interior also deserves an adequate exterior.

The hybrid design of functional materials has opened up new doors for WBT. The most conspicuous achievement is the futuristic design of the nextgen™ banana plug WBT-0610. However these highly innovative nextgen™ products still feature the tried and tested mechanisms, like the banana plug's angled design for strain relief or the RCA plug's patented clamping device for constant contact pressure.

All WBT products testify to the meticulous, conscientious precision work performed in the service of outstanding audio experience. The results are a pleasure to both ears and eyes alike, as certified by countless audio presentations and awards that WBT has received for its revolutionary nextgen™ products.

nextgen™ pole terminal
WBT-0710



Fig 1: Clear to see on the X-ray

The signal conductor is a single, highly filigree work of art, exactly like the banana plug shown below. And it is just this filigree work that is instrumental in reducing eddy current and mass storage effects. Sometimes less is even a lot more!

The entire nextgen™ series received the following awards:



nextgen™
Banana plug WBT-0610
awards for innovation,
high quality and design

* More basic and background details can be found in the WBT technical articles at www.wbt.de.



nextgen.

WBT RCA CONNECTORS

RCA PLUGS pages 8 - 9

The product range of the RCA plugs is offered by WBT in a particularly broad spectrum. From hifi beginner to an experienced audiophile: everybody finds here the best plug for his cable or his very special applications.

The nextgen™ series enables to open up the world of sound of your hifi system in its full richness, true to detail and vital. nextgen™ are plugs designed for music-lovers.

RCA SOCKETS page 11

Precision is the key when it comes to a tight connection and WBT RCA sockets are unbeatable in this regard. All WBT RCA sockets have an active spring internal contact which adjusts to all RCA connector pins.

The gourmet version of the RCA sockets is the nextgen™ series. The super-fine resolution of the sound makes it possible to get used to the new look very fast!



RCA plugs – nextgen™ –

For the audiophile gourmet:
RCA plugs in nextgen™ quality

The core of the WBT development is a central contact unit which consists of pure copper signal conductor the mass of which has been reduced to the minimum. The direct 24 carat gold-plating is nickel-free, therefore non-magnetic.

Signal conductors made from silver are passivated for the purpose of oxidation protection. The contact pressure is assured by means of WBT collet chucking device, and the cable strain relief guaranteed in form of the well-proven Torx screws.

CHARACTERISTICS

- ultimate conductivity through pure copper or fine silver conductors
- 24 carat direct gold-plated (or passivated), nickel-free
- with patented WBT clamping device
- reliable cable strain relief

WBT-0110

- transmission width 1GHz (!)
- low eddy current through mass reduction
- with 75 ohm the perfect plug for digital connections

WBT-0102 | WBT-0152

- wideband capable (up to 200 MHz)
- excellent shielding against electromagnetic interfering fields
- simply the best plug for analog connections!
- WBT-0152 same construction as WBT-0102, however designed for a larger cable diameter: up to 10.8 mm



Recommended particularly for digital applications (D/A converters, CD players, etc.) the RCA plug WBT-0110 features a characteristic impedance of 75 ohm for continuous matched connection (RCA plugs generally have a characteristic impedance of 15–20 ohm!).



For phono outputs (record players, microphones, etc.) good shielding against interference fields is particularly important. This is provided by the WBT-0102 that features the brass sleeve of higher conductivity connected to the minus pole – but otherwise is all nextgen™.

RCA plugs – classic –

The classic series feature a reliable and stable mechanics, an utmost tightening force and long-life cycle, especially comfortable possibility of cable assembling and the finest machining. The approved clamping device guarantees for a long-lasting high contact pressure, minimizes reliably the transition resistance and compensates for any size variations of the outer contact elements of the RCA females. Torx screws guarantee an excellent cable strain relief. High conductivity is ensured by the copper alloy as basic material. Corrosion is eliminated through the gold-plated surface of all contact elements.



Slotted central pin provides for exact adjustment, a permanently high contact pressure and minimal transition resistances. The surface is protected with 24 carat gold-plating, here free of nickel and therefore non-magnetic. High precision machining tolerances of < 2/100 mm!

* Discontinued model for 2010



The clamping sleeve with mat black finish is designed as a two-part structure with independent face ring element – for minimized wear on the contacts. Also the somewhat smaller WBT-0147 presents easily accessible soldering points: the terminal panel for the minus pole is on the rear side.

CHARACTERISTICS

- with patented WBT clamping device
- slotted contact pin
- heat resistant Teflon insulation
- easy accessible soldering points
- secure cable strain relief

WBT-0101 | WBT-0150

- made from high ductile copper alloy
- 24 carat gold-plating
- nickel-free
- tolerances of < 2/100 mm

WBT-0144 | WBT-0147

- made from copper alloy
- 24 carat gold-plating
- tolerances of < 5/100 mm

WBT RCA PLUGS nextgen™

Product	Signal conductor material	Soldering	For cable up to (mm ²)	With nextgen™ technology	Nickel-free	Direct gold-plating	Passivated	Sleeve material
nextgen™								
WBT-0110 Ag	Ag	x	9	x	x		x	Alu
WBT-0110 Cu	Cu	x	9	x	x	x		Alu
nextgen™								
WBT-0102 Ag	Ag	x	9	x	x		x	Ms
WBT-0102 Cu	Cu	x	9	x	x	x		Ms
WBT-0152 Ag	Ag	x	10.8	x	x		x	Ms
WBT-0152 Cu	Cu	x	10.8	x	x	x		Ms

Signal conductor material: Ag = fine silver, Cu = pure copper
Sleeve material: Alu = aluminium, Ms = brass

WBT RCA PLUGS classic

Product	Signal conductor material	Soldering	For cable up to (mm ²)	Nickel-free	Direct gold-plating	Sleeve material
classic						
WBT-0101	Cu Zn	x	9	x	x	Ms
WBT-0150	Cu Zn	x	11.3	x	x	Ms
classic						
WBT-0144	Cu Zn	x	9		x	Ms
WBT-0147	Cu Zn	x	7.8		x	Ms

Signal conductor material: Cu Zn = copper / zinc
Sleeve material: Ms = brass

equipped with
WBT



Would you like to find further manufacturers whose products are equipped with WBT technology?

Ask your WBT specialized trade dealer. He will be happy to inform you and to make the right decision.



WBT presents:



HIGH END AUDIO EQUIPMENT MADE IN SWITZERLAND

To preserve the natural purity of sound in its entirety – this is the challenge that first class high fidelity components must master. During the development and production of our series 7 products, we at soulution have never let this challenge out of our sight. Our team is firmly convinced that the acoustical beauty of music does not need artificial enhancement, and that the music signal should pass through every component as purely as possible. The requirement of true high fidelity for worldclass components has always been: »no deletions, no additions«.

This sounds simple. However it is no easy task for a CD player or amplifier to truly approach the ideal of natural music reproduction: to interfere as little as possible with the music, to serve the music instead of imposing itself upon it, to achieve complete control of the reproduction without depriving the sound of its magic.

At soulution we produce uncompromising High-End components, therefore the choice for the optimal connector felt on WBT for their outstanding quality. The nextgen™ connectors are used for all inputs and outputs of the preamplifiers 720 and 721. For our power amplifiers we use of course WBT loudspeaker terminals.

For the natural reproduction of music, state-of-the-art technology is a prerequisite, but not an end unto itself. Amplifiers should not adulterate the music by their own sound. For the listener, becoming absorbed in the music is a sensual experience, full of emotional fireworks. The technology must be subordinate – and transparent – to the music. This is soulution's understanding of »nature of sound«.

soulution
www.soulution-audio.com
Phone 0041 62 2853040

RCA sockets

For the audiophile gourmet:
RCA sockets in nextgen™ quality

WBT offers both chassis versions which are connected to the board by means of cables, as well as board versions which are soldered directly to the board, as well as screwed on. All are equipped with a set of insulating washers, offering the perfect solution for every wall thickness.

– nextgen™ –



The changeover to the nextgen™ principle enables the RCA sockets (as with WBT-0110!) to be set to an impedance of 75 ohm (typ.), as required for digital connections in particular. Yet also analog data benefit from the enormous bandwidth.

– Board versions –



WBT board type RCA sockets are due to the additional screw connection absolutely strain-relieved and are characterized by a firm fixing on the pc board. The space between the solder feet is in line with the 7/10 inch (17.78 mm) matrix. Both models are finally fixed from the outside by means of a convenient three-hole nut.

– Housing versions –



All classic WBT RCA sockets feature the same state-of-the-art. However, WBT-0201 and WBT-0244 are not screwed on the pc board, but to the cabinet. Contacting is generated by means of internal cable connection to the pc board.

By the way:
all RCA housing type sockets can be installed with the impact sound interrupter WBT-0718.

However:
recommended only for absolute high-end gourmets.

WBT-0210

- maximum conductivity thanks to pure copper or fine silver conductors for + and -
- transmission bandwidth of 1 GHz (!)
- inner contact designed as tulip contact with spring ring
- outer contact in the form of a patented double wave contact
- 75 ohm (typ.) characteristic impedance

WBT-0234 | WBT-0274
WBT-0201 | WBT-0244

- active spring internal socket for secure contact
- 24 carat gold-plating
- insulated, twist-proof installation
- adjustable mounting distance to the board
- heat-resistant Teflon dielectric

WBT RCA SOCKETS

Product	Signal conductor material	75 Ω impedance	Soldering	Chassis assembly	Board assembly (horizontal)	Nickel-free	Gold-plated	Platinated / Passivated	Direct gold-plating
nextgen™									
WBT-0210 Ag	Ag	x	x	x		x		x	
WBT-0210 Cu	Cu	x	x	x		x			x
classic									
WBT-0234	Cu Zn		x		x	x	x		
WBT-0274	Cu Zn		x		x		x		
classic									
WBT-0201	Cu Zn		x	x		x	x		
WBT-0244	Cu Zn		x	x			x		

Signal conductor material: Ag = fine silver, Cu = pure copper, Cu Zn = copper / zinc

© by WBT



WB presents:

marantz®

THE MARANTZ PASSION – THE MARANTZ DIFFERENCE

At Marantz, we believe that music has always played a fundamental role in humanity. Even today, as audio is increasingly coupled to vision, music is still the defining ingredient. It is music that drives home the ecstasy and agony of a film's story.

We also believe that true Hi-Fi is about being able to reproduce the magic of a performance. It's about experiencing music just as the artist intended, even in the cinema. Obviously, this kind of high quality reproduction requires the best components. Marantz uses high quality and carefully chosen components to achieve the goal of unadulterated music reproduction.

But importantly simply using the best components in an audio product will not reproduce the music exactly how the original artists intended. To achieve this, each element within a set must work in harmony with all the rest, they must all be carefully selected to ensure they work in complete harmony. After all, we are dealing with music.



"We at Marantz are passionate and know that people at WB are too. That's the best foundation for extraordinary quality."

Ken Ishiwata
Brand Ambassador Marantz Europe



Our heritage of technical excellence means we can create products with high-precision playback capabilities. By using the WB speaker terminals we can handover the carefully treated and amplified audio signal to the speakers and can be sure we are doing the best to the music again.

After all it is our love and understanding of music reproduction that gives us the ability to communicate the scale, timbre, pitch, dynamics, and the very essence of a recording. It is this passion that helps ensure that every one of our home entertainment products unlocks the power, the excitement and the emotion of music.

because music matters

www.marantz.com



Would you like to find further manufacturers whose products are equipped with WB technology?

Ask your WB specialized trade dealer. He will be happy to inform you and to make the right decision.



nextgen.

WBT LOUDSPEAKER CONNECTORS

BANANA PLUGS / SANDWICH SPADES pages 16 - 17

All WBT banana plugs have a solid terminal mechanism: the contact pin is expanded by a central spike and guarantees a firm position and permanent contact pressure.

WBT has once again set new standards with the new nextgen™ banana plugs and sandwich spades. WBT-0610 and WBT-0681 are the ne plus ultra of loudspeaker connectors.

POLE TERMINALS pages 20 - 21

WBT pole terminals are truly little masterpieces, symbols of quality with high functional value. This is why they can be found as built-in components in so many high quality audio systems.

With a wide range of more than a dozen of terminals WBT would like to enthuse hifi gourmets of all sound tastes. WBT pole terminals feature good haptics and offer universal inner and outer termination options.



Banana plugs / Sandwich spades – nextgen™ –

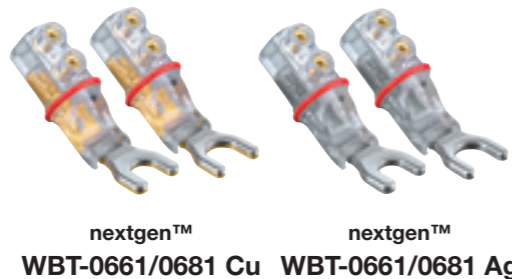
For the audiophile gourmet: Banana plugs and Sandwich spades in nextgen™ quality

Delicately formed out of pure copper – the signal conductor of the nextgen™ banana plug WBT-0610 Cu. Directly gold-plated in a nickel-free finish to prevent oxidation. Despite the delicacy of the signal conductor, WBT-0610 is perfectly suited for the crimping technique. The crimping cage (cable termination area) is almost metal-free, however long-term stable. This is a real high-tech achievement of the precision mechanics with modern functional materials.

The basic concept behind the tried-and-tested WBT sandwich spade has always been a minimalist signal conductor made from pure copper (Cu versions). The nextgen™ principle was applied also for the high-tech crimping cage in 2008. You can now look forward to an even more detailed and spacious musical sound!



The nextgen™ banana plug WBT-0610 feature high conductivity and is free of magnetic interference. The contact pin “bellies” when the spindle is screwed in – for a constantly high contact pressure with constant low transition resistances.



The key to quality inherent in these sandwich spades is the patented design of their contact forks. An elastomer between the signal conductor and non-magnetic steel cap provides a constantly high contact pressure. Transition resistances are minimized and vibrations successfully absorbed.

CHARACTERISTICS

- signal conductor made from pure copper or fine silver
- mass-reduced nextgen™ principle
- 24 carat direct gold-plating (nickel-free)
- contacts through crimping
- IEC and CE compliant
- angled design as smart cable guide

WBT-0610

- secured with a central pin

WBT-0661 / 0681

- contact fork with integrated vibration absorber
- WBT-0661 with 6 mm fork width
- WBT-0681 with 8 mm fork width

WBT BANANA PLUGS / SANDWICH SPADES nextgen™

Product	Signal conductor material	IEC/CE compliant (insulated)	Crimping	For cable up to (mm ²)	Nickel-free	Direct gold-plating	Platinated
nextgen™							
WBT-0610 Ag	Ag	x	x	10	x		x
WBT-0610 Cu	Cu	x	x	10	x	x	
nextgen™							
WBT-0661 Ag	Ag	x	x	10	x		x
WBT-0661 Cu	Cu	x	x	10	x	x	
WBT-0681 Ag	Ag	x	x	10	x		x
WBT-0681 Cu	Cu	x	x	10	x	x	

Signal conductor material: Ag = fine silver, Cu = pure copper
IEC = touch-proof insulation and approved for currents > 34.5 V | CE = suitable for use in AV systems;
safety pin for child protection (preventing unintended connection to a mains socket)

Banana plugs – classic –

The classic series banana plugs from WBT present an impressive robust design. To avoid unnecessary transition resistances, it is produced from a single piece of copper alloy. Oxidation is prevented by 24 carat gold-plating.

The expandable central pin means that the WBT banana plugs will fit tightly into any socket. This means not only a secure connection, but also a constant high contact pressure and constantly low transition resistances.



Soldering or crimping?
Those who favor the crimping technique will use the relevant Torx screws to permanently fix the crimped cable end and as a reliable strain relief. WBT Torx screws run on special fine threads and maintain the applied pressure perfectly.

* Discontinued model for 2010



Thanks to its angled design the WBT-0645 is a potential space saver in the arrangement of devices. Also, the cable is directed down to the ground and cannot be damaged from kinking. In addition the WBT-0645 can be cascaded and features child protection.

CHARACTERISTICS

- locking bananas with expandable contact pin
- WBT double Torx screw system
- 24 carat gold-plating
- perfect strain relief

WBT-0600 / WBT-0644

- for crimping or soldering
- easy to assemble
- WBT-0644 has less copper in the substrate, but otherwise is identical to WBT-0600

WBT-0645

- for crimping
- compact and cable-friendly
- stackable
- IEC and CE compliant

WBT BANANA PLUGS classic

Product	Signal conductor material	IEC/CE compliant (insulated)	Suitable for Bi-Wiring	Soldering	Crimping	For cable up to (mm ²)	Nickel-free	Gold-plated
classic								
WBT-0600	Cu Zn			x	x	10	x	x
WBT-0644	Cu Zn			x	x	10		x
WBT-0645	Cu Zn	x	x		x	10		x

Signal conductor material: Cu Zn = copper / zinc
IEC = touch-proof insulation and approved for currents > 34.5 V | CE = suitable for use in AV systems;
safety pin for child protection (preventing unintended connection to a mains socket)

equipped with
WBT



TEMPO 25 white high gloss



AUDIO PHYSIC Terminal equipped with WBT nextgen™ pole terminals

WBT presents:

audio physic

No loss of fine detail

WE ARE CELEBRATING OUR 25TH ANNIVERSARY. GOOD NEWS FOR US, EVEN BETTER NEWS FOR OUR CUSTOMERS!

No loss of fine detail – this has been Audio Physic's maxim for 25 years and has filled our passion, dedication and determination ever since. Our maxim carries in itself the will to never stop, to constantly challenge ourselves and, whenever necessary, explore new paths that have never been trodden before. Therefore vintage Audio Physic loudspeakers are not and never will be mainstream.

Absolutely exceptional designs such as the MEDEA with its bending wave transducers for the midrange and tweeter, the CALDERA with its modular structure that had the international audiophile world buzzing and the newest flagship loudspeaker CARDEAS with its technical and acoustic excellence all serve to confirm this.

Audio Physic's 25 years of success has not only been based on designing large and costly loudspeakers, rather on the company being able to represent the pinnacle of the industry and staying on the cutting edge of loudspeaker technology. After all, every single loudspeaker benefits from the experiences gained in developing the top models. A renowned specialist magazine even hailed the SCORPIO II as "a new benchmark" in the 5000 Euro price range. To celebrate our 25th anniversary, we have decided to present the TEMPO 25 special edition featuring midrange drivers and tweeters borrowed from the CARDEAS flagship.

Cabinet design is, was and always will be one of our foremost concerns. Our highly elaborate and complex cabinets are heavily braced internally, preventing the cabinet from adding or taking anything from the original sound as well as ensuring the reproduction of every detail. It goes without saying that they are extremely well built and available in the finest quality hardwood veneer or lacquered finishes.

At Audio Physic we understand a loudspeaker as a whole system, the sum of its parts. Therefore we ensure that every single loudspeaker, from our budget priced YARA series to our high-end product range, meets our own requirements as well as those of our customers before it leaves the factory. Our name and reputation says it all.



CARDEAS ebony



Over the past 25 years, authentic sound reproduction has not only been the focus of our work but has also been our passion. This passion has given and continues to give us the courage needed to go our own way, stand out and swim against the tide in a world that is becoming increasingly monotonous in many areas. Creative technical solutions like our new HHC midrange drivers and tweeters are just some examples representative of our approach. Nevertheless, we consider loudspeakers to be far more than just cool technical products. Every AUDIO PHYSIC product is an embodiment of individuality. This is why WBT parts with their patented nextgen™ technology are a perfect match for our concept. Highly detailed signal transmission along with a unique design – a totally individualistic innovation which meets our requirements in every respect.

The uniqueness of our loudspeakers has formed the foundation of our success since 1985 and inspires us to constantly strive to reach new goals. As a result, our AUDIO PHYSIC loudspeakers will continue to excel in the future, staying true to our motto: no loss of fine detail.

Audio Physic GmbH
www.audiophysic.de



TEMPO 25 walnut

Would you like to find further manufacturers whose products are equipped with WBT technology?

Ask your WBT specialized trade dealer. He will be happy to inform you and to make the right decision.

Pole terminals – nextgen™ –

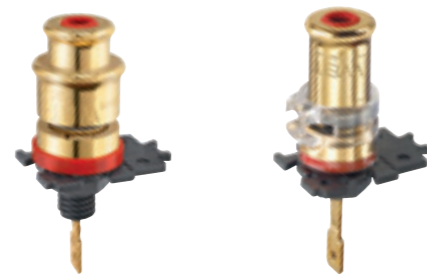
For the audiophile gourmet:
Pole terminals in nextgen™ quality

nextgen™ pole terminals provide the same great potential for connecting your loudspeaker cables as the classic series, and accept banana plugs, spades, and crimped cable ends. Inside, cables can be soldered, crimped, or even screwed directly to the crossover. The assembly is always insulated and secured perfectly against twisting.

CHARACTERISTICS

- completely new innovative construction
- minimalistic signal conductor made from pure copper or fine silver
- 24 carat direct gold-plating (nickel-free)
- accepts banana plugs, spades, crimped cable ends (6 mm²/11 AWG)
- for soldering or flat push-on cable shoes
- twist-proof mounting
- fully insulated, IEC and CE conformable
- puzzle plate system

* More basic and background details on eddy currents and mass storage effects can be found in the WBT technical articles at www.wbt.de.



nextgen™
WBT-0705 Cu

nextgen™
WBT-0710 Cu

Where sound quality is concerned, nextgen™ pole terminals will satisfy even the most fastidious of audiophiles.

The innovative design behind this can be revealed only on an X-ray image (page 5).

A mineral- and glass-fiber-reinforced plastic sheath houses an innovative, ideally molded signal conductor – naturally made of pure copper in a minimalistic design. The minimized metal masses are one of the basic principles of nextgen™: only signal conductors that are as thin as possible help to eliminate eddy currents* and mass storage effects*.

In addition the WBT-0705 presents a fascinating all-metal look and haptics. But for all that: Inside it's pure nextgen™! The ideal shape of this conductor makes every configuration possible, it accepts 4 mm banana plugs and crimped cable ends up to 6 mm² and of course sandwich spades.

Pole terminals – classic –



classic
WBT-0763

classic
WBT-0765

classic
WBT-0766

WBT POLE TERMINALS nextgen™

Product	Signal conductor material	IEC/CE compliant (insulated)	Nickel-free	Direct gold-plating	Passivated
nextgen™					
WBT-0705 Ag	Ag	x	x		x
WBT-0705 Cu	Cu	x	x	x	
WBT-0710 Ag	Ag	x	x		x
WBT-0710 Cu	Cu	x	x	x	
WBT-0710 Cu mC	Cu	x	x	x	

Signal conductor material: Ag = fine silver, Cu = pure copper, Cu mC = pure copper with velours chromium finish
IEC = touch-proof insulation and approved for currents > 34.5 V | CE = suitable for use in A/V systems

Pole terminals – classic –

The classic series of pole terminals feature superior mechanisms, solid designs, and strong clamping nuts for high contact pressure and constant low transition resistances – the ideal attributes for minimizing audio interference.

“Genuine gems”: WBT-0702.11, WBT-0702.12, WBT-0730.11, and WBT-0730.12
These four products are already something quite special among our classic range. Their contact areas have been optimized by fine grinding, and the visual appeal of all visible faces enhanced even further by additional polishing.



classic
WBT-0702.11 gold
WBT-0702.12 platinum



classic
WBT-0702.01



classic
WBT-0730.11 gold
WBT-0730.12 platinum



classic
WBT-0735

CHARACTERISTICS

- puzzle plate system
- twist-proof mounting

WBT-0763 | WBT-0765
WBT-0766

- extremely high contact pressure through fine pitch thread and cross-milled surface
- soldering or crimping, screw-on pcb connection in case of WBT-0766
- made from brass, gold-plated

WBT-0702

- extremely high contact pressure through fine pitch thread and milled grooves
- soldering or crimping (with a Torx screw) connection
- high conductive copper alloy
- 24 carat direct gold-plating (nickel-free)

WBT-0730 | WBT-0735

- extremely high contact pressure through fine pitch thread and cross-milled surface
- soldering or crimping (with a Torx screw) connection
- high conductive copper alloy
- 24 carat direct gold-plating (nickel-free)

WBT POLE TERMINALS classic

Product	Signal conductor material	CE compliant (insulated)	Nickel-free	Gold-plated	Direct gold-plating	Direct Platinum-plating	Polished surface
classic							
WBT-0763	Cu Zn			x			
WBT-0765	Cu Zn	x		x			
WBT-0766	Cu Zn	x		x			
classic							
WBT-0702.11	Cu Zn		x		x		x
WBT-0702.12	Cu Zn		x			x	x
WBT-0730.11	Cu Zn		x		x		x
WBT-0730.12	Cu Zn		x			x	x
classic							
WBT-0702.01	Cu Zn		x	x			
WBT-0735	Cu Zn	x	x	x			

Signal conductor material: Cu Zn = copper / zinc
CE = suitable for use in A/V systems



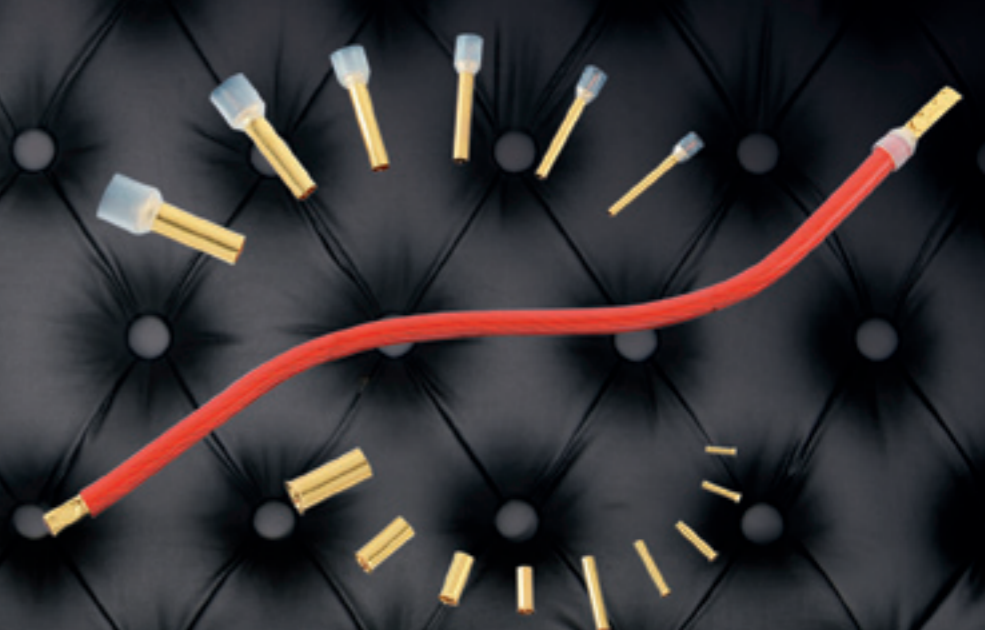
nextgen.

FINISHING TOUCHES & ACCESSORIES

- POLE TERMINAL ACCESSORIES page 24
- FINISHING TOUCHES page 29

The WBT range of connectors is rounded off with a series of accessories. Every single accessory part is well conceived and enables such a pleasant and easy installation of WBT terminals.

With the fine tools and processing materials you can fully and unreservedly enjoy the quality of WBT products.



Pole terminal accessories

WBT mounting plates have been designed for a professional installation of all WBT pole terminals. They can be installed on the panel front or countersunk. Their stability is good enough to accept the crossover to be mounted directly on the rear side of the plates.

The power bridges have been designed quite in the sense of the nextgen™ technology for bridging of bi-wiring terminals. The conductor material is pure copper or fine silver which provides these power bridges the highest degree of conductivity. In addition they feature an intermediate elastomer for absorbing vibrations.

... and of course all mounting plates are available with a slot hole for the impact sound interrupter.

CHARACTERISTICS

All WBT mounting plates are of course equipped with the necessary accessory parts:

- screws
- wood press-in nuts (brass)
- cellular rubber seal
- cabinet production drawing
- assembly drawing
- available also with slot hole

WBT-0530.05

- 110 x 110 mm

WBT-0531.05

- 110 x 150 mm

WBT-0532.05

- 127 x 178 mm

WBT-0725

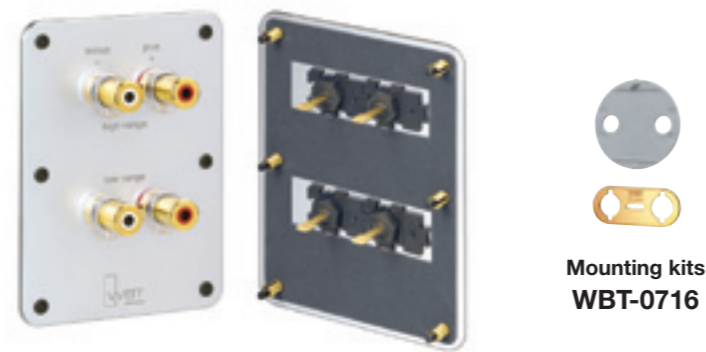
- power bridge, nextgen™ style
- made from pure copper or fine silver
- equipped with elastomer as vibration damper
- fully insulated, IEC and CE conformable
- easy handling

WBT-0718

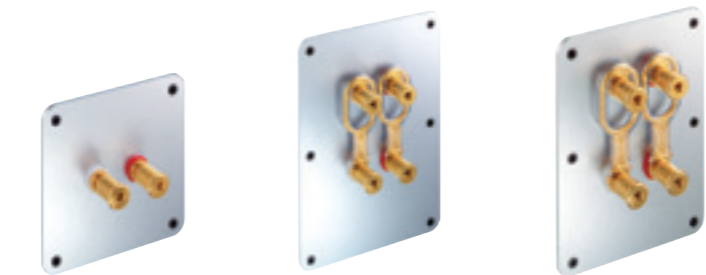
- for decoupling of impact sound in loudspeakers and electronic equipment (line frequency)
- for all WBT pole terminals and RCA sockets

Soon available from your specialized WBT dealer.

* WBT provides special slot hole punches for retrofits.



Mounting kits
WBT-0716



for single-wiring
WBT-0530.05

for bi-wiring
WBT-0531.05

for bi-wiring XL
WBT-0532.05



Power Bridge
WBT-0725

Impact sound interrupter
WBT-0718

Assembly requires a slot hole*. The rest follows almost automatically. The set is secured with the counter nuts of the pole terminals.

IEC = touch-proof insulation and approved for currents > 34.5 V
CE = suitable for use in A/V systems
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WBT inside? – Feel certain with WBT-signet –

How do you know if your high-end devices are equipped with WBT connectors?

Is it the crystal clear sound? The undisturbed signal transmission? Music which sounds off your loudspeakers tunefully with all details and refinements?

Yes, all this indicates that manufacturers of your high-end devices use our innovative nextgen™ products, and that our high-quality connectors reproduce the sound of your high-end devices authentically.

However, this should be recognized in an easier and faster way. With a simple mark which guarantees the best possible quality of your components without a comprehensive sample-listening.

We give you a mark for real WBT quality! The new WBT-signet. This way you will view the interior quality of your high-end components right away from the outside. This is so to say a quality symbol for a real high-end standard which can be recognized at first sight.

The WBT-signet has approx. 2 cm diameter and consists of 3 elements: an adhesive film, WBT logo in red elastomer, a soft, rubber-like material, and a cover made of hard makrolon in blue coal.

High quality functional materials are self-evident to us, we are sure you know this. But not only due to high-quality claims have we created our signet in special materials and in a distinct design making it unmistakable and forgery-proof.

Product pirates copy over and over again WBT products being so popular with high-end enthusiasts. Since imitation is the highest form of appreciation we actually could feel flattered. However, there is no reason for us to see fakes as something positive.

Forged connectors, alleged “high-end” with alleged WBT interior parts – this is how our good image gets damaged by bluff and bad copies. This is very annoying.



But not only for us, also for you – our customers. If you are convinced that you buy real WBT quality and pay much money for forged products, you are perfectly entitled to be angry about the bad sound.

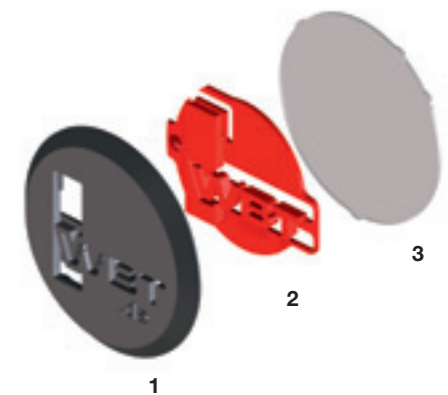
Being produced in low-wage countries can't keep up in the least with the reliability and sound quality of WBT connectors. What they copy is only the outer form. It has taken many years of research and development for our nextgen™ series to be thought through and put in line with the best technical and acoustic performance.

Forged “low tech” products don't fulfill these requirements. They offer instead sluggish sound with unpleasant fluctuations, background noise and rather low mechanical capacity. All this is quite contrary to WBT quality!

Good sound is important for us! Have fun and satisfaction with pure sound with its all nuances. As a quality-conscious customer you are protected against product piracy.

Please pay attention to the WBT-signet when you choose your high-end components and check it with your high-end dealer. You can feel certain of purchasing the best sound quality with genuine and first-class WBT products only through an appropriate marking on the components.

WBT-signet – The mark of distinction for original high-end quality



WBT-signet

forgery-proof and made of several components:

- 1| Basic part – the signet made of polycarbonate
- 2| Logo signet made of elastomer
- 3| Adhesive film for WBT-signet made of polystyrene



WBT presents:

KEF®

INNOVATORS IN SOUND

KEF – THE INNOVATORS IN SOUND

The loudspeakers of the British manufacturer KEF are already today legendary. The global player looks back on a long tradition with path-breaking developments such as the Uni-Q or the ACE technology.

Since KEF was founded in 1961 it has expanded from a small, English manufactory to a premium supplier of top-of-the-range audio systems. With nearly 50 years of experience in the field of modern loudspeaker development and future-oriented engagement in research and development, KEF belongs today to the world's leading manufacturers of superior acoustic quality sound systems.

KEF defines the four key points of its success as quality, reliability, commitment and innovation. Another important part of its success is the co-operation with suppliers who meet KEF's high quality demands – WBT with its first-class products is the best example.



Muon – There can be few projects in this world where the central aim is to create an 'ultimate'. But this was precisely the goal when KEF combined their state-of-the-art acoustic technology with the sensual, organic forms of visionary designer Ross Lovegrove. The result was Muon – perhaps the most extraordinary audio speaker ever conceived.



With engagement and commitment combined with solid craft trade and technical development urge, KEF's engineers create high-performance, modern home entertainment products. These have been granted several international awards for their top quality and innovation. The umbrella brand KEF unites four product divisions: loudspeakers, home cinema systems, complete systems and in-wall loudspeakers.

The brand KEF belongs to the electronics company GP Acoustics since 1992 (headquartered in Hong Kong). GP Acoustics is one of the world's leading loudspeaker manufacturers and offers the entire know-how package which ranges from providing the concept, development and production to distribution of home entertainment solutions.

KEF
www.kef.com



Raymond Cooke founder of KEF

Would you like to find further manufacturers whose products are equipped with WBT technology?

Ask your WBT specialized trade dealer. He will be happy to inform you and to make the right decision.



The impact sound interrupter WBT-0718 in detail:



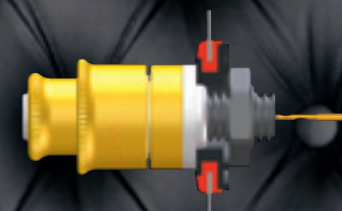
Fig. 1: Both sides of WBT impact sound interrupter:

A: Mounting plate, chassis side, external
B: Counter-plate, internal

The red frame made of soft elastomer is injected directly and non-detachably in a complex 2-c-procedure.



Fig. 2 and 3: The sectional images show how WBT impact sound interrupter grips the chassis or the rear panel of a gadget in a firm, yet soft way.



The latest member of the nextgen™ family

The newest addition to the nextgen™ family, the impact sound interrupter WBT-0718 was created for the purpose of enriching the world of high end.

From the physically defined viewpoint, tones, sound and music are nothing other than sonic waves.

This is a physical phenomenon which is highly estimated by sound enthusiasts. Yet an undesirable side effect of sound is the so called impact sound. No doubt you have heard this adverse effect from your loudspeaker cabinets.

This impact sound enforces mechanical vibrations not only to be heard but also affects all of the contact elements along the hi-fi chain which constitute the electrical connections of the elements of your hi-fi system.

These vibrations commonly result to small alterations of the transition resistances of the different connectors which on the other hand produce hearable distortions. This means degraded sound quality and limited listening experience.

The challenge: Avoid the impact

These distortions primarily depend from the level and the frequency of the impacting signal and may definitely reach values of half a LSB (least significant bit). This indication of measurements is easily to be imagined and means for a 16 bit AD / DA system a signal to noise ratio (SNR) of 96 dB, a well known value for minimum hi-fi requirements.

It is simply not possible to eliminate these impact sound generated distortions if they once corrupted the signal to be transmitted. The only way to avoid these distortions is to

thoroughly decouple the vulnerable contact areas from the impact sound.

The impact sound generated by a speaker must not affect the quality of the transmission path. This is assured by the youngest member of the nextgen™ family, the WBT-0718 impact sound interrupter.

Disruptive vibrations don't have a chance!

The WBT impact sound interrupter discontinues the path of impact sound transmission by means of a soft decoupling frame. Disruptive vibrations coming from the source of sound don't have a chance in the surrounding materials. The contacts are protected against impact sound and yet firmly secured in the housing.

So young and so much potential – the WBT impact sound interrupter. Unveiled just in time for the HIGH END 2010 in Munich it is already enjoying a huge rush in demand. This development is a genuine gain for all lovers of perfect sound, and soon available from your specialized WBT dealer.

TIP: WBT also offers retrofit kits for certain high-quality amplifiers and loudspeakers.

The WBT-0718 impact sound interrupter is a WBT quality product – and simply indispensable for anyone wanting to experience the high-end dimensions of sound.

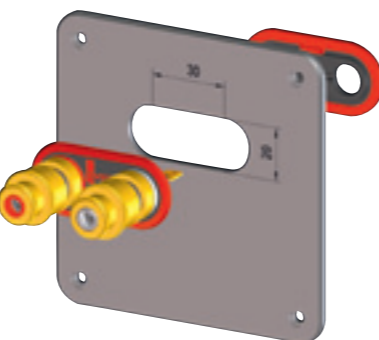


Fig. 4: Assembly requires a slot hole*. The rest follows almost automatically. The set is secured with the counter nuts of the pole terminals.

* WBT provides special slot hole punches for retrofits.

1|1 There are two kinds of distortion to be distinguished: a) linear ones: there exist no modulation products, the distortions are to be compensated by linear networks b) non-linear ones: there exists no open loop method for compensation.

1|2 More basic and background details can be found in the WBT technical articles at www.wbt.de.

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Finishing Touches

Must haves – The crimping pliers WBT-0403 are perfectly matched to the geometry of WBT crimping plugs, and the Dynakey WBT-0481 ideal for the 5 dNm needed for WBT plugs. Also the razor-sharp cable cutter is suitable for both virgin cables and crimped cable ends, without deforming them. The Dynakey set WBT-0490 has long left behind its original target group of audiophiles and is now entralling tool lovers all over the world.



Dynakey set
WBT-0490



Torque controlled
Dynakey
WBT-0481



Bit set
WBT-0484



Crimping set
WBT-0411



Crimping pliers
WBT-0403



Cable end sleeves
with and without
insulation collar



Cable cutter
WBT-0499



Silver solder
WBT-0800/0805



Angled Torx
WBT-0488

WBT-0490

- includes the torque controlled Dynakey WBT-0481 and the bit assortment WBT-0484 with 18 top-grade 4 mm bits
- delivered in a handy plastic case

WBT-0481

- high-precision tool
- factory-set to 5 dNm for perfect mounting of all WBT plugs
- fitted as standard with a Torx T.6 bit for WBT mounting

WBT-0484

- 18 pieces set with top-grade 4 mm bits made from hardened chrome vanadium steel for WBT-0481

WBT-0403

- ideal for crimping of cable end sleeves from 0.5-16 mm² (20-5 AWG) for WBT crimping plugs
- comfortable grip zones, gold-plated

CABLE END SLEEVES

- made from pure copper, 24 carat gold-plated, nickel-free
- with and without insulation collar, available in the standard sizes from 0.5-16 mm² (20-5 AWG)
- also available in fine silver, passivated

WBT-0499

- ideal also for stripping cables, gold-plated
- very straight, high-precision cut profile

WBT-0800/0805

- high quality solder with 4% fine silver content
- WBT-0800 melting temperature 178°/180° C
- WBT-0805 (lead-free!) melting temperature 216°/219° C

WBT-0488

- small Torx T.6 screw driver



If you love the best –
You'll get it –
life like music



RG 14 Edition
Reference at magazine stereo



The CD player



RG 10 MK4
Reference at magazine audio



Heart and hand work.

Would you like to find further
manufacturers whose products
are equipped with WBT tech-
nology?

Ask your WBT specialized trade
dealer. He will be happy to inform
you and to make the right deci-
sion.

From the beginning
WBT in use for the best
sound at our company



WBT presents:

Symphonic Line

FOR OVER 30 YEARS
HIGH END FROM DUISBURG



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