

# Coaxial Plug WBT-0101

RCA plug (16 ohms) for cables up to 9 mm dia.,  
for soldering

Made in Germany

Int. Patent 0460145

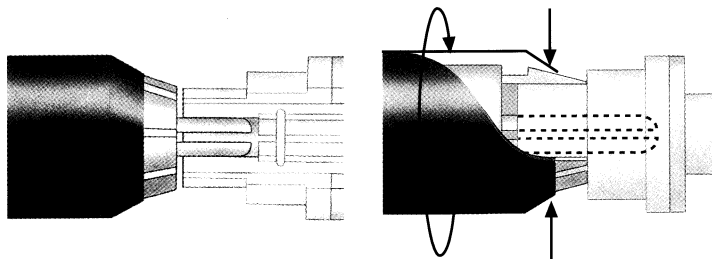
To achieve the best possible results from the individual components of a HiFi system, you need optimum connections. It's not so much the cable you use which is decisive but the connectors, since it is at the contact points between cable and system that most transmission loss occurs.

For this reason, WBT has developed plugs and jack sockets for audio systems far superior to the standard types available. WBT quality connectors are made from a special **OFC copper alloy** and ideally protected against corrosion by **24-carat gold plating**. **Teflon\*** insulation additionally ensures constant dielectric properties. WBT RCA plugs and jacks are matched for a unified surge impedance of 16 ohms which qualified them to form adapted connections when the system cable WBT-2016 is used. All WBT RCA connectors are free from ferromagnetic materials.

Even more important than the material used are the mechanical properties of a connector. The decisive factor is a high and reliable contact pressure, created for example by clamping or spring mechanisms: A precision-turned part alone can fulfill these requirements. A connector **turned from solid material** (tolerance  $\leq 2/100$  mm) additionally guarantees **extremely low** and **reliably reproducible contact resistance**.

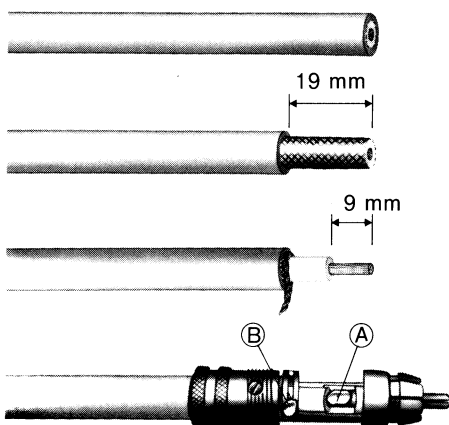
The contact quality of conventional RCA pin-plug connectors is undeniably poor. The reason for this is a lack of standardisation. WBT trial measurements have shown, for example, that the diameter of the outside contacts of RCA jack sockets varies from 7.95 to 8.55 mm! An ideal pin-plug connector can therefore never be a perfect fit but must be **adaptable**. This problem was solved by WBT long ago:

- Due to the (patented) **collet chucking device**, which works in the same way as the chuck of a power drill, WBT coaxial plugs can be adjusted **to fit phono jacks of all kinds**. The lamellas of the outer plug contact can be narrowed down to fit any jack socket by turning the plug sleeve. This not only ensures uniformly high contact pressure but also clamps the plug firmly to the jack socket.
- The spring path of **the fourfold slotted inside contact** is such that the necessary contact pressure is reliably created even in the widest of jacks.
- **Intelligent contact arrangement**: when WBT plugs are used in conjunction with WBT coaxial jacks, this ensures that the outside conductors are activated before the inside conductors, thus preventing unwanted voltage peaks.



## Hints for assembly:

- Strip cable, as shown in the diagram, twist cable core, then insert cable loosely into the plug.
- Press cable core (+ conductor) into point "A" and solder.
- Slide shield conductor (- conductor) a short way between the two stays at point "B" (- pole), if necessary, these can be slightly bent apart, and solder. Cut off excess cable. The resultant soldering joint, which is slightly overlapping, must be bent inwardly approx. 2 - 3 mm by applying thumb pressure, so that the plug sleeve can be screwed on without difficulty.
- Now screw in headless screw for strain relief.



## Handling

**The plugs should only be inserted and withdrawn in relaxed condition:** to achieve this, first twist the sleeve slightly on the plug (the sleeve cone does not yet narrow the lamella head of the plug).

Insert the plug into the jack. In order to fix the plug, turn the plug sleeve in the direction of the cable.

Before withdrawing the plug, turn the plug sleeve in the direction of the jack to release the collet chuck mechanism until the plug can be easily pulled out of the jack.

## Important:

**The WBT-0101 coaxial plug is designed exclusively for use in signal connections of the audio and video range. WBT GmbH assumes no liability for incorrect use.**

Mechanical sizes (in mm)

external contact dia.	8.4
range of spring of eight-fold slotted part	7.8-8.8
- internal contact dia.	3.3
range of spring of fourfold slotted part	3.0-3.4

Surge impedance (proj.): 16 ohms

Recommended soldering medium and cable:

- WBT-0800 silver solder 4% Ag
- WBT-2016 interconnect cable 16 ohms