

No other manufacturer strives for uncompromising audio quality with the same perseverance and level of knowledge as ETI Research does. The team at ETI Research benefit from their strict business beliefs that endorse innovation, top performance, and unparalleled quality. Time and again, ETI Research's connectors emerge as the best in their class. In terms of construction and of music reproduction, in fact: in terms of every facet of the product. Out-of-the-box thinking has brought the company to where it is today, and out-of-the-box is also an excellent classification for the final sound. Every detail is essential. If you then tackle these details with passion and knowledge, ground-breaking products will be the result. Hearing is believing.

It all started with the ETI Bullet RCA connector

"The benefits are huge, HUGE! They transform the performance of affordable cables, and I can't wait to hear them on serious leads"

The introduction of the ETI Bullet Plug RCA connector in 2001 caused quite a stir. A completely new approach to signal transmission formed the basis for this unique connector. To this day, most connectors are manufactured based on a casting process using cheap and poorly conductive metal. This is often brass (IACS 28), an alloy of copper and zinc. After the casting process, the connector is coated with a layer of nickel (IACS 22) as an adhesive for a coat of vapor-deposited gold (IACS 70). The purpose of the adhesive layer is nothing other than a nice glossy surface.

The casting process limits the design and forces the production of large and solid surfaces with undesirably increasing transition impedances and capacity problems. ETI introduced an alternative: a CNC production process that allowed compact surfaces and complex shapes with low mass. By using ultra-pure copper (IACS 100) in a hollow signal pin milled from one piece and using a single-point contact instead of a ring contact for the return line, unwanted eddy currents (eddy currents) in the signal transmission were greatly reduced. Through advancing insight and fundamental research, ETI technology has evolved, and the Bullet Plug lives on as the Link RCA connector, as part of a full range of quality connectors.

The conduction of metals is defined in the International Annealed Copper Standard (IACS). The conductivity of pure copper is the standard and is set at 100. Silver is the most superior conductor and on this scale 106, Gold 70, Brass 28 and Platinum 17. Below is an overview of the most used metals and alloys for audio connectors.



Conduction of various (precious) metals

ETI Link Series

The ETI Link Series consists of five models. One RCA ETI Silver link, and four ETI Copper Links. Available as a Banana, a Spade, an RCA or an XLR version. The Link Series models have evolved from the original Bullet and Silver Bullet models. The ETI Link Series is a series of High-End models where experiences and new techniques have been incorporated in completely new designs in an uncompromising manner. These designs have been transformed into reality and form the showpieces of ETI's delivery program.

ETI Silver Link

The ETI Silver Link is the evolved Silver Bullet Plug. The Silver Link is the same as the Link, but the copper parts have been replaced by 99.99% pure silver (IACS 106). The connector housing is also dielectric (insulating material) and made of Delrin®, a heat-resistant material that allows high-temperature soldering. Affordable connectors are often equipped with simple plastic insulation that melts or deforms during the soldering process. To prevent radiation (EMI/RF), the connector is supplied in a screwable aluminium housing. The housing is equipped with a channel indication (white and black) and serves as strain relief by means of two screws. Cables with a diameter of up to 12 mm can be mounted without any problems. All connections in the Silver Link RCA connector must be soldered.



Conduction of various (precious) metals



ETI Copper Link RCA

The ETI Copper Link is the evolved Bullet Plug. The large contact surface and the low physical load make it possible to use a hollow centre pin made of ultra-pure copper (IACS 102). The small dimensions of the return pin in combination with the clamping and spring function requires a different type of copper. Tellurium copper (IACS 95) is a flexible copper with excellent spring properties due to the addition of 0.5% tellurium. The connector housing is also dielectric (insulating material) and made of Delrin[®], a heat-resistant material that allows high-temperature soldering. Inexpensive connectors are often equipped with simple plastic insulation that melts or deforms during the soldering process. To prevent radiation (EMI/RF), the connector is supplied in a brass housing. The housing is equipped with a channel indication (white and red) and serves as strain relief by means of two screws. Cables with a diameter of up to 11.6 mm can be mounted without any problems.



ETI Copper Link XLR



The contact pins of the ETI Link male XLR are milled from tellurium copper (IACS 95) and then gold-plated. The spring contact terminals of the ETI Link female XLR are also made of milled tellurium copper. This deserves special mention. Usually, the contact terminals in female XLR connectors are made of stamped brass, a cheap and very poor conductor. The connector housing is also dielectric (insulating material) and made of PTFE (Telfon™). To prevent radiation (EMI/ RF), the connector is supplied in a brass housing. The housing is equipped with a channel indication (white and red) and serves as strain relief by means of two screws. Cables with a diameter of up to 14 mm can be mounted without any problems.





ETI Link Banana

The entire connector is milled from one piece of tellurium copper and then gold plated. The signal connection of the Link Banana can be made optionally with a double screw connection and/or by soldering. To prevent radiation (EMI/RF), the connector is supplied in a brass housing. The housing is equipped with a channel indication (white and red) and serves as strain relief by means of two screws. Cables with a diameter of up to 11.6 mm can be mounted without any problems.

ETI Link Spade

The entire connector is milled from one piece of tellurium copper and then gold plated. The signal connection of the Link Spade can be made optionally with a double screw connection and/or by soldering. To prevent radiation (EMI/RF), the connector is supplied in a brass housing. The housing is equipped with a channel indication (white and red) and serves as strain relief by means of two screws. Cables with a diameter of up to 11.6 mm can be mounted without any problems.



The ins en outs of ETI connectors

	Signal Pin	Return Pin	Dielectric	Direct Plating	Shielding	Mounting
	Silver Silver 1100 Series copper Tellurium copper Cryogenic Hollow	Silver 1100 Series copper Tellurium copper Cryogenic not applicable	Teflon® (PTFE) Delrin® Polymer	Silver Gold Rhodium not applicable	Brass Aluminium	Soldering Screwing
ETI Link						
Banana						
Spade						
RCA Copper						
XLR						
RCA Silver						
ETI Kryo						
Banana						
Spade						
RCA						
XLR						
Binding posts						
ETI Brio						
Banana						
Spade						
RCA						
XLR						
ETI Nexus						
RCA						
XLR						
ETI Binding posts						
BP20C						
FSU8 FRTC07						
ETI Legato						
Schuko Gold						
IEC Gold						
Schuko Rhodium						
IEC Rhodium						
US Gold						
US Rhodium						

ETI Kryo Series

The ETI Kryo Series includes six models: RCA, XLR male, XLR female, Banana, Spade and Amplifier Binding Post. All signal carrying parts are not cast but machined (CNC) from tellurium copper (IACS 95). A CNC production process makes it possible to mill away unnecessary material. The result is a robust connector with little mass. After manufacture, the tellurium copper parts are cleaned and then silver plated. The silver layer is applied directly to the tellurium copper. The connector is then cryogenically treated. During a cryogenic process, an object is exposed to extremely low temperatures (up to -200 degrees Celsius) for a long period of time (often days). The object is then returned to the ambient temperature in phases. The goal (and result) with the ETI Kryo connectors is better conduction and audible sound improvement. To prevent radiation (EMI/RF), the connector is mounted in a brass housing. The housing is equipped with a channel indication (white and red) and, where necessary, also serves as strain relief by means of two screws.

ETI Kryo RCA

The connector housing is also dielectric (insulating material) and made of Delrin[®]; a heat-resistant material that allows high-temperature soldering. Inexpensive connectors are often equipped with simple plastic insulation that melts or deforms during the soldering process. The signal connections of the Kryo RCA connector must be soldered. Cables with a diameter of up to 11.6 mm can be mounted without any problems.





ETI Kryo XLR

The connector housing is milled from a single piece of tellurium copper and then silver-plated. The dielectric (insulating material) is made of Teflon®: a heat-resistant material that allows high-temperature soldering. Teflon, after or in combination with air, is usually judged to be the most high-quality and sound-neutral dielectric. All contact pins of both the male and female XLR are milled from one piece. The signal connections of the Kryo XLR connector must be soldered. Cables with a diameter of up to 14 mm can be mounted without any problems.

ETI Kryo Banana

The entire connector is milled from one piece of tellurium copper and then silver plated. The signal connection of the Kryo Banana connector can be made optionally with a double screw connection and/or by soldering. A screw-on brass housing for cables with a diameter of up to 11.6 mm is included.





ETI Kryo Spade

The entire connector is milled from one piece of tellurium copper and then silver plated. The signal connection of the Kryo Spade connector can be made optionally with a double screw connection and/or by soldering. A screw-on brass housing for cables with a diameter of up to 11.6 mm is included.

ETI Kryo Binding Post

The entire connector is milled from one piece of tellurium copper and then silver plated. The signal connection of the Kryo Binding Post can be made optionally with a screw connection and/ or by soldering. The connector is placed in a polymer sleeve so that the brass mounting nut does not contact the silver-plated conductor.



ETI BP20C Binding Post

The entire connector is milled from one piece of specially treated ultra-pure copper (IACS 102) and then gold-plated. The signal connection of the BP-20-C Binding post can be made optionally with a screw connection and/or by soldering. The connector is placed in an aluminium on polymer sleeve with polymer mounting nut. The housing is equipped with a channel indication (black and red). The usable length for transit is 20 mm. Usually 20 mm is used on amplifiers or removable crossovers of speakers. The BP-50-C Binding Post is the same as the 20, but with a usable length for passage of 50 mm. Typically, 50 mm is applied directly to/in the cabinet of a loudspeaker.





ETI BP50C Binding Post

The entire connector is milled from one piece of specially treated ultra-pure copper (IACS 102) and then goldplated. The signal connection of the BP-50-C Binding post can be made optionally with a screw connection and/or by soldering. The connector is placed in an aluminium on polymer sleeve with polymer mounting nut. The housing is equipped with a channel indication (black and red). The usable length for transit is 50 mm. Typically, 50 mm is applied directly to/in the cabinet of a loudspeaker. 20 mm is usually used on amplifiers or removable crossovers of speakers. The BP-20-C Binding Post is the same as the 50, but with a usable length for passage of 20 mm.

FR-TC07 Female RCA for flush mounting

The signal pin is milled from one piece of specially treated ultra-pure copper (IACS 102). The connector and return pin are milled from tellurium copper. The connector is placed in a polymer sleeve so that the black anodized brass mounting nut does not contact the copper conductor.





FS-08 Female RCA for flush mounting

The signal pin is milled from one piece of 99.99% pure silver (IACS 106). The connector and return pin are milled from one piece of specially treated ultra-pure copper (IACS 102) and then silver-plated. The dielectric (insulating material) is made of Teflon®: a heat-resistant material that allows hightemperature soldering. Teflon, after air or in combination with air, is usually judged to be the most high-quality and sound-neutral dielectric. The connector is placed in a polymer sleeve with silver-plated brass mounting nut.

Rhodium

The unique sound properties of ETI connectors are formed by a combination of factors. The two most important are the low mass and the use of the purest copper (1100 Series conducts 102 on a scale of 100). To prevent oxidation, the surface of the copper connector is often sealed with a layer of precious metal. The layer thickness is usually 5 microns (1 micron is 0.001 mm). Gold is often used for this (pure gold conducts 70 on a scale of 100) and better, pure silver (conducts 106 on a scale of 100). Over time, silver turns black due to sulphur in the air. The black layer is silver sulphide (not oxide) and contrary to what many people think, this improves conductivity. In Asia, where there is more sulphur in the air than the rest of the world, this process happens much faster, and people are still suspicious of the black substance. The solution to this problem is rhodium. Rhodium is not a precious metal and is poorly conductive (39 on a scale of 100). Rhodium is very wear-resistant, does not oxidize, it shines and remains shiny. Like the full moon in an oil puddle. A few decades ago, rhodium was at least 4 times cheaper than gold. Under the guise of unparalleled sound quality, the affordable rhodium was presented to the audio market as the new standard. Rhodium is now 10 times more expensive than gold and the result is that connectors with a layer of rhodium are much more expensive than with a layer of gold or silver. We can be brief about the sound properties of connectors provided with a layer of 0.005 mm rhodium. There aren't any. We can also be brief about the sound properties of a 0.005 mm layer of silver or gold. There aren't any either. It's all about the material the connector is made of...

ETI Brio Series

The ETI Brio Series includes five models: RCA, XLR male, XLR female, Banana, and Spade. All signal carrying parts are not cast but machined (CNC) from tellurium copper (IACS 95). A CNC production process makes it possible to mill away unnecessary material. The result is a robust connector with little mass. After manufacture, the tellurium copper parts are cleaned and then rhodium plated. The rhodium is applied directly to the tellurium copper. To prevent radiation (EMI/RF), the connector is mounted in a screwable brass housing. The housing is equipped with a channel indication (white and red) and, where necessary, also serves as strain relief by means of two screws.

ETI Brio Banana

The entire connector is milled from one piece of tellurium copper and then coated with rhodium. The signal connection of the Brio Banana connector can be made optionally with a double screw connection and/or by soldering. A screw-on brass housing for cables with a diameter of up to 11.6 mm is included.





ETI Brio RCA

The connector housing is also dielectric (insulating material) and made of Delrin®; a heat-resistant material that allows high-temperature soldering. Inexpensive connectors are often equipped with simple plastic insulation that melts or deforms during the soldering process. The signal connections of the Brio RCA connector must be soldered. Cables with a diameter of up to 11.6 mm can be mounted without any problems.



ETI Brio XLR

The connector housing is milled from a single piece of tellurium copper and then provided with a layer of rhodium. The dielectric (insulating material) is made of Teflon[®]: a heat-resistant material that allows high-temperature soldering. Teflon, after or in combination with air, is usually judged to be the most high-quality and sound-neutral dielectric. All contact pins of both the male and female XLR are milled from one piece. The signal connections of the Brio XLR connector must be soldered. Cables with a diameter of up to 14 mm can be mounted without any problems.

ETI Brio Spade

The entire connector is milled from one piece of tellurium copper and then coated with rhodium. The signal connection of the Brio Spade connector can be made optionally with a double screw connection and/or by soldering. A screw-on brass housing for cables with a diameter of up to 11.6 mm is included.



ETI Nexus Series

The Nexus Series includes two models, RCA and XLR and is primarily developed for screw mounting instead of soldering. When soldering is not possible or undesirable, the Nexus models offer a solution.



ETI Nexus RCA

The signal pin in the RCA connector is an 1100 Series OCC copper one. The return pin is tellurium copper. The aluminium connector sleeve is equipped with double strain relief.

ETI Nexus XLR

The contacts in the male and female connector of the XLR version are made of milled and directly silver-plated tellurium copper. Both are equipped with an aluminium connector sleeve with double strain relief.



ETI Legato Schuko AC Power Connector

The AC Power Connector from ETI Research is made for those who want to get the highest level of such connectors at home. No voodoo or emperor's clothes stories. The contact pins are milled from 1100 Series copper with an IACS rating of 102%. 1100 Series copper has a uniform fine structure, which guarantees the best signal transmission. After manufacture, the copper parts are cleaned and then gold plated. The gold layer is applied directly (without poorly conductive adhesive layers) to the copper. To prevent radiation (EMI/RF), the connector is mounted in a high-quality aluminium (6061) housing.



A self-centering polymer inner sleeve prevents live cable parts coming into contact with the housing. A selftightening polymer strain relief with aluminium clamping nut allows problemfree use of cables up to 20 mm.

ETI Legato IEC AC Power Connector

This mains plug is of the same high standard as the version described above but equipped with an IEC part. Any power cable that is equipped with a Legato Schuko on one side and a Legato IEC part from ETI Research on the other side will perform at 102% of its potential.



Prices ETI Research con	nectors	Price	per piece
ETI Link series			
Link Banana	Banana tellurium copper, gold plated. In red or white.	€	49,50
Link Spade	Spade tellurium copper, gold plated. In red or white.	€	64,50
Copper Link RCA	RCA 1100 series copper, gold plated. In red or white.	€	39,50
Copper Link XLR Male/Female	XLR male/female tellurium copper, gold plated. In red or white.	€	74,50
Silver Link RCA	RCA pure silver. In red or white.	€	74,50
ETI Kryo series			
Kryo Banana	Banana tellurium copper, silver plated. In red or white.	€	49,50
Kryo Spade	Spade tellurium copper, silver plated. In red or white.	€	64,50
Kryo RCA	RCA tellurium copper, silver plated. In red or white.	€	39,50
Kryo XLR Male/Female	XLR male/female tellurium copper, silver plated. In red or white.	€	74,50
Kryo Binding Post	Binding post tellurium copper, silver plated. In red or white.	€	74,50
ETI chassis parts			
BP20C	Binding post, 1100 copper, gold plated. In red or black.	€	42,50
BP50C	Binding post, 1100 copper, gold plated. In red or black.	€	57,50
FS08	RCA chassis female, pure silver. In red or black.	€	79,50
FRTC07	RCA chassis female, 1100 copper, gold plated. In red or black.	€	57,50
ETI Brio series			
Brio Banana	Banana, tellurium copper, rodinated. In red or white.	€	59,50
Brio Spade	Spade, tellurium copper, rodinated. In red or white.	€	74,50
Brio RCA	RCA, tellurium copper, rodinated. In red or white.	€	49,50
Brio XLR Male/Female	XLR, male/female tellurium copper, rodinated. In red or white.	€	89,50
ETI Nexus series			
Nexus RCA	RCA, 1100 series copper, silver plated. In red or white.	€	42,50
Nexus XLR Male/Female	XLR male/female, 1100 series copper, silver plated. In red or white.	€	64,50
ETI Legato series			
Legato Schuko	Mains plug, 1100 series copper, gold plated. With Schuko connector, suited for cables to 20 mm.	€	249,00
Legato IEC C15	Mains plug, 1100 series copper, gold plated. With IEC connector, suited for cables to 20 mm (10 AMP).	€	249,00
Legato IEC C19	Mains plug, 1100 series copper, gold plated. With IEC connector, suited for cables to 20 mm (16 AMP).	€	269,00
Legato IEC Chassis part	IEC chassis part, 1100 series copper, gold plated.	€	39,50
Legato Schuko R	Mains plug, 1100 series copper, rodinated. With Schuko connector.	€	299,00
Legato IEC C15 R	Mains plug, 1100 series copper, rodinated. With IEC connector.	€	299,00
Legato US G	Mains plug, US version 1100 series copper, gold plated.	€	249,00
Legato US R	Mains plug, US version, 1100 series copper, rodinated.	€	299,00