

Guide to Neutrik® Speakon® NL4FX Connector Assembly



Acoustic Reality - Denmark

Why Speakon?

For amplifiers, the most popular termination device on professional products has been the banana. However, recent regulatory requirements in Europe have outlawed the use of the dual banana plug and forced users to terminate speaker cables with spade lugs or bare ends—an approach that is clearly not advantageous to the customer who wants to reconfigure his system or quickly change out a defective product. It is possible that similar regulatory controls will appear worldwide over the next few years.

One solution to this problem is to use the Neutrik® Speakon® connector. Here at Acoustic Reality, we wanted to develop a system for you that eliminated the need for specialized, time-consuming, interface cables. With Speakon® connectors, you can plug straight from the amp to the speaker, and start making those great sounds right away. The Speakon® connector meets all known safety regulations. Once wired correctly, the connector cannot be plugged in backwards, causing the type of inverted polarity situations that are common with banana hook-ups. It will provide a safe, secure and reliable method of interfacing your amplifier to the load.

The Guide to Neutrik Speakon NL4FX Connector Assembly will take you through the steps for simple and accurate NL4FX connector wiring to fit your specific system and requirements.

Technical data

Rated current/contact: 40 A rms continuous, 50 A audiosignal, duty cycle 50%

Dielectric strength: 4kV peak

Rated voltage: 250 V ac

Contact resistance after lifetime: < 2 mΩ

Insulation resistance: > 1 GΩ

Retention method: Quick lock with latch

Lifetime (mating cycles): > 5000

Cable anchoring: NEUTRIK® chuck principle

Cable O.D. range: 6-14 mm / 0.24 - 0.55"

Wiring: screw-type terminals or soldering (stranded wire 6mm²/10 AWG)

Solderability: complies with IEC 68-2-20

Contacts: Brass CuZn39Pb3

Locking element: Zinc diecast ZnAl4Cu1

Housing / insert: PBTP 20% GR

Bushing: Polyamide PA 6 15% GR

Chuck: Polyacetal POM

Temperature range: -30°C to +80°C

Flammability: UL94V-0 (housing), UL94HB

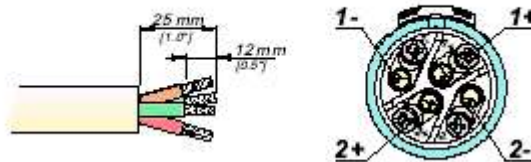
Never short or parallel the output channels of an amplifier to itself or any other amplifier.

Guide to Neutrik® Speakon® NL4FX Connector Assembly

To assemble the Neutrik Speakon NL4FX connector, complete the following steps:

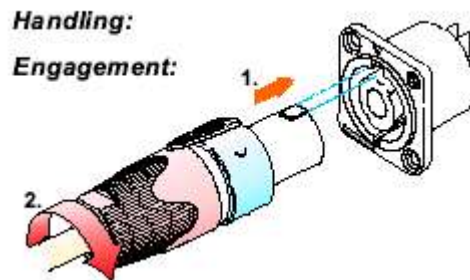
1. Put bushing and chuck onto the cable.
2. Prepare cable as shown. Strip approximately 1-inch (25-mm) of casing from the cable end. Strip approximately 0.5-inch (12-mm) from the end of each of the conductors down to bare wire.
3. Insert the wires into the terminals and fasten the clamping device with the screwdriver.
4. Push chuck onto the housing.
5. Single wiring: Socket pins 1+/1-.
6. BI-wiring: Low frequency socket pins to 1+/1-. High frequency socket pins to 2+/2-.

Cable Preparation:

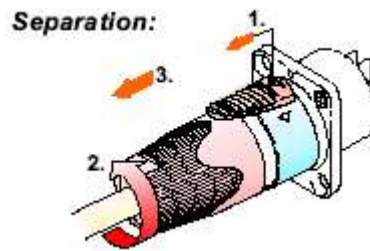


To make sure it has been assembled properly and before turning on the amplifier you may want to test the connector to avoid shorting the amplifier.

Insert the Speakon into the amplifier (1) and turn around (2):

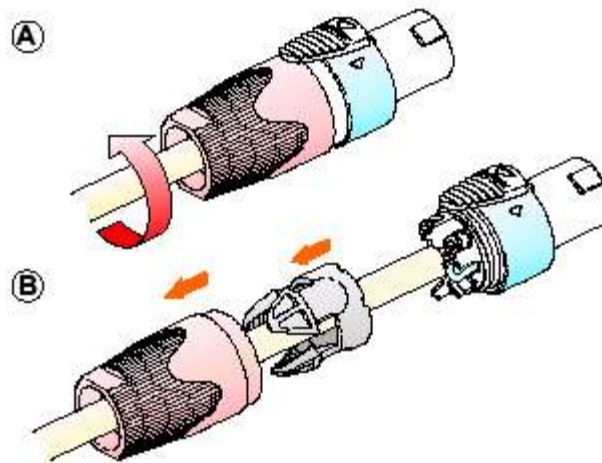


Remove the Speakon from the amplifier press (1) and chuck back and turn around (2).



To disassemble the Neutrik Speakon NL4FX connector, complete the following steps:

1. Open the bushing.
2. Slide the bushing and the chuck back.



You can visit the <http://www.neutrik.com> website to find a dealer in your area.

If you have further questions, please call Acoustic Reality customer support: **+45 9610 9008**