NBNC75BTU11X

The rearTWIST UHD BNC connectors are specifically designed for high resolution video signal transmissions. Due to the unique insulator and contact pin design, the connectors feature low return loss values for 4K and 8K signals.

Features & Benefits

- Optimized contact pin and insulator design for UHD-data transmissions
- Proven rearTWIST technology
- Swiss antraloy plating
- Fully compatible with conventional BNC chassis connectors
- Improved return loss values at high frequencies

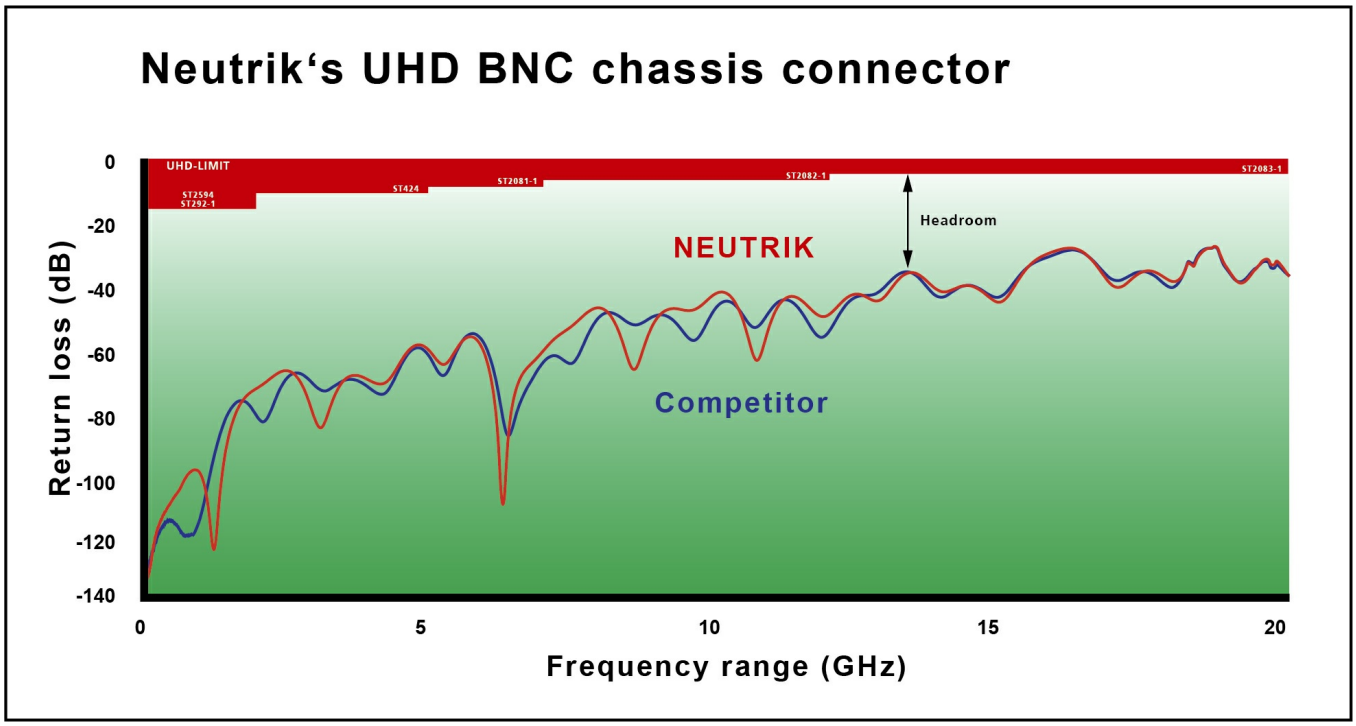
① Screen and cable jacket crimp instead of screen crimp only. Grooved inner surface holds the cable jacket to prevent tearing braids.
② High frequency optimized insulator design for UHD-transmissions.
③ Reduced pin diameter for performance improvement (return loss values).
④ Swiss antraloy plating
⑤ rearTWIST boot for easy access in high density applications.

All rights reserved / 05.03.2025

Optimized Return Loss

Due to optimized insulator design and reduced crimp diameter from center pin the Neutrik rearTWIST UHD BNC connector achieves increased headroom compared to conventional BNC connectors and offers additional return loss reserve for potential impedance deviations resulting from cable bending, incorrect connector assembly or faulty connection interfaces without signal interruption.

For more details see Neutrik UHD BNC White Paper.



Crimp Dimensions

In order to achieve optimum return loss values at high frequencies the crimp dimension of the contact pin has been reduced.

Pin:	1.07 mm
Shield:	7.36 mm
Crimp die:	DIE-R-BNCX-PU

All rights reserved / 05.03.2025

Approved Cables

To guarantee high performance for each cable-connector combination at high frequencies Neutrik measured common COAX cables which are specifically designed for ultra high definition transmission (UHD). Find all approved cables listed below.

Suitable cables:
CommScope 5765, Gepco VSD2001, Suhner S05163-02, Suhner S05133-07, Percon VK77

UHD optimized cables:
Belden 1694A, Belden 1694ANH, Belden 1694DNH, Belden 4694R, Belden 70082, Belden 70082NH, Belden 70082CH, Bryant SD11, Bryant SD10F, Canare L-4.5CHWS, Canare L-4.5CHD, Clark Wire CD7506, DirectCable 301-330 Evolution XPC, DirectCable 301-361 6 Channel Evolution XPC

All rights reserved / 05.03.2025

NEUTRIK

Technical Information

Product	
Title	NBNC75BTU11X
Connection Type	BNC 75 Ω
Gender	male

Electrical	
Contact resistance	≤ 3 mΩ (inner)
Contact resistance	≤ 2 mΩ (outer)
Dielectric strength	1.5 kVdc
Impedance	75 Ω
Insulation resistance	> 5 GΩ
Rated voltage	< 50 V
VSWR	≤1.06 / >30 dB up to 6 GHz ≤1.13 / >24 dB up to 12 GHz ≤1.22 / >20 dB up to 18 Ghz

All rights reserved / 05.03.2025

NEUTRIK

Mechanical

Cable O.D.	7.3 mm
Cable retention	> 30 N (center)
Crimp size	7.36 Hex crimp (shield)
Crimp size (pin)	1.07 crimp
Insertion force	< 25 N
Lifetime	> 1000 mating cycles
Wiresize	
Locking device	Bayonett
Cable anchoring	Jacket crimping

Material

Contacts	Brass (CuZn35Pb2), 0.2 µm AuCo (center contact)
Shell	Brass (CuZn39Pb3)
Shell plating	Antraloy
Insert	PP

Environmental

Temperature range	-30 °C to +85 °C
Contact crimpability	Complies with IEC 60803 and IEC 60352-2

All rights reserved / 05.03.2025