



NBNC75BXU13X

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



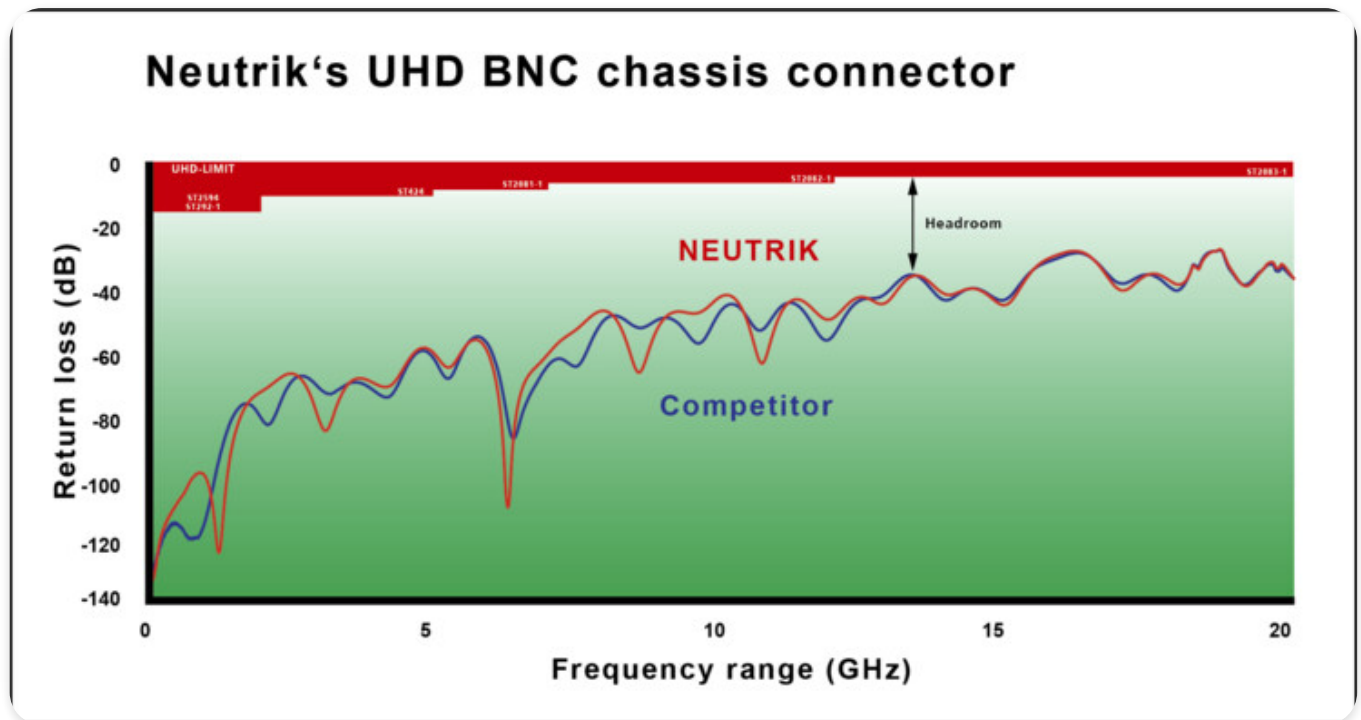
- ① Screen and cable jacket crimp instead of screen crimp only. Grooved inner surface holds the cable jacket to prevent tearing braids.
- ② High frequency optimized insulator design for UHD-transmissions.
- ③ Reduced pin diameter for performance improvement (return loss values).
- ④ Swiss antraloy plating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

Optimized Return Loss

Due to optimized insulator design and adjusted 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 adjusted.

| | |
|------------|--------------|
| Pin: | 1.6 mm |
| Shield: | 7.36 mm |
| Crimp die: | DIE-R-BNC-PU |

Approved Cables

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

UHD optimized cables:
DRAKA HD PRO 100 UHD

Technical Information

| Product | |
|-----------------|--------------|
| Title | NBNC75BXU13X |
| 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 | ≤ 1.6 / > 23 dB up to 6 GHz ≤ 2.3 / > 15 dB up to 12 GHz ≤ 3.9 / > 12 dB up to 18 GHz |

| Mechanical | |
|------------------|-------------------------|
| Cable O.D. | 7.3 mm |
| Cable retention | > 30 N (center) |
| Crimp size | 7.36 Hex crimp (shield) |
| Crimp size (pin) | 1.6 crimp |
| Insertion force | < 25 N |
| Lifetime | > 1000 mating cycles |
| 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 |