



## NBNC75BTUP11X

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.

The NBNC75BTUP11X is designed to be used with the common Paladin crimp tool.

## 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



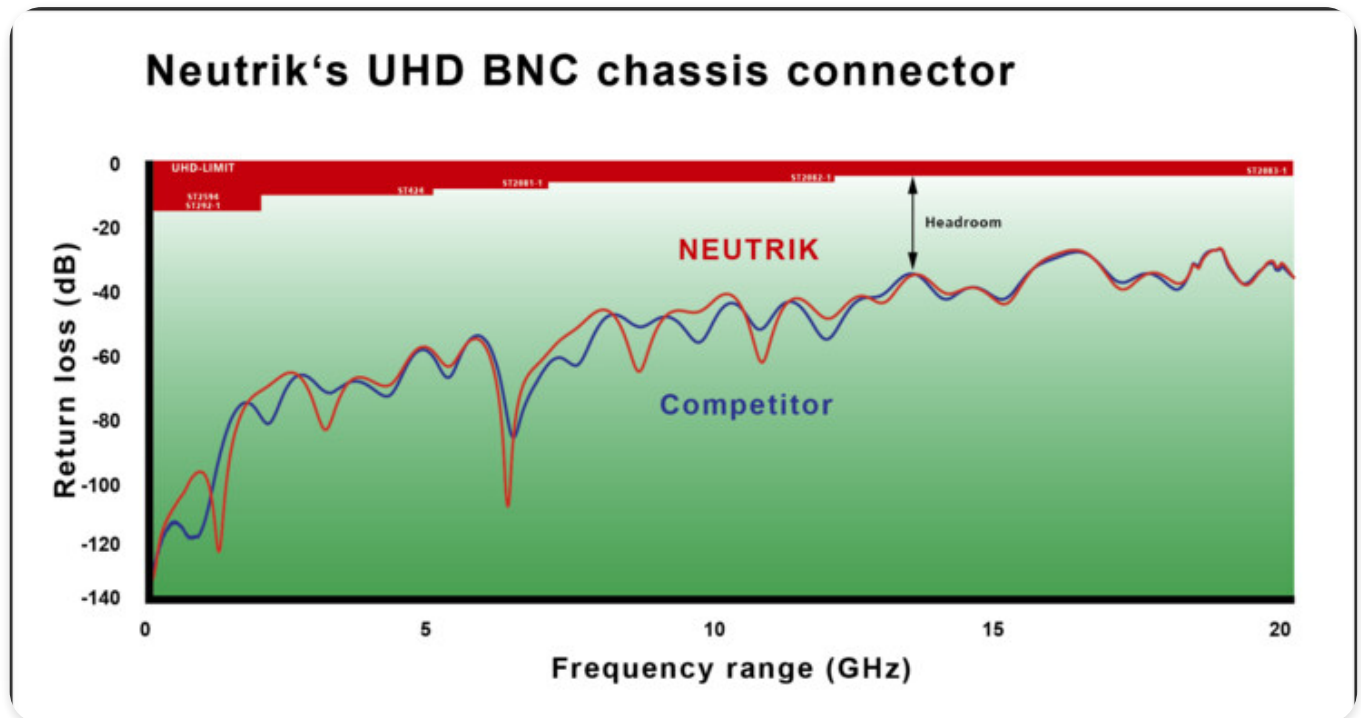
- ① Screen and cable jacket crimp instead of screen crimp only. Grooved inner surface holds the cable jacket to prevent tearing braids.
- ② High frequency optimized insulator design for UHD-transmissions.
- ③ Reduced pin diameter for performance improvement (return loss values).
- ④ Swiss antraloy plating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

## Optimized Return Loss

Due to optimized insulator design and reduced crimp diameter from center pin the Neutrik NBNC75BTUP11X

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:       | 0.041 in square        |
| Shield:    | 0.278 in hex           |
| Crimp die: | Paladin crimp die HDTV |

## 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:

Argosy Image 1000, Belden 1694A, Belden 1694ANH, Belden 1694DNH, Belden 70082, Belden 70082NH, Belden 70082CH, Bryant SD11, Bryant SD10F, Canare L-4.5CHWS, Canare L-4.5CHD, Clark Wire CD7506, Klotz V10/48, Klotz V10/48H

## Technical Information

| Product         |               |
|-----------------|---------------|
| Title           | NBNC75BTUP11X |
| Connection Type | BNC 75 Ω      |
| Gender          | male          |

| Electrical            |                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------|
| Contact resistance    | ≤ 3 mΩ                                                                                   |
| Contact resistance    | ≤ 2 mΩ                                                                                   |
| 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<br>≤1.13 / >24 dB up to 12 GHz<br>≤1.22 / >20 dB up to 18 GHz |

| Mechanical       |                      |
|------------------|----------------------|
| Cable O.D.       | 7.3 mm               |
| Cable retention  | > 30 N (center)      |
| Crimp size       | 0.278 in hex         |
| Crimp size (pin) | 0.041 in hex         |
| 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 |