



**Part Number: 4794ANH**

12 GHz Coax, 4K UHD Precision Video Cable, RG-7 Series, 75 Ohm, 16 AWG Solid

**Product Description**

12 GHz, 4K UHD Precision Video Cable, RG-7 Series, 75 Ohm 16 AWG solid 0.051" silver-plated copper conductor, gas-injected foamed high-density polyethylene insulation, Duofoil® bonded to the core + tinned copper braid shield (95% coverage) plus Beldfoil® with shorting fold, LSZH jacket

**Technical Specifications**

**Product Overview**

Environmental Space:	Indoor - Euroclass Dca
Suitable Applications:	SMPTE 2082-1 12 Gb/s UHDTV, SMPTE 2081-1 6 Gb/s UHDTV, SMPTE 424M 3 Gb/s HD-SDI 1080P

**Physical Characteristics (Overall)**

**Conductor**

AWG	Stranding	Material	Nominal Diameter	No. of Coax
16	Solid	SPC - Silver Plated Copper	0.051 in	1

Conductor Size:	16 AWG
-----------------	--------

**Insulation**

Material	Nominal Diameter
Gas-injected FHDPE - Foam High Density Polyethylene	0.225 in

**Outer Shield Material**

Type	Layer	Material	Material Trade Name	Coverage [%]
Tape	1	Aluminum Foil-Polyester Tape-Aluminum Foil (bonded to dielectric)	Bonded Duofoil® (Bonded to Dielectric)	100.0 %
Braid	2	TC - Tinned Copper		95.0 %
Tape	3	Aluminum/Polyester	Bonded Beldfoil® with shorting fold (bonded to jacket)	100.0 %

**Outer Jacket Material**

Material	Nominal Diameter
LSZH - Low Smoke Halogen Free	0.320 in

**Electrical Characteristics**

**Conductor DCR**

Nominal Conductor DCR	Outer Conductor DCR
4.0 Ohm/1000ft	1.9 Ohm/1000ft

**Capacitance**

Nom. Capacitance Conductor to Shield
16.0 pF/ft

**Impedance**

Nominal Characteristic Impedance
75 Ohm

**Return Loss (RL)**

Frequency [MHz]	Minimum Return (RL)
-----------------	---------------------

5 MHz - 1600 MHz	23 dB
1600 MHz - 4500 MHz	21 dB
4500 MHz - 12000 MHz	15 dB

#### High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz MHz	0.26 dB/100ft
3.58 MHz MHz	0.43 dB/100ft
5 MHz MHz	0.50 dB/100ft
6 MHz MHz	0.52 dB/100ft
7 MHz MHz	0.55 dB/100ft
10 MHz MHz	0.63 dB/100ft
12 MHz MHz	0.66 dB/100ft
25 MHz MHz	0.88 dB/100ft
55 MHz MHz	1.21 dB/100ft
67.5 MHz MHz	1.31 dB/100ft
71.5 MHz MHz	1.34 dB/100ft
88.5 MHz MHz	1.47 dB/100ft
100 MHz MHz	1.54 dB/100ft
135 MHz	1.75 dB/100ft
143 MHz	1.79 dB/100ft
180 MHz	1.98 dB/100ft
270 MHz	2.40 dB/100ft
360 MHz	2.76 dB/100ft
540 MHz	3.41 dB/100ft
720 MHz	3.96 dB/100ft
750 MHz	4.05 dB/100ft
1000 MHz	4.70 dB/100ft
1500 MHz	5.83 dB/100ft
2000 MHz	6.80 dB/100ft
2250 MHz	7.25 dB/100ft
3000 MHz	8.48 dB/100ft
4500 MHz	10.66 dB/100ft
6000 MHz	12.47 dB/100ft
12000 MHz	19.45 dB/100ft

#### Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.2 ns/ft	85.0 %

#### Voltage

UL Voltage Rating
300 V RMS

Electrical Characteristics Notes:	Return Loss: Fixed bridge and termination
-----------------------------------	---

#### Temperature Range

Operating Temp Range:	-30°C To +75°C
-----------------------	----------------

#### Mechanical Characteristics

UV Resistance:	Yes
Bulk Cable Weight:	56 lbs/1000ft
Max Recommended Pulling Tension:	84 lbs
Min Bend Radius/Minor Axis:	3.2 in

#### Standards

CPR Euroclass:	Dca-s1,d1,a1
RG Type:	7/U Type

#### Applicable Environmental and Other Programs

EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes

EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	Yes
EU RoHS Compliance Date (yyyy-mm-dd):	2016-04-01
CA Prop 65 (CJ for Wire & Cable):	Yes

## Suitability

Suitability - Aerial:	Yes - Black only, when supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes - Black only

## Plenum/Non-Plenum

Plenum (Y/N):	No
---------------	----

## Part Number

### Variants

Item #	Color	Length
4794ANH G751000	Aqua	305 m
4794ANH G751640	Aqua	500 m
4794ANH 0101000	Black	305 m
4794ANH 0101640	Black	500 m
4794ANH 0061000	Blue	305 m
4794ANH 0061640	Blue	500 m
4794ANH N3U1000	Green	305 m
4794ANH N3U1640	Green	500 m
4794ANH 0071000	Purple	305 m
4794ANH 0071640	Purple	500 m

© 2019 Belden, Inc

All Rights Reserved.

Although Belden makes every reasonable effort to ensure their accuracy at the time of this publication, information and specifications described here in are subject to error or omission and to change without notice, and the listing of such information and specifications does not ensure product availability.

Belden provides the information and specifications herein on an "ASIS" basis, with no representations or warranties, whether express, statutory or implied. In no event will Belden be liable for any damages (including consequential, indirect, incidental, special, punitive, or exemplary damages) whatsoever, even if Belden has been advised of the possibility of such damages, whether in an action under contract, negligence or any other theory, arising out of or in connection with the use, or inability to use, the information or specifications described herein.

All sales of Belden products are subject to Belden's standard terms and conditions of sale.

Belden believes this product to be in compliance with all applicable environmental programs as listed in the data sheet. The information provided is correct to the best of Belden's knowledge, information and belief at the date of its publication. This information is designed only as a general guide for the safe handling, storage, and any other operation of the product itself or the one that it becomes a part of. The Product Disclosure is not to be considered a warranty or quality specification. Regulatory information is for guidance purposes only. Product users are responsible for determining the applicability of legislation and regulations based on their individual usage of the product.