



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

#### Insulation

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

### **Outer Shield Material**

Type	Layer	Material Material	Material Trade Name	Coverage [%]
Tape	Tape 1 Aluminum Foil-Polyester Tape-Aluminum Foil (bonded to dielectric) Bonded Duofo		Bonded Duofoil® (Bonded to Dielectric)	100.0 %
Braid	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
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# **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

Р	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

## **History**

Update and Revision:	Revision Number: 0.14 Revision Date: 08-22-2019
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