

**HD-BNC**  
By Amphenol® RF

**High Density Connectivity  
for a Higher Definition World**



**Amphenol® RF**

*Global RF Solutions*  
**HDBNC.AmphenolRF.com**

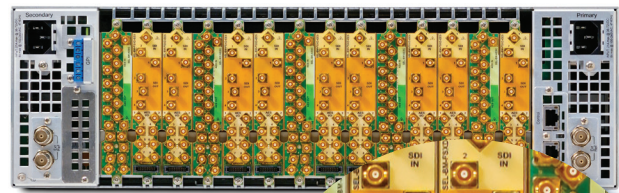
## Product Description

Amphenol RF, the inventor of the BNC, introduces the High Density BNC family of connectors.

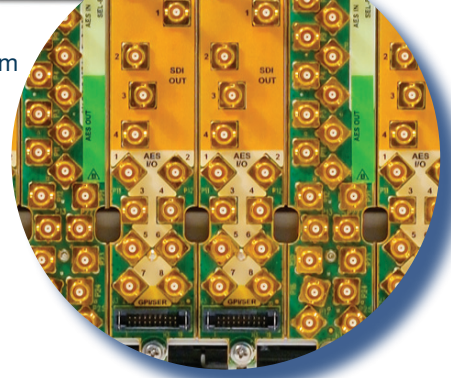
HD-BNC delivers TRUE 75 Ohm performance in a footprint 51% smaller than traditional BNC connectors, allowing 4X the density.

Engineered to enhance electrical and mechanical performance, the HD-BNC connector features the trusted, push and turn interface of a traditional BNC, providing tactile feedback and a positive lock for quick and guaranteed mating.

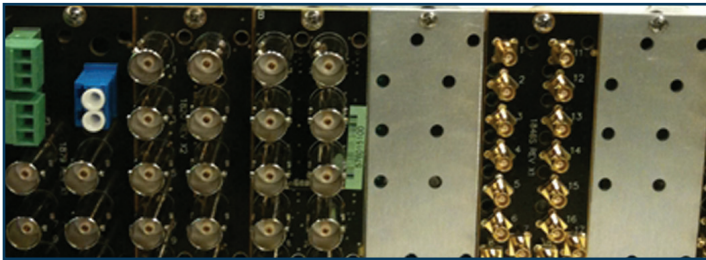
Using the same cable prep and termination specifications of legacy broadcast connectors makes adopting HD-BNC seamless.



Above and Inset Image:  
Selenio Broadcast system  
from Harris.

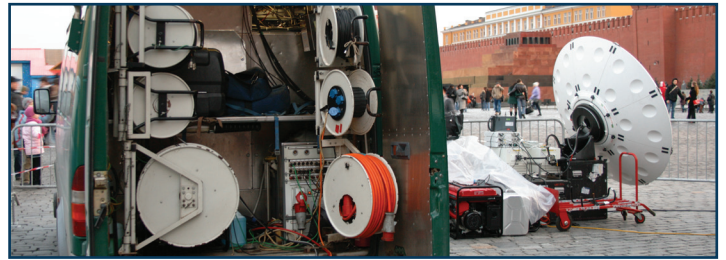


## Applications



### Digital A/V cards or Routing Systems

- Increased density hence room for ventilation
- Stack more cards in less rack space
- PCB solutions to maintain signal integrity for 3 Gbps+ applications
- SFPs with HD-BNCs



### Mobile Broadcast

- Mechanically robust and reliable interface
- Trusted positive locking mechanism
- Lowers equipment weight



### Studio Integration

- 3 Gbps+ signal for the distance over 190 m
- Same stripping and termination tools
- Patch panel solutions with HD-BNCs
- Availability of Installation and removal tool
- HD-BNC plug for 1694A type cables



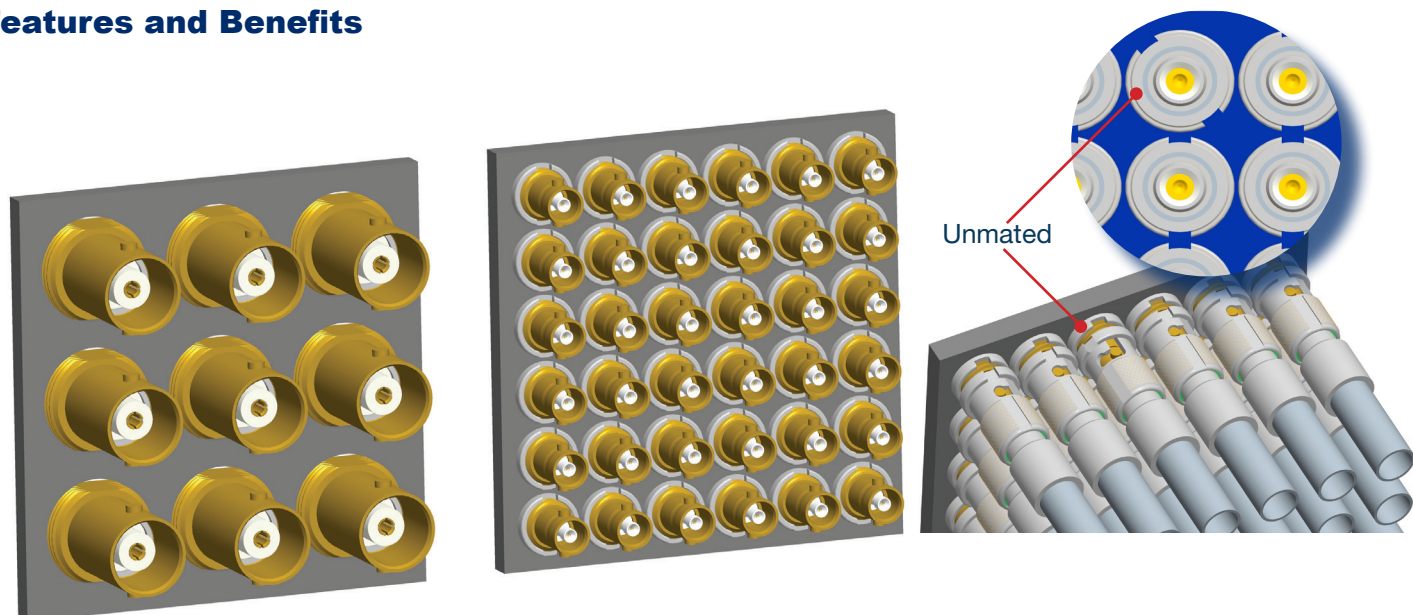
### Broadcast Cameras

- High Density without compromising signal integrity
- Helps reduce the equipment size and cost
- CCTV Market

For more information

Visit: **HDBNC.AmphenolRF.com** or E-mail: **HDBNC@AmphenolRF.com**

## Features and Benefits



- Provides 4x the density than regular BNC
- Trusted bayonet style positive lock
- Closed entry interface
- VSWR or Return Loss: 30dB min @ 3GHz
- Accommodates 1694A (RG-6) type cables
- Meets and exceeds SMPTE 292M and 424M standards for 3 Gbps
- Same user experience as traditional BNCs
- Recommended minimum pitch of 8 mm for cables < 5.4 mm (ex: 1855A types)
- Recommended minimum pitch of 9.5 mm for cables > 5.4 mm (ex: 1694A types)
- Complete product portfolio including Calibration kit and Precision adapters
- Assured mating with visual indicator

## Technical Details

Electrical	
Impedance	75 Ohms
Frequency Range	0-6 GHz
Voltage Rating	170 Volts
Dielectric Withstanding Voltage	500 VRMS
Return Loss	30 dB Min @ 3 GHz
Contact Resistance	Center Contact: 5 m ohm Outer Contact: 2.5 m ohm
Insulation Resistance	10,000 M ohm minimum
Data Rate	3 Gbps or higher

Materials	
Male Contact	Brass, Amorphous (gold) Plating
Female Contact	Beryllium copper, Amorphous (gold) Plating
Outer Contacts	Beryllium copper, Nickel Plating
Body & Hardware	Brass, Nickel Plating

Mechanical	
Mating	Bayonet Positive Locking, Visual Indicator
Braid/Jacket Cable Affixment	Hex crimp
Center Conductor Cable Affixment	Solder/ Crimp
Tool	Conventional crimp/ Die sets
Contact Captivation	All types as noted
Connector Durability	500 mating cycles minimum



Scan the QR Code to download SMPTE whitepaper or visit [HDBNC.AmphenolRF.com](http://HDBNC.AmphenolRF.com).



# Worldwide Distribution Network for HD-BNC



**HD-BNC** has a complete list of global distributors on-line.  
To visit the global list of distributors, please scan the QR code to the left  
or visit [HDBNC.AmphenolRF.com](http://HDBNC.AmphenolRF.com).

BNC to HD-BNC  
Adapters



Long Nose Vertical

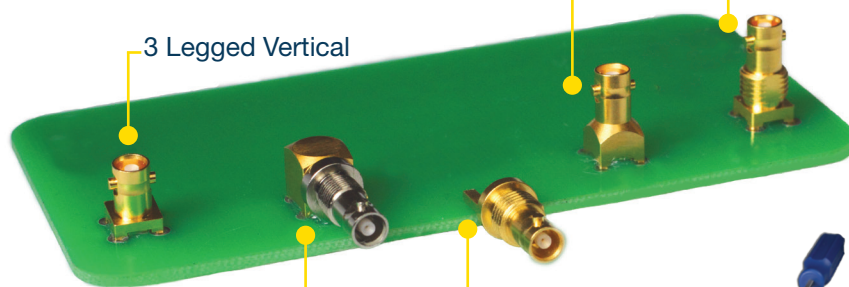
Vertical Bulkhead

Precision Type N to  
HD-BNC Adapters

3 Legged Vertical

R/A PCB

Edge Mount



Scan here to download the  
**HD-BNC** Parts List or visit  
[HDBNC.AmphenolRF.com](http://HDBNC.AmphenolRF.com).

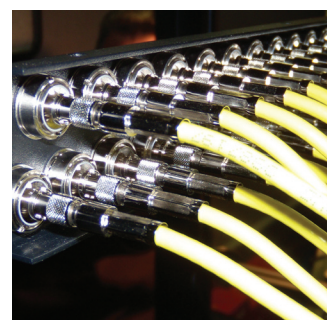
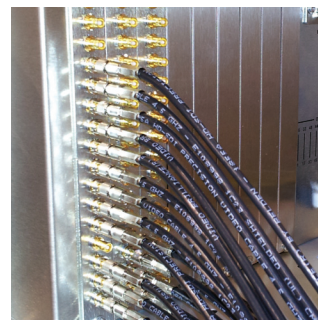


HD-BNC Tool  
US Patent #US7553177

To learn more about **HD-BNC**:  
Web [HDBNC.AmphenolRF.com](http://HDBNC.AmphenolRF.com)  
E-mail [HDBNC@AmphenolRF.com](mailto:HDBNC@AmphenolRF.com)  
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Image courtesy of Embrionix



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