

■ Connectivity...for
Business-Critical Continuity™

F-to-BNC "Between Series" Connector Adapter

Brochure





New F-to-BNC Adapter Delivers Carrier Class Performance From Any Cable Appliance, Instantly!

Whether you are dealing with a set-top box or a cable modem, there is now a simple solution that instantly elevates system performance to an entirely new level. It is easy to install, permanent, low cost - and available in quantity, today!

Lose the F Connector - Gain Performance.

The single largest performance deficiency in the hybrid fiber coax (HFC) delivery network used by CATV providers occurs at the F connector where the signal meets the appliance. When the cable television system was originally designed as a one-way home entertainment transmission line, a connector meeting minimum performance needs at a low cost made sense. Today, that same network is delivering broadband two-way Internet content, which can involve such critical transactions as monetary transfers, stock purchases, home security, and business management. Additional new demands being made include accommodating advances in television screen size and resolution, along with various innovative high tech media that is now commonplace in the home.

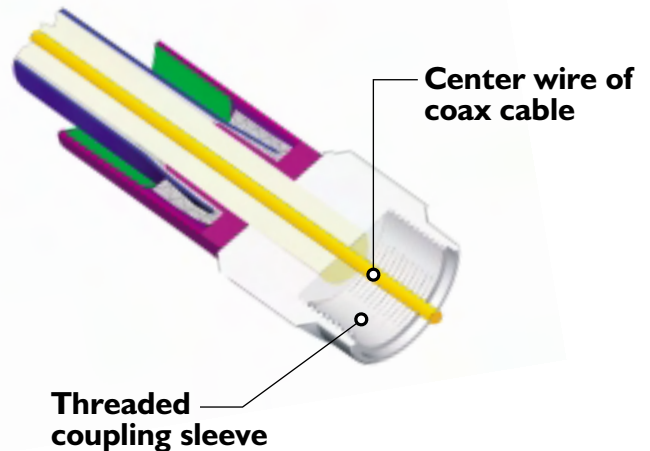
How Does The Standard F to F Connection Degrade The Signal?

A number of technical features in the design cause performance breakdown. Foremost is utilization of the center wire of the coaxial cable as the "pin" contact.

- This center wire "pin" is either un-plated or plated with metals which do not provide an optimum mating surface.
- It is of a diameter to match the other characteristics of the cable for 75 ohm performance. The specification allows for a wire diameter for the center conductor to be 0.022 to 0.052 inches – a range that, when mated to a female socket, is not appropriate for impedance matching for broadband applications.
- When a large diameter wire is used and then followed by a smaller diameter wire, the socket is distorted by the larger wire and no longer makes intimate contact

An additional problem is that the F design uses a threaded coupling sleeve to ensure ground. In conditions of temperature fluctuations, threaded connectors can work loose due to differing co-efficients of thermal expansion, causing signal loss and/or interference.

Legacy Traditional F-Connector



What Makes a "Carrier Class" BNC Better for Broadband Signal Transmission?

There are unique RF problems associated with the combination of high data rate digital traffic and high frequency transmissions. The unique design of Trompeter's Carrier Class BNC allows for an impedance-matched (true 75 ohm) transition through the connector, taking advantage of the electromagnetic effects that are unique to high frequency transmission lines. The signal is safely contained within the inside surface of the outer shield through the connector, in much the same way the braid of the coax cable contains the electromagnetic energy of the signal within the cable dielectric itself.

These effects are more and more pronounced as the installed cable television infrastructure is utilized for Internet, HDTV, DTV and various high-end applications where signal integrity is critical to the performance of the device.

Carrier Class BNC Features:

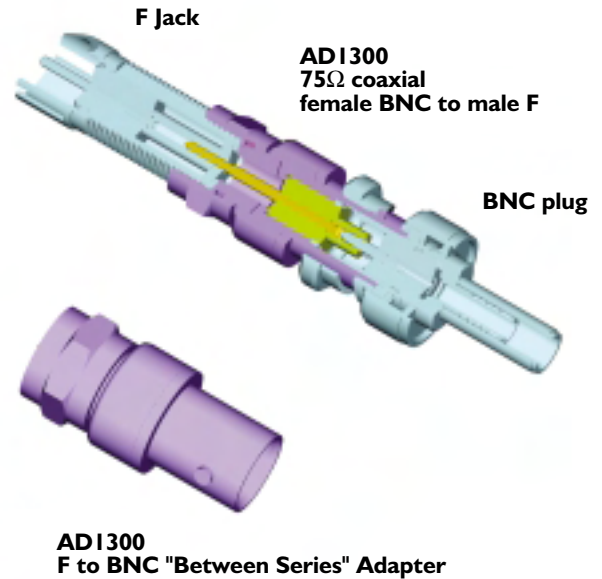
- 100% reliability and performance features,
- True 75 ohm design and return loss attributes, and
- Industry standard strip dimensions and tooling.

New F-to-BNC Connection Solution

Now there is a simple, small adapter for converting the low performance F connector to a high frequency BNC connection. This fast, sure solution from Trompeter enables Carrier Class performance from appliances featuring legacy F-connector technology - at a cost that anyone can afford.

All that is required is three quick steps:

- Clip off and discard the F connector attached to the coax cable and replace it with a high performance Trompeter BNC plug,
- Attach the AD1300 "Between Series" Adapter,
- Plug it into the appliance!



THE SOLUTION

**The "Carrier Class" CATV BNC
17 Specific Features
For Improved Performance:**

Stepped crimp sleeve grips the outer jacket which increases connector-to-cable reliability.

Exterior ferrule surface provides superior cable retention without braid breakage.

Generous capture cone design ensures easy insertion of center conductor.

Spring-loaded coupling ring using a beryllium copper crescent washer assures positive electrical mating over time.

Unique black nickel finish adds endurance and reliability.

Fully enclosed metal outer conductor This feature is an integral part of a rugged construction, important for handling the stress of cable weight over time.

Tapered ferrule facilitates connector insertion under braid.

.300" ferrule improves connector-to-cable tensile strength.

Unique plating flow hole ensures uniform interior plating.

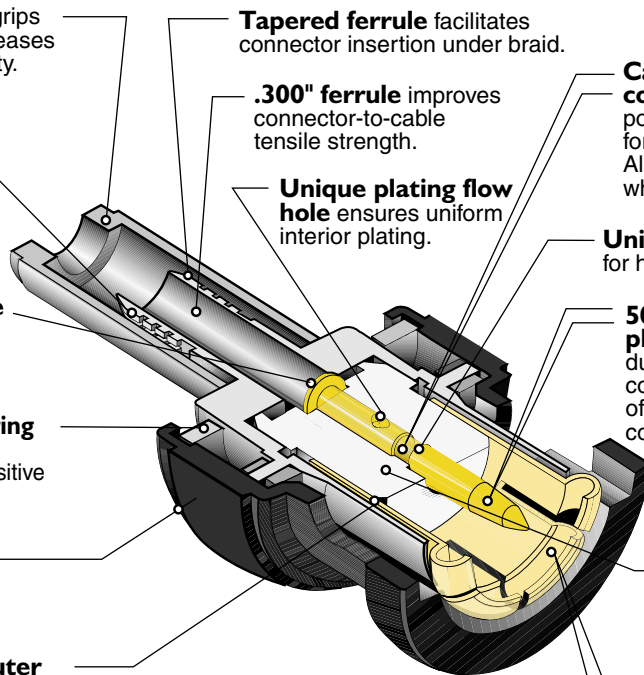
Gold flash palladium Ni plated spring fingers for high mating cycle repeatability and improved high frequency conductivity.

Captive center contact provides positive tactile feedback for error-free assembly. Also prevents movement when cable is flexed.

Unique locking design for high contact retention.

50 millionths gold plating improves durability of electrical contact over thousands of cycles and exceptional conductivity.

Machined PTFE insulator for superior RF electrical performance.



ISO 9001 registered company

Trompeter - Products and Service Levels You Can Count On

Trompeter understands that the best connector and the best cable selection are only effective if the comparable installation techniques and tools are used. The company provides customers with Best-in-Class installation hand tools as well as CD-Rom, Video, and On Site installation technique instruction.

Product ordering is available 24/7 via the company's e-commerce website. We offer industry-best on time delivery and short lead times.

For more information on this product or others, visit the Trompeter website or call the Sales Team at 1-800-982-2629. For a quick answer from a factory expert on a specific question, e-mail us at info@trompeter.com.



Other Products

- 75 ohm BNC, M-BNC, F and DIN Connectors
- Distribution Panels
- Patching Products
- Cross Connect Network Systems
- Co-Location Panels
- Custom Coax Cable Assemblies
- Custom FiberOptic Cable Assemblies
- Installation and Testing Tools



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About Emerson Network Power Connectivity Solutions

Emerson Network Power Connectivity Solutions, an Emerson business, serves the needs of wireless communications, telephony and data networks, CATV, security systems, health care and industrial facilities with a full spectrum of broadband copper and fiber optic connectivity products. For more information, visit www.EmersonNetworkPower.com/Connectivity.

About Emerson

Emerson (NYSE: EMR), based in St. Louis, is a global leader in bringing technology and engineering together to provide innovative solutions to customers through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. For more information, visit www.gotoemerson.com.

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