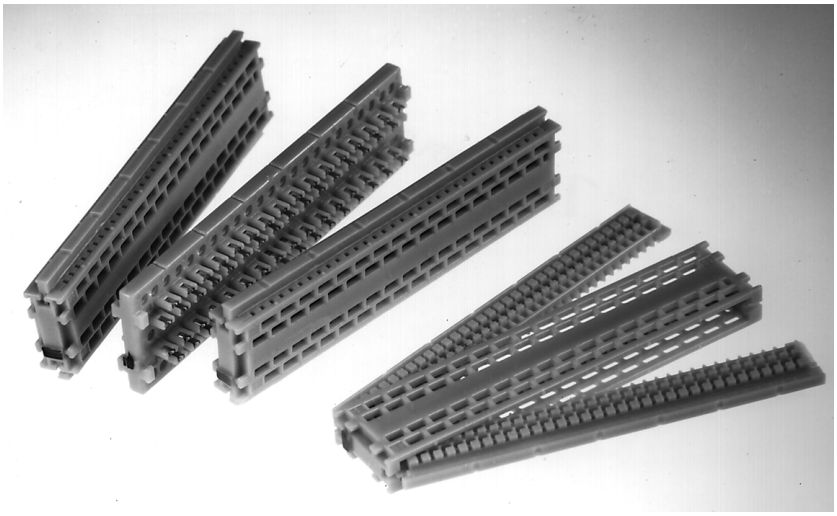
711 Connector System – A Flexible, Ecomomical Way to Connectorize Central Offices



Description

Lucent Technologies' 711 Connector System comprises a family of modular cable-splicing connectors in various sizes, and the associated assembly tools, documentation and test equipment. This system is ideal for mass termination of cable-to-cable or cable-to-apparatus wiring in the central office. The 711 Connector solves the basic central office problem of reusing, rearranging or retrofitting equipment by:

- straight splicing
- bridging
- half tapping
- and dual half tapping

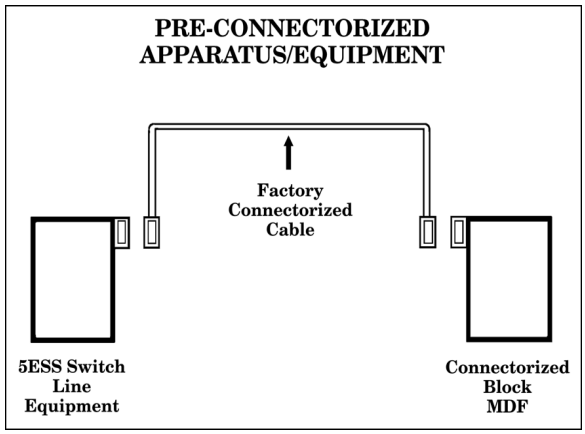
Features and Advantages

- UL Listed in accordance with Underwriters Laboratories Standards for Communication Circuit Accessories, UL1863.
- The 711 Connector System offers highly reliable gas tight connections, and built-in strain relief which eliminates the need for external devices.
- This expandable connector system provides numerous configurations and multiple combinations. It accommodates 22 to 26 AWG (.64 to .40mm) wire conductors and is reconnectable. It provides for in-service retermination capability not available with most other connector systems.
- Assembly costs are reduced because there is no need for soldering or wire stripping. New equipment may be shipped preconnectorized and ready for immediate hook-up.
- Test points are exposed for easy access.
- Assembled with flame-retardant plastic. Built-in grippers eliminate the need for cable clamps.
- Available in 12, 25 and 32 pair sizes.

How It Works

The 711 receptacle assembly is made up of two mandrels. These are used to align and secure the wires to be joined. The mandrels are then inserted into the side openings of the receptacle housing. This step is repeated with a second set of wires to be joined, forming another receptacle assembly. The two receptacle assemblies are snapped onto each side of a common connector module, forcing the wires into the connector contact elements, penetrating the insulation and making a firm, gas tight connection. Disconnection is simple, requiring only the twist of a screwdriver.

Applications



Pre-connectorized Apparatus/Equipment

Pre-connectorized Apparatus/Equipment permits shortening of the installation interval. It also allows for upgrading to the latest vintage digital switches without interruption of service

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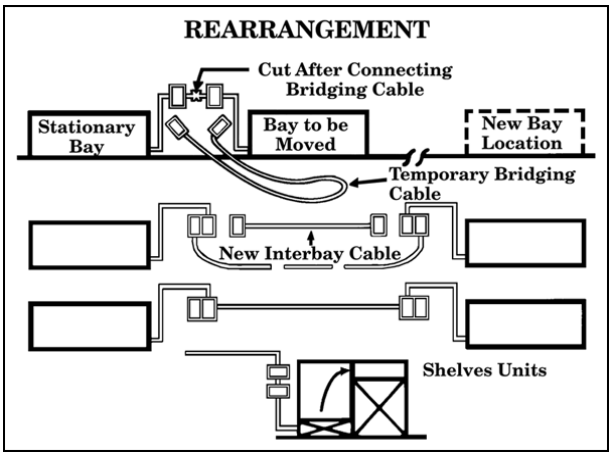

Rearrangement

This versatile system can be used for equipment cables or private networks needing to reorganize telephone equipment bays (without service interruption) for a more efficient and less costly use of floor space

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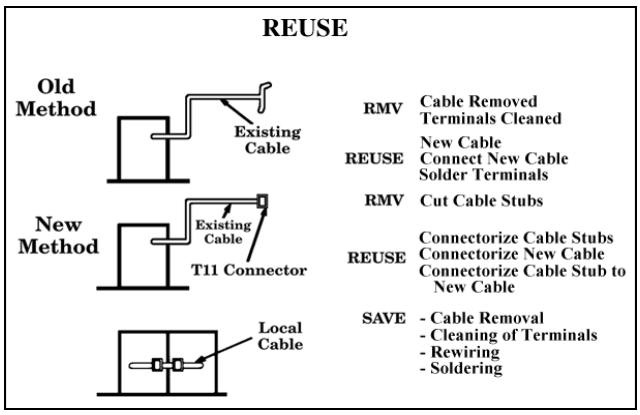
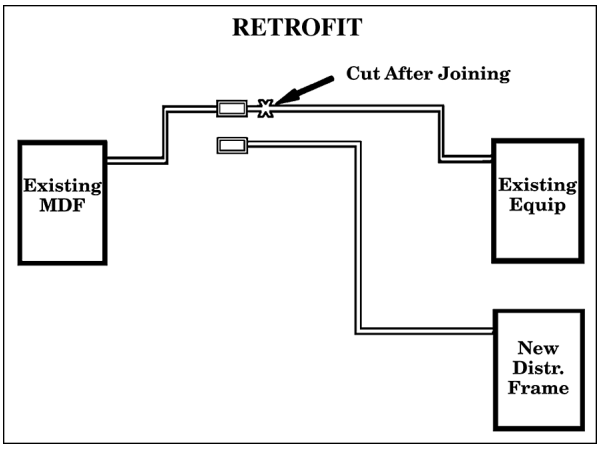


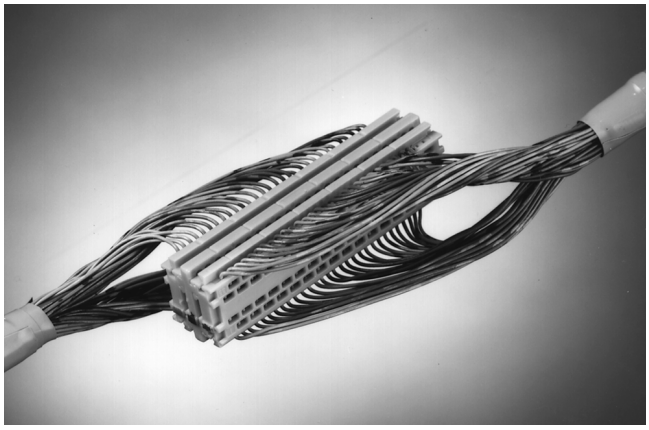
Reuse

Electromechanical and earlier electronic switching systems are being replaced in many locations with a newer electronic counterpart. Often bays are fairly new and can be used to expand other electromechanical and earlier electronic systems with the aid of the 711 Connector System.

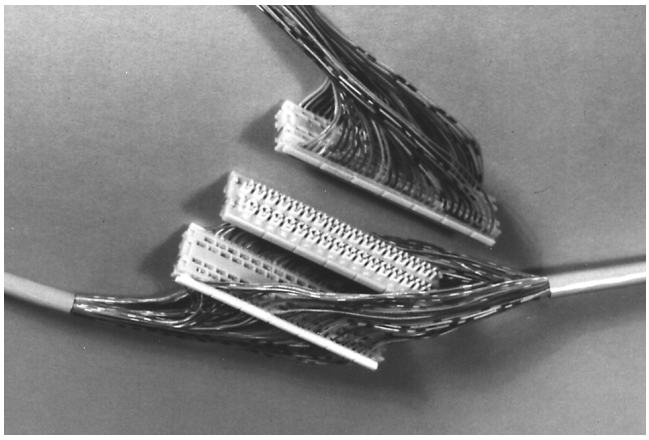


Retrofit

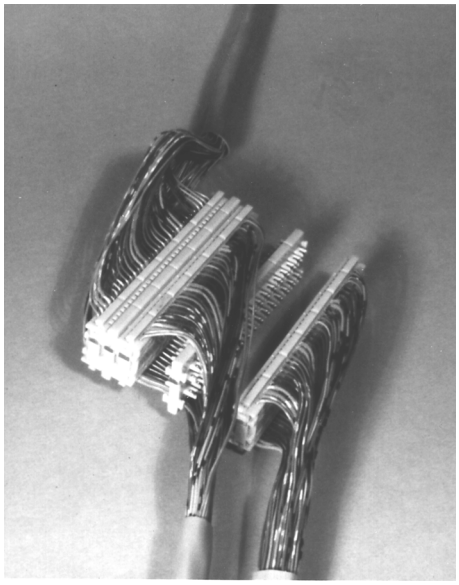
Retrofit applications involve upgrading or modifying existing working systems with state-of-the-art systems without interrupting service. The 711 System makes this operation practical.



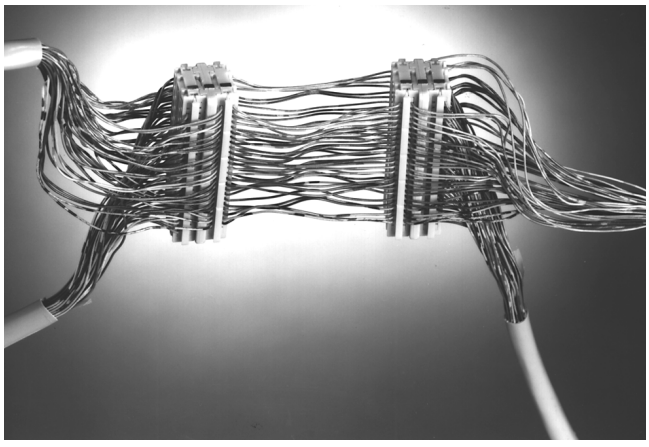
Straight Splice



Half-tap



Bridge



Dual Half-tap

Specifications

The 711 Connector is made of highly durable, flame retardant polycarbonate plastic.

Slotted Beam Contacts are made from a high strength elastic Cu-Ni-Sn (copper, nickel, tin) spinodal alloy.

Wire accommodations are 22 and 24 AWG (.64 and .51 mm) BU and 26 (.40mm) BY-Type wire. Wire sizes may be mixed by selecting mandrels to accept a combination of 22 (.64mm) and/or 24 and 26 AWG (.51mm and .40mm) wires.

Contact spacing is .100 in (.25 cm).

Voltage breakdown is 1500 VAC, 3000 BDC (surge).

UL Listed in accordance with Underwriters Laboratories Standards for Communication Circuit Accessories, UL 1863, and have a flammability rating of 94V-0.

Satisfies Section 4.3.3.1 of the NEBS (Network Equipment Building System, TR-EOP-000063, Issue 3, March 1988) requirements.

Materials have an Oxygen Index of 28 percent or greater.

Connector Assembly Dimensions

	Width	Height	Length
12 pair	1.0" (2.5 cm)	.78" (2.0 cm)	1.5" (3.8 cm)
25 pair	1.0" (2.5 cm)	.78" (2.0 cm)	2.8" (7.0 cm)
32 pair	1.0" (2.5 cm)	.78" (2.0 cm)	3.5" (9.0 cm)

Connector/Wire Compatability Chart

Receptacle	Mandrel Color	Acceptable Wires
711RAA1-50, 64	Yellow	22 AWG (.64mm)-BU (PVC), BW* (PVC CL) ABAM (PE PVC), DEPIC
711RAB1-24, 50 or 64	Gray	22 AWG (.64mm)-BU (PVC), DEPIC 24 GA. (.51mm)-BU (PVC), BW* (PVC CL), ABMM (PE PVC)
711RAC1-50	Pink	24 AWG (.51mm)-BU (PVC), D INSIDE WIRE BW* (PVC CL), ABMM (PE PVC)
711RAD1-24, 50 or 64	White	26AWG (.40mm)-BY (PVC), D INSIDE WIRE
711RAE1-64	Blue	26 AWG (.40mm)-1249 TYPE CABLE

* These wires require two insertions of the connector module to insure complete penetration of the wire insulation.

Ordering Information

Code Number	Description	Comcode
711CA1-24	Connector Module	103 046 231
711CA1-50	Connector Module	103 046 264
711CA1-64	Connector Module	103 046 272
711RAB1-24	Receptacle 12 Pair	103 043 972
711RAD1-24	Receptacle 12 Pair	103 044 079
711RAA1-50	Receptacle 25 Pair	103 043 949

Code Number	Description	Comcode
711RAB1-50	Receptacle 25 Pair	103 043 998
711RAC1-50	Receptacle 25 Pair	103 044 046
711RAD1-50	Receptacle 25 Pair	103 044 095
711RAA1-64	Receptacle 32 Pair	103 043 956
711RAB1-64	Receptacle 32 Pair	103 044 004
711RAD1-64	Receptacle 32 Pair	103 044 103

Lucent Technologies Reference Documentation

Title	Document Number
Wire Joining System 711 Connector System Description and Use	Lucent Technologies 632-205-222
711 Connector WIP Packages	632-WIP-004V 632-WIP-005V 632-WIP-006V