

MODE CONDITIONING PATCH CORD

Mode conditioning patch cord is required where Gigabit 1000 Base-LX routers and switches are installed into existing multimode cable plants. The transceiver modules launch only singlemode 1300nm signals but the existing network is built with multimode cables.

A single-mode laser launch into the center of a multimode fiber can generate multiple signals that confuse the receiver at the other end of the fiber. These multiple signals, caused by Differential Mode Delay (DMD) effects, limit the system distance lengths for operating Gigabit Ethernet. Mode Conditioning Patch Cord eliminates these multiple signals by aligning the single-mode launch away from the center of a multimode fiber core. This offset launch creates a transmitted signal that is similar to typical multimode light emitting diode (LED) launches.

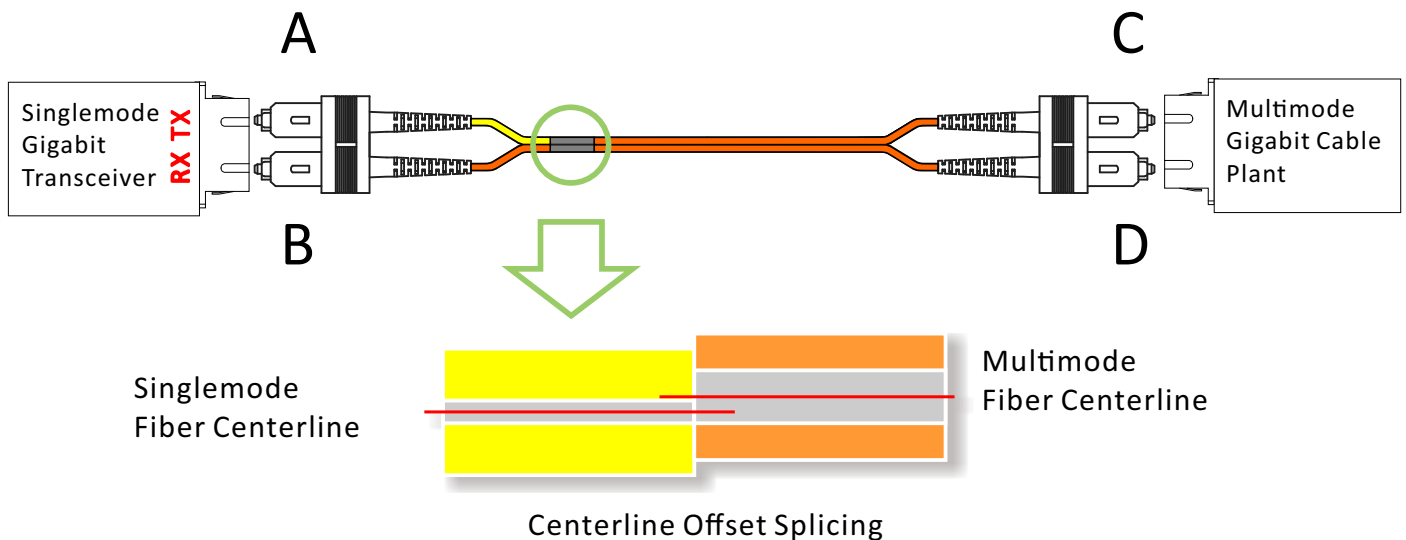


Features

- Differential Mode Delay (DMD) elimination
- Compliant with IEEE 802.3z
- Consistent Offset
- Compliant with GR-326-Core

Application

- Long Haul to Short Haul LX Gigabit System
- Gigabit Ethernet 1000Base-LX (1300nm long wavelength)

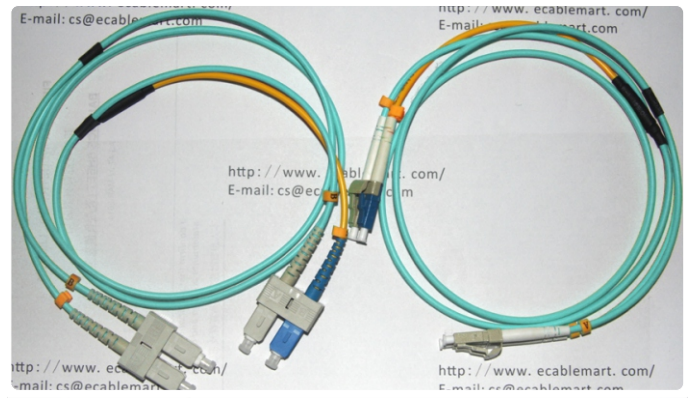


Cable Structure:

The mode conditioning patch cord is generally duplex. On one side, there are a singlemode connector and a standard multimode connector attached. On the other side, there are two standard multimode connectors. The single mode and multimode side is plugged directly into the equipment. The duplex multimode side is plugged into the cable plant.

To avoid DMD effect, the singlemode centerline and multimode centerline are offset spliced in a manner which the cores do not align center-to-center. The light is launched from the singlemode fiber on to the multimode fiber at a precise angle.

The fusion splice is protected by a black over-wrap or circular stainless steel tube on request.



Specification

Multimode Fiber	OM1, OM2, OM3, OM4
Cable OD (mm)	2.0, 3.0. Upon request, 1.6, 1.8, 2.4 available
Cable Jacket	OFNR (Normal), OFNP, LSZH
Connector	SC, LC, ST, FC, MU, MTRJ, E2000, SMA
Insertion Loss	Details See Table Below.
Return Loss	UPC > =50dB, APC > =60dB, PC > =35dB
Durability	<=0.20 dB(1000 times)
Operating Temperature	-20 ° C ~ +70 ° C
Storage Temperature	-40 ° C ~ +85 ° C

All connectors are inspected visually at 400X

Light Transmission Direction	Testing Wavelength	Insertion Loss
B to D	850nm, 1300nm	Max <=0.3dB, Typical <=0.2dB
D to B	850nm, 1300nm	Max <=0.3dB, Typical <=0.2dB
C to A	850nm, 1300nm	<=10.0dB
A to C	850nm, 1300nm	Max <=0.3dB, Typical <=0.2dB
C to A	1310nm, 1550nm	<=3.0dB



Please be sure to connect the yellow leg (Singlemode) of the cable to TX side, and the orange leg (multimode) to RX side of the equipment.

Quick find and custom link:
http://www.ecablemart.com/mode_conditioning_patch_cord/