OTDR Launch Cables

SINGLEMODE / MULTIMODE

Fiber Rings and Dead Zone Boxes

OTDR launch cables, such as fiber rings and dead zone boxes, are vital to the success of OTDR measurements and address two key issues:

REFLECTIONS. Reflections caused by connector interfaces "blind" OTDRs for a short period of time. The period of time it takes for an OTDR to recover from this "blindness" is commonly referred to as a "dead-zone". Within this dead-zone period, OTDRs are unable to distinguish one anomaly (e.g. breaks, shatters, bends, or even another connector) from another. Without a sufficiently long launch cable, the reflection from the near-end patch panel will be undetectable because it is within the dead-zone caused by the OTDR port.

LOSS MEASUREMENT THROUGH INTER-CONNECTIONS. To measure the optical loss of any event found on an OTDR trace, there must be sufficient measurable backscatter both before <u>and</u> after the inter-connection. Lack of a launch means there is no measurable backscatter outside the fiber link under test, preventing the OTDR from measuring the relative loss through both near-end and far-end patch panel connections.

WHAT IS THE DIFFERENCE BETWEEN FIBER RINGS AND DEAD ZONE BOXES?

FIBER RINGS. Fiber rings are long cables with connectors on the ends, allowing the OTDR to sufficiently address the two key issues above. Fiber rings are thus the BEST CHOICE for <u>superior</u> OTDR test results.



Various fiber rings will be necessary when the technician works with different patch panel connections (e.g SC, LC, ST, etc.).

Fiber Ring Pricing										
Part #	Length		Fiber	Connector (OTDR)	Connector (link)	Price				
Singlemode										
FR-SM-500-LCLC	500m	Sin	glemode	LC/UPC	LC/UPC	290.00				
FR-SM-500-LCSC	500m	Sin	glemode	LC/UPC	SC/UPC	290.00				
50/125 Multimode										
FR-M5-150-LCLC	150m	50/12	5 multimode	LC/UPC	LC/UPC	230.00				
FR-M5-150-LCSC	150m	50/12	5 multimode	LC/UPC	SC/UPC	230.00				
62.5/125 Multimode										
FR-M6-150-LCLC	150m	62.5/1	25 multimode	LC/UPC	LC/UPC	230.00				
FR-M6-150-LCSC	150m	62.5/1	25 multimode	LC/UPC	SC/UPC	230.00				
Fa	r-end n panel	Symbolic	Fiber Link Near-end patch panel	P. 4 5 4 7 8 9 10 11	O					
A fiber ring attached to the far end of the link allows the OTDR to measure loss <u>through</u> the far-end patch panel connection		Fiber ring serves two functions: 1) allows the OTDR to recover from the reflection received from the patch panel; and 2) allows the OTDR to measure loss through the patch panel connection.								

DEAD ZONE BOXES. Dead zone boxes, on the other hand, have adapters installed on the ends of a long spool, and short patch cables are required to make the final connection to the OTDR and the link under test.

Only one dead zone box (per fiber type) is required, since patch cables convert the dead zone box adapters to whatever link connector is required.

However, dead zone boxes are inferior to fiber rings because the adapter at the end of the dead zone box prevents the OTDR from sufficiently addressing the two issues listed above.

Dead Zone Box Pricing								
Model #:	Length	Fiber	Connectors	Price				
DZB-SM-1100	1100m	9/125 singlemode	SC/UPC	375.00				
DZB-M5-450	450m	50/125 multimode	SC/UPC	335.00				
DZB-M6-450	450m	62.5/125 multimode	SC/UPC	335.00				



