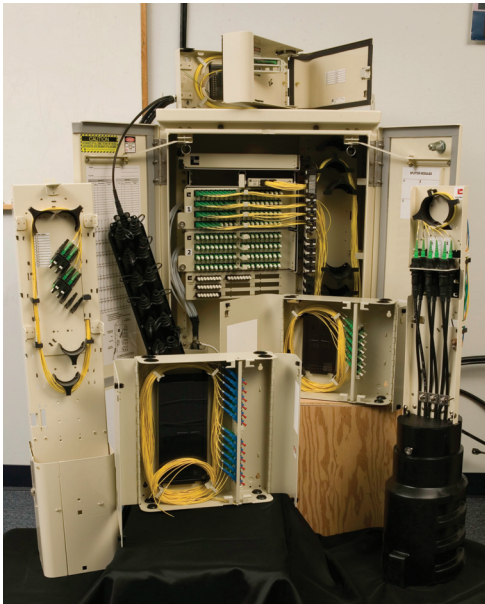


The
LIGHT BRIGADE

Your Fiber Optic Resource.

Fiber Optic Patch Panels, Splice Closures and Pedestals

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Cable and fiber management for your application

In any fiber-optic system splices and connectors are crucial to system operation and must be properly housed in protective structures for the system to continue to operate reliably. Completed splices must be properly organized into splice trays, which are designed to hold specific types of splices as well as to store slack fiber at the proper bend radius. These trays can be housed inside “patch panels,” a general term that refers to a family of panels that provide specific features to a fiber-optic designer.

In addition to true patch panels, which provide only cross-connection, splice trays also can be housed in splice panels, distribution panels and LAN panels as well as fiber management bays, splice closures and pedestals. Each type must be properly designed for cable grounding, strain relief and fiber routing requirements and should be chosen to best fit the application. Before the proper type of storage can be chosen, one must understand the function and features of each distinct type.

Just as a chain is only as strong as its weakest link, so are the quality and integrity of a fiber-optic system. Only by carefully planning and protecting your system can you keep your optical chain strong.

Chapter Selections

Introduction – 8:11

The chapter covers cable and fiber management products for outside plant and premises applications. Singlemode and multimode cable structures are reviewed, along with preparation, routing and applications.

Patch Panels – 10:13

The patch panel provides the mechanical interface between transmission equipment and the optical cable in OSP and premises applications. This chapter covers cable management terminology, applications, and recommendations for handling a wide range of fiber types and cable structures.

Splice Panels – 3:42

This chapter discusses the traditional methods for splicing and routing pigtails to patch panels, entrance panels, and new products for FTTx applications. Cable routing and installation options are also covered.

Distribution Panels – 5:34

Designed for patching and splicing, distribution panels have more diversity than ever with new variations including fiber management bays, FTTx panels and premises panels. Options for both designers and installers are covered.

Entrance Cabinets – 3:18

Entrance cabinets not only simplify code compliance, they also lower installation costs at hub locations by centralizing the splicing at one location. This allows patch panels to be distributed and installed as space allows.

Premises Panels – 7:39

Premises panels are used in factories, office buildings and local area networks. Learn about standards, terminology, and the challenges faced by those installing fiber. Also addressed are cable terminations and management from cross-connect to fiber-to-the-desk products.

Splice Closures for OSP – 8:50

Splice closures are key for protection and management of cables and fibers in the OSP. Learn about closures available for different types of fiber, cable and applications. Content includes re-entries, fiber and cable routing, and environmental and mechanical issues.

FTTx Splice Closures – 5:16

FTTx has created a new generation of products specifically designed for the cable transitions between the FDH and the subscriber. This chapter covers installation and splicing options, as well as FTTx-specific closures.

Fiber Distribution Hubs – 10:24

Fiber distribution hubs address the many challenges present with cable terminations and OSP optical circuit management. Learn about the capabilities of FDHs and the options available for both designers and installers.

Fiber Optic Pedestals – 5:45

As fiber gets closer to homes and buildings, pedestals provide the last termination point for fiber circuit management before the customer’s facility. Learn about the features and options available, including express entries.

Loose Buffered Cable Prep. – 20:35

Learn how to prepare armored and unarmored stranded and central tube cable structures. See how to install fan-out kits and attachment hardware. Learn about mid-entries for trunk and feeder applications, including FTTx.

Tight Buffered Cable Prep. – 10:17

Learn how to prepare distribution, breakout cables and cordage, and to perform a mid-entry on sub-unit indoor/outdoor distribution cables for protective, alternate route ring and ITS networks. See the process for installing fan-out kits and attachment hardware.

Bonus Materials – Quiz in Word format, with both student and instructor versions.