A LANscape[®] Solutions Product

Corning Cable Systems

Applications

- All telco, CATV and LAN applications
- Accurately splices dissimilar and specialty fibers
- Splicing 900 µm pigtails via Core Detection System (CDS) mode
- New construction or old grade fiber splicing

Description

The X77 Fusion Splicer is Corning Cable Systems best-selling unit. The X77 offers the core alignment accuracy of Corning Cable Systems LID-SYSTEM[®] Unit as well as the recent addition of a camera based core-alignment technology, core detection system (CDS), for speed and versatility.

With the increasing number of applications for splicing dissimilar and specialty fibers, the LID-SYSTEM Unit is a necessity for low-loss splices. The X77 Fusion Splicer is the perfect combination of precision operation and ease of use, both in a cost-effective machine.

The X77 Fusion Splicer offers 13 factory-optimized programs for single-mode, multimode and specialty fibers, as well as 192 user defined programs. Up to 5200 splice loss values can be stored for downloading to a text file for system records. Messages and splice loss results are shown on the fusion splicer's 5.5-in high resolution LCD screen with contrast adjustment. A tilt stand on the splicer base provides improved viewing and operation orientation.

Features / Benefits

- Both a precision LID-SYSTEM Unit for direct core alignment and a fast three-axis camera based core detection system (CDS)
- Utilizes Automatic Fusion Time to optimize each splice (LID-System)
- Auto-Start feature begins the splice process when the fiber flaps close
- Includes an external AC power adapter/charger and three internal batteries
- Rugged, watertight "carry-on" style carrying case
- Maintenance-free precise and durable (P&D) electrodes
- Ultra-fast heat-shrink oven (20 secondheating time on 60 mm heat-shrinks)
- USB work lamp (optional)

CORNING

• Builds attenuators, programmable splice loss (up to 10 dB)



Model X77 Micro Fusion Splicer | Photo SEH151



Model X77 Micro Fusion Splicer Carry-On Case (open) | Photo NS72



Model X77 Micro Fusion Splicer Carry-On Case (closed) | Photo NS73

Product Specifications

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LID-SYSTEM[®] Unit Technology

The accuracy of the LID-SYSTEM Unit and its powerthrough splice loss measurement method eliminates the time consuming task of evaluating splices with an OTDR. The single-mode LID-SYSTEM Unit first optimizes core alignment in each of the X, Y and Z axes. When the fusion process begins, the X77's unique Auto Fusion Time Control monitors the power level through the splice and completes the fusing process when splice loss is at a minimum – ensuring the best splice possible. Finally, the LID-SYSTEM Unit measures splice loss by comparing power levels before and after the fusion process.

Core Detection System (CDS[™])

The X77 is now equipped with a secondary method for core alignment (CDS) based on cameras. This technology, although not as accurate as the LID-SYSTEM, allows for fast corealignment (15s) even on 900 µm single-mode fibers. The X77 is also capable of automatically choosing the best alignment method for the application at hand.

Precise and Durable Electrodes (P&D)

Precise and durable (P&D) electrodes for the iLID fusion splicer are absolutely maintenance-free, worry-free, and can reduce the average splice loss up to 50 percent. Permanently attached arc-stabilizers guarantee both high precision and long-life durability. An electrode cleaning arc, which is applied by the fusion splicer automatically, is sufficient to ensure continued low-loss splicing for approximately 7,000 arcs.



LID-System Unit | Photo ZA-2736



Precise and Durable Electrodes (P&D) | Photo ZA-2737



Specifications

Parameter	Specification
Principle Operation	Direct Core Alignment LID-SYSTEM [®] Unit, three-axis alignment, 1300 nm LED
Fiber Coatings	250 to 900 μm
Fiber Types	Multimode, single-mode, specialty single-mode (non-zero dispersion-shifted (NZDS) single-mode fibers including long-haul, metropolitan and others)
Typical Splice Loss Lab Field	0.02 dB for identical single-mode fibers, 0.01 dB for identical MM fibers, 0.03 for identical NZDS < 0.05 dB for single-mode
Operating Temperature	-15 to +50°C
Storage Temperature	-40 to +80°C
Humidity	93%, non-condensing
Monitor	Color TFT QVGA LCD, 100x, 5.5-in diagonal
Power AC DC	95-260 V with automatic voltage range selection; 50 to 60 Hz; DC 3x 12 V camcorder rechargeable batteries; recharge time: approximately eight hours Allows for approximately three to four hours of use
Dimensions (H x W x D)	8.5 x 7.3 x 5.5 in (216 x 185 x 140 mm)
Weight	5.5 lb (2.5 kg) without batteries, 9.9 lb (4.5 kg) with batteries



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Ordering Information

Part Number	Description
Х77-08М-Т-Н	X77 Micro Fusion Splicer with FBC-006 precision diamond cleaver, heat-shrink oven, standard carrying case, tilt-base AC/DC power supply and two 12 V batteries
X77-XSM-T-H	X77 Micro Fusion Splicer with all accessories above except for the FBC-006 cleaver
Accessories	
Part Number	Description
X7-CARRYONCASE	New "Carry-On" Style Transit Case with wheels
X7-Fast Oven	New Ultra-Fast (10 sec.) Heat-Shrink Oven for X77 Fusion Splicers
2806031-01	Heat-Shrink Splice Protection Parts (package of 50, 60 mm long)
X75-010	Crimp & Go® Splice Protection Crimping Device with mounting bracket
FSA-012	Crimp & Go Splice Protection Crimping Device parts (150/pack)
X7-TRANSFER	Splice Pak [™] Splice Protector crimp adapter with transfer arms
A0276859	Splice Pak Splice Protector, yellow, 250/250 µm (25/pack)
A0295149	Splice Pak Splice Protector, blue, 250/900 µm (25/pack)
A0295150	Splice Pak Splice Protector, green, 900/900 µm (25/pack)
2820013-01	X77 (+14K Series) / iLID USB worklight
M67-003	Fusion Splicing Tool Kit
FSA-022	Precise and Durable (P&D) Electrodes for X77 Series 2000 or higher
TKT-SPLICE	Basic Fusion Splicing Tool Kit
OFT-000	Optical Fiber Access Tool for mid-span access
A0398057	Camcorder Battery

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