EL Series Optical Fiber Patch Cords

The Expanded Light DIN connect patch cord is similar in function to the traditional BNC to BNC installed copper wiring terminated to the rear of a copper jackfield. This patch cord has an EL-DIN connector on one end and an industry standard LC, SC, FC, ST, (or any single or multi-mode) fiber connector on the other end. The EL-DIN connector end is attached to the rear of the EL-Video Jack and the Kevlar reinforced fiber is routed to the termination point at the router, or traditional fiber distribution frame.

The Expanded Light Quick Connect (EL-QC) is similar in function to a copper video patch cord. With the EL-QC connector on either end of a 5mm bend-insensitive rugged fiber, when inserted into the front of the EL Optical Fiber Video Jack, it will automatically switch the optical signal being routed through the back of the video jack to the front connectors.

Patents Pending

Product Benefits

- Expanded Light beam connection scheme eliminates issues with dirt and scratches common with single-mode and multi-mode fiber connections.
- Non contact optical connection eliminates deterioration of insertion and return loss over matings; no cleaning required.
- Rugged cable jacket offers same physical usage characteristics as copper.
- Kevlar reinforcement provides high pull strength.
- Bend-insensitive fiber allows for small bend radius without any increased insertion loss.
- Fiber connection is "signal agnostic" allowing video, data, audio, internet protocol, analog, or any other signal to be transmitted.
- Front push/pull connection allows easy insertion and withdrawal.
- Components made of high-strength stainless steel.
- Coated optics for low loss connections.



Material	Mechanical	Optical
Body High Strength Stainless Steel	Patch Cord Mates 10,000 Cycles	Insertion Loss Normal
Optical Alignment Pin High Strength Stainless Steel	Withdrawal Force (<i>Patch Cord</i>) 5 lbs. Minimum	Insertion Loss Patched 1.5 dB Typical
	Pull Force (Rear Side) 20 lbs. Minimum	Return Loss 55 dB Typical 45 dB Minimum



Patents Pending

Description	Part Number
EL DIN™ Removal Tool	107-1505
EL Series™ Bare Fiber Cable Assembly Pigtail	776R-716-394014
EL Series™ DIN-SC Fiber Optic Cable Assembly (3M)	776L-700-118014
EL Series™ DIN-LC Fiber Optic Cable Assembly (3M)	776L-704-118014
EL Series™ DIN-FC SM Fiber Optic Cable Assembly (3M)	776L-710-118014
EL Series™ DIN-ST Fiber Optic Cable Assembly (3M)	776L-712-118014
Singlemode EL to EL Patch Cable w/5mm 9 / 125 Blue Cable (3M)	776L-776-118016

Note: Any length available - please contact sales for assistance.

The *Expanded Light* Patch Cords provide a new way to route broadcast signals over optical fiber.

Eliminating issues associated with single mode ferrule-based connections, the EL Patch Cords, combined with the EL Optical Fiber Video Jack (EL-VJ), provide a rugged and reliable way to carry, monitor, and route your high-speed signals. Totally signal agnostic, the fiber video jack is equally adept at carrying HDTV, SDI, Ethernet IP, Analog Video, or any other data format, at whatever data rate your transmit/receive system can deliver. With a workflow carried directly from the proven copper jackfield and patch cord routing methodology, the *Expanded Light*

system is totally passive, and provides a single-mode expanded beam connector system with excellent reliability and optical performance.

Connecting Innovation to Application®

