

ASSEMBLY INSTRUCTIONS

SKLC (Secure Keyed LC) Connector Field Termination

PREPARE

1. Slide boot onto the fiber, with the small end inserted first, away from the connector. (FIGURE 1)

NOTE: 900um boots are sold separately.

- 2. Remove 4 inches of the outer cable sheath for jacketed cable.
- 3. Strip the 900µm buffer as indicated in the measurements provided in the chart below **(FIGURE 2)***, strip the fiber in increments of ¼".
- 4. Clean exposed fiber with a lint-free wipe damped with 99% isopropyl alcohol to remove any contaminants.

NOTE: Images are not to scale.

ASSEMBLE

- 1. Remove the dust cap from the connector.
- 2. Dry fit the fiber by inserting the fiber into the connector. This will assure that all coating has been removed and the fiber can be inserted into the connector ferrule.
- 3. Shake the adhesive bottle before using. Remove the cap from the adhesive bottle, and attach the needle by pressing it gently onto the top of the bottle until you feel it set into place.
- **NOTE:** Syringes are also available for inserting adhesive. See parts list for part number.
 - 4. Insert the needle into the back of the connector, holding it firmly in place while filling. Being careful not to over fill the connector, squeeze the bottle gently, injecting the adhesive into the connector. Continue squeezing until a dot of adhesive is visible at the ferrule end of the connector, and then remove the needle. Wipe away any excess adhesive from the end of the ferrule.

- 5. Using the brush attached to the lid on the bottle of primer, apply the primer to the area of fiber as indicated. See (FIGURE 2).
- 6. Insert the fiber into the back of the connector. To prevent premature bonding, use a continuous motion, until the fiber is fully seated in the connector. The primer will activate the adhesive and begin the bonding process.
- NOTE: The fiber should be inserted within 45 seconds of placing the primer on the fiber.
 - Hold the fiber in place for 10-20 seconds, and allow up to 3 minutes for the adhesive to fully bond.
 - 8. Slide the boot back up over the back of the connector.

CLEAVE AND POLISH

- 1. When the adhesive is cured (no longer wet), scribe the fiber where it meets the bead of adhesive at the end of the ferrule. (FIGURE 3)
- 2. Pull the fiber away from the connector, properly dispose of the debris.
- **NOTE:** Loose fiber debris can be dangerous. Be sure to properly dispose of fiber debris.
 - 3. Begin by "air polishing" the connector with 12µm polishing film. Leviton's 12 µm film is a dark pink in color. Hold the edge of the film, with thumb and fore finger, dull side down. Hold the connector ferrule pointing up. Gently touch the connector to the film. While holding the polishing film in contact with the connector, move the polishing film in approximately a 1 inch circle to remove the fiber stub. The scraping sound of the fiber on the film will cease when the air polish process is complete.

- 4. Hold a lint-free wipe across the finger tips, and then gently press the ferrule end-face against the wipe. Twist the connector in place to remove any debris. Do not drag the connector across the lint-free wipe.
- 5. Wipe the bottom surface of the LC 1.25mm polishing puck and the surface of the polishing pad with a lint-free wipe damped with 99% isopropyl alcohol to remove any contaminants.
- 6. Place the 3µm film on the polishing pad, dull side up. Leviton's 3µm film is yellow in color. Place the polishing puck on the film. Gently insert the connector ferrule into the polishing puck and using very light pressure, trace 15-20 figure 8's on the film. Inspect to ensure the fiber is polished flush by first gently dragging the connector across a lint-free wipe. Fiber should not snag. If the fiber snags, continue polishing until it does not snag. Remove debris with a lint-free wipe dampened with 99% isopropyl alcohol.
- 7. Repeat steps 5 and 6 with 0.3µm polishing film. Leviton's 0.3µm film is a light blue in color.
- 8. Using a Leviton 200x inspection scope, inspect the fiber core to assure the core is not scratched, cracked, broken and is clean. (FIGURE 4)
- 9. Replace the dust cap on the connector to maintain cleanliness.



INSTALLING THE SECURED KEYED LC HOUSING

- **NOTE:** Assure correct connector polarity prior to final assembly of the housing; refer to **(FIGURE 5)**. Failure to do so may result in the need to disassemble the Secured LC housing, which will result in damage to the housing.
- 1. Place the upper housing with the top of the housing down on the work surface (FIGURE 6).
- Insert the first fiber connector, with the LC latch facing down, into the correct connector slot in the upper housing, making sure the retention slots on the connector are aligned with the capture feature in the housing (FIGURE 7).
- 3. Now insert the second fiber connector, with the LC latch facing down, into the correct connector slot in the upper housing, making sure the retention slots on the connector are aligned with the capture feature in the housing (FIGURE 8).



IMPORTANT INSTRUCTIONS

- 1. Read and understand all instructions. Follow all warnings and instructions marked on the product.
- 2. Do not use this product near water-e.g., near a tub, wash basin, kitchen sink or laundry tub, in a wet basement, or near a swimming pool.
- 3. Never push objects of any kind into this product through openings, as they may touch dangerous voltages.
- **4.** SAVE THESE INSTRUCTIONS.

SAFETY INFORMATION

- 1. Never install communications wiring or components during a lightning storm.
- 2. Never install communications components in wet locations unless the components are designed specifically for use in wet locations.
- **3.** Never touch uninsulated wires or terminals unless the wiring has been disconnected at the network interface.
- 4. Use caution when installing or modifying communications wiring or components.
- 5. To prevent electrical shock, each opening must be filled with a module.

- 4. Insert the Assembly Alignment Guide into the lower housing, from the bottom (FIGURE 9).
- 5. Place the lower housing over the upper housing with the Assembly Alignment Guide positioned so it will fit into the alignment slot into the upper housing (FIGURE 10).
- 6. Place the housing assembly between your thumb and fingers, gently squeeze the upper and lower housing assemblies together until the retention snaps lock the upper and lower housing together.
- 7. Remove the Assembly Alignment Guide from the connector housing.

- **NOTE:** Always inspect the fiber connector before inserting into an adapter. Leviton 200x scope with duplex adapter is specifically designed to allow inspection of duplex connector pairs.
- **NOTE:** Once a connector is engaged into an adapter, an extraction tool of the same keyed color is required to disengage from the adapter

FIBER STRAND POLARITY

10

Proper polarity of the fiber strands is required to assure transmit and receive functionality. See figure 5.

The **odd** numbered strands (i.e. 1, 3, 5,) of the fiber cable typically are placed in the A polarity position. The **even** numbered strands (i.e. 2, 4, 6,) of the fiber cable typically are placed in the B polarity position. This should result in proper A-B polarity alignment.



Secure Keyed LC Kits & Accessories	Part No.	
Secure Keyed LC Connector Kit, 900um, MM/SM - black	4999K	ELC
Secure Keyed LC Connector Kit, 900um, MM/SM - green	4999K	VLC
Secure Keyed LC Connector Kit, 900um, MM/SM - blue	4999K	LLC
Secure Keyed LC Connector Kit, 900um, MM/SM - orange	4999K	OLC
Secure Keyed LC Connector Kit, 900um, MM/SM - red	4999K	RLC
Secure Keyed LC Connector Kit, 900um, MM/SM - slate	4999K	GLC
Secure Keyed LC Connector Kit, 900um, MM/SM - white	4999K	WLC
Secure Keyed LC Connector Kit, 900um, MM/SM - yellow	4999K	YLC
900µm Boot, Blue (bag of 50)	4999K	BLU
900µm Boot, Beige (bag of 50)	4999K	BGE
900µm Boot, Black (bag of 50)	4999K	BLK
900µm Boot, Aqua (bag of 50)	4999K	AQU
Extraction Tool with Dust Cap	ETRTN	*TL

Fiber Installation Tools	Part No.	
Fast Cure Tool Kit	49800	FTK
Adhesive Primer Kit	49800	680
Fast Cure Consumables Kit	49800	FAC
200x Fiber Inspection Scope	49886	FSP
Duplex LC Scope Adapter (for use with Leviton 200x Scope)	49886	LCD
LC Polishing Puck	49886	LCP
Fast Cure Carrying Case	49886	FCC
Replacement Needles	49886	FCN
Syringes (bag of 25)	49886	SYR

* = W (white), Y (yellow), O (orange), R (red), L (blue), V (green), G (slate), E (black)