### Connector Installation & Assembly Instructions

**FASTCAM® SC & LC**

**WARNING:** Always wear eye protection when handling optical fibers. Dispose of any cut or cleaved ends properly.

**NOTE:** These instructions should not be used with previous versions of the FastCAM SC and LC connectors which are only used to terminate 250µm and 900µm fiber.

The following installation instructions describe the assembly procedure for the new FastCAM SC and LC connectors which allow termination on 250µm, 900µm, 2.0mm, and 3.0mm fiber.

**FIBER TERMINATION- 250µm**

1. Tools required for installation are the LYNX™ Cleaver and a fiber stripper.
2. Slide the protective tubing, 500µm boot and 250µm protective tube (in order) onto the fiber. (See Figure 3)
3. Strip the fiber to a length of 40mm. (See Figure 4)
4. Clean the stripped fiber with an alcohol wipe to remove any debris. Check the fiber integrity by bending the stripped end slightly at 60 degrees. (See Figure 5)
5. Coating is snapped onto the fiber in order. (See Figure 6)

**Fiber Cleave Specifications (Specifications are 45º to center)**

- **Claw® Cleaver for Single-Mode Fibers**
- **Cut Angle:** 1º
- **Claw™ Cleaver for Multimode Fibers**
- **Cut Angle:** 2º

*Alternative cleavers were also tested. Those with a guaranteed maximum 1º cleave angle for single-mode fibers and a maximum 2º cleave angle for multimode fibers provided acceptable results.

6. Insert the cleaved fiber into the rear of the connector until the connection is made. Make a bend in the fiber to maintain connection. (See Figure 7)

7. Remove the FastCAM SC/LC connector dust cap and insert the connector into the VFL. Turn the VFL power on and there will be a red glow in Position 1 of the wedge clip. (See Figure 10)

8. Insert the cleaved fiber into the rear of the connector until the red glow dims in Position 1 of the wedge clip. Make a bend in the fiber to maintain connection. (See Figure 11)

9. Maintain a slight force on the fiber, release the wedge clip by squeezing both sides until the wedge clip dislocates itself from the connector body. Remove the wedge clip. Remove the VFL from the connector and place the dust cap back onto the connector body. (See Figure 9)

10. Slide the boot up and over the connector body. Slide the clear 900µm protective tubing over the black 250µm protective tubing. (See Figure 8)

**Termination is complete.**

**NOTE:** The connector's dust cap should remain in place until you are ready to insert the connector.

**WARNING:** Always wear eye protection when handling optical fibers. Dispose of any cut or cleaved ends properly.

**NOTE:** These instructions should not be used with previous versions of the FastCAM SC and LC connectors which are only used to terminate 250µm and 900µm fiber.

The following installation instructions describe the assembly procedure for the new FastCAM SC and LC connectors which allow termination on 250µm, 900µm, 2.0mm, and 3.0mm fiber.

**FIBER TERMINATION- 250µm**

1. Tools required for installation are the LYNX™ Cleaver and a fiber stripper.
2. Slide the protective tubing, 500µm boot and 250µm protective tube (in order) onto the fiber. (See Figure 3)
3. Strip the fiber to a length of 40mm. (See Figure 4)
4. Clean the stripped fiber with an alcohol wipe to remove any debris. Check the fiber integrity by bending the stripped end slightly at 60 degrees. (See Figure 5)
5. Coating is snapped onto the fiber in order. (See Figure 6)

**Fiber Cleave Specifications (Specifications are 45º to center)**

- **Claw® Cleaver for Single-Mode Fibers**
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*Alternative cleavers were also tested. Those with a guaranteed maximum 1º cleave angle for single-mode fibers and a maximum 2º cleave angle for multimode fibers provided acceptable results.

6. Insert the cleaved fiber into the rear of the connector until the connection is made. Make a bend in the fiber to maintain connection. (See Figure 7)

7. Remove the FastCAM SC/LC connector dust cap and insert the connector into the VFL. Turn the VFL power on and there will be a red glow in Position 1 of the wedge clip. (See Figure 10)

8. Insert the cleaved fiber into the rear of the connector until the red glow dims in Position 1 of the wedge clip. Make a bend in the fiber to maintain connection. (See Figure 11)

9. Maintain a slight force on the fiber, release the wedge clip by squeezing both sides until the wedge clip dislocates itself from the connector body. Remove the wedge clip. Remove the VFL from the connector and place the dust cap back onto the connector body. (See Figure 9)

10. Slide the boot up and over the connector body. Slide the clear 900µm protective tubing over the black 250µm protective tubing. (See Figure 8)

**Termination is complete.**

**NOTE:** The connector's dust cap should remain in place until you are ready to insert the connector.
**Fiber Termination - 900μm**

**Note:** When using a 900μm Fan-out/Breakout kit to unjacket 250μm fiber, follow the manufacturer’s instructions. After the kit is installed properly, the following procedures for FastCAM termination are applicable. Tools required for installation are the Lynx or CT30A Cleaver and a fiber stripper.

1. **Slide the 900μm boot onto the fiber.** (See Figure 13)
2. **Strip the fiber to a length of 40mm by removing 10mm at a time.** (See Figure 14)
3. **From the end of the 900μm buffered fiber, place a mark at 15.5mm for SC or a mark at 11.5mm for LC.**

4. **Clean the stripped fiber with an alcohol wipe to remove any debris. Check the fiber integrity by bending the stripped end slightly at 60 degrees.** (See Figure 18)
5. **Set the stripped fiber onto the cleaver such that the 900μm buffered fiber’s edge is at the 10.5mm position and cleave.** (See Figure 16)
6. **The wedge clips are engaged at shipment. If they have become dislodged, squeeze the top and bottom of the wedge clip, insuring it is inserted in the connector body. A click will be heard for each wedge.** (See Figure 17)
7. **OPTIONAL: Use the Visual Fault Locator (VFL) as an aid to determine the cleaved fiber and stubbed fiber are connected properly.**

8. **Remove the FastCAM connector dust cap and insert the connector into the VFL. Turn the VFL power on and there will be a red glow in Position 1 of the wedge clip.** (See Figure 21)
9. **Insert the cleaved fiber into the rear of the connector.** (See Figure 18) until the red glow dims in Position 1 of the wedge clip. (See Figure 22)
10. **Make a bend in the fiber to maintain connection.** (See Figure 19)
11. **Maintaining a slight force on the fiber, release the wedge clip by squeezing both sides until the wedge clip dislocates itself from the connector body. Remove the wedge clip.** (See Figure 20)
12. **Slide the boot cap up and over the rear of the connector body. Termination is complete.** (See Figure 23)

For Technical Assistance Call:
1-800-722-2082
www.leviton.com/ns

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**Fiber Termination - 2mm and 3mm**

**Tools required for installation are the Lynx or CT30A Cleaver and a fiber stripper.**

1. **Slide 2mm or 3mm boot onto cable.** (See Figure 24)
2. **Remove 70mm of cable jacket.** (See Figure 25)

3. **Strip the fiber to a length of 40mm by removing 10mm at a time.** (See Figure 26)
4. **From the end of the 900μm buffered fiber, place a mark at 15.5mm for SC or a mark at 11.5mm for LC.** (See Figure 28)
5. **Clean the stripped fiber with an alcohol wipe to remove any debris. Check the fiber integrity by bending the stripped end slightly at 60 degrees.** (See Figure 27)
6. **Set the stripped fiber onto the cleaver such that the 900μm buffered fiber’s edge is at the 10.5mm position and cleave.** (See Figure 29)
7. **The wedge clips are engaged at shipment. If they have become dislodged, squeeze the top and bottom of the wedge clip, insuring it is inserted in the connector body. A click will be heard for each wedge.** (See Figure 30)
8. **OPTIONAL: Use the Visual Fault Identifier (VFL) as an aid to determine the cleaved fiber and stubbed fiber are connected properly.**
9. **Remove the FastCAM connector dust cap and insert the connector into the VFL. Turn the VFL power on and there will be a red glow in Position 1 of the wedge clip.** (See Figure 31)
10. **Insert the cleaved fiber into the rear of the connector until connection is made and the mark is inside the connector. Make a bend in the fiber to maintain connection.** (See Figure 18)
11. **Maintaining a slight force on the fiber, release the wedge clip by squeezing both sides until the wedge clip dislocates itself from the connector body. Remove the wedge clip.** (See Figure 20)
12. **Grip Kevlar on both side of the connector to maintain tension. Insert boot boot onto back of connector to fix Kevlar family.** (See Figure 34)
13. **Cut Kevlar from around connector.** (See Figure 35)
14. **Termination is complete.** (See Figure 36 & 37)

Note: The fiber’s dust cap should remain in place until you are ready to insert the connector.