Fiber Splitter Breakout Kit Installation Instructions

- 1. General
 - 1.1 These instructions detail the installation of a 4-, 6-, 8-, and 12-fibers-per-tube splitter kit. Each kit breaks out 250 µm fibers from a multi-fiber, loose tube into individual 900 µm buffer tubes. The fibers can then be terminated using the connector manufacturer's recommended termination procedure for 900 µm tight-buffered fibers.
 - 1.2 One splitter kit is required for each multi-fiber loose buffer tube being terminated. OCC recommends that you read these instructions thoroughly prior to installation of the splitter kit.

2. Splitter Kit Contents

- 2.1 Each OCC Splitter Kit contains the following (See Figure 1):
 - 1 Cover
 - 1 Bottom
 - 1 24" 4-, 6-, 8-, or 12-fiber terminal assembly
 - 1 3/4" long clear tubing



3. Required Tools and Material (not included)

- 3.1 The following tools and material are needed to complete these instructions but are not included in this package:
 - Electrical or masking tape Lint free wipes Indelible marker Buffer tube stripper Gel cleaner Needle nose pliers Talc

4. Determining Strip Length

- 4.1 Locate your work surface as close to the patch panel location as possible. This will minimize the strip length.
- 4.2 Route the cable through the patch panel to the work surface.
- 4.3 Measure backwards, from the end of the cable to the point at which it will attach to the patch panel, and add 39 inches (1 meter) to the length.
- 4.4 Mark this length with an indelible marker and piece of tape. This is the strip point for the cable being terminated.

5. Cable End Preparation

- 5.1 Follow the cable manufacturer's recommended sheath stripping procedures.
- 5.2 Strip the cable back to the mark and tape mark.
- 5.3 Secure the cable to the patch panel.
- 5.4 Clean any dirt and/or gel surrounding the loose cable.

6. Loose Buffer Tube Preparation

- 6.1 Select the first buffer tube and measure back90 cm (36") and place a mark. Then mark tube1/2" back from first mark.
- 6.2 Slide tubing onto buffer tube past the second mark.
- 6.3 Score the buffer tube and strip the loose buffer tube to the mark.
- 6.4 Tape the buffer tube to the work surface with 50 mm (2") overhanging the end of the work surface (See Figure 2).





- 6.4 Wipe all the gel from the exposed fibers using a gel cleaner.
- 6.5 Place the buffer tube in the bottom of the splitter kit. Using pliers, press the tabs of the crimping fixture to hold the loose tube. Crimp only enough to start to deform the tube. Twist and pull the splitter body to check if the crimp is secure. The tube should not slip or move in the crimp fixture. For added retention, secure with a few drops of Loctite 411.

7. Fiber Threading Procedure

7.1 Tape the terminal assembly in the vertical position 75 mm (3") to the side of the loose buffer tube (See Figure 3).



- 7.2 Untangle the fibers and make sure they are completely free of gel filling compound.
- 7.3 Talc the fibers to facilitate the threading operation. Cup the talc in the palm of your hand and apply along the whole length of the fibers.
- 7.4 Select the blue fiber and thread 150 mm (6") into the blue tube of the terminal assembly (See Figure 3).
- 7.5 Repeat this procedure for the remaining fibers, making sure the color coded fibers match the color coded 900 μm tubing.
- 7.6 When all the fibers have been threaded, push the fibers as a group until the fibers start to protrude from the ends of the buffer tubes.
- 7.7 Gently pull the fibers from the ends of the buffer tubing. Do not pull the fibers taught. Leave sufficient slack so the fibers are not stressed.

7.8 Untape the buffer tube assembly and slide the assembly toward the loose tube while pulling the fibers from the end of the 900 μ m tubing. If the fibers twist, rotate the terminal assembly in the opposite direction of the twist (See Figure 4).



7.9 Align the clear tube with the second mark. Place the terminal assembly into the bottom of the splitter body. Crimp the back clamp on to the clear tubing so the buffer tube will not slide easily. Align the top cover and snap into place (See Figure 5).



7.10 Remove the tape from the loose tube and repeat this procedure fro the remaining loose tubes.

8. Termination

8.1 Terminate and test each fiber following the connector manufacturer's instructions.

9. Patch Panel Installation

- 9.1 Hold splitter kit and loose tube together at the point where the tube enters the splitter kit.
- 9.2 Place the excess loose tube and splitter kit into the patch panel.