FIU-12TM, FIU-24, and FCL Series INSTALLATION GUIDE

Installation Guidelines for the FIU-12-TM, FIU-24, and FCL Series termination (-TM) and splice and termination (-S/TM) wall mount interconnect enclosures.

NOTE: This installation guide outlines typical applications of the Century Fiber Optics FIU-12-TM termination enclosure, FIU-24 termination only and splice and termination, and FCL Series termination only and splice and termination enclosures. The guidelines are generic. Some design details may differ. This equipment is designed to be flexible in its application, and it is the responsibility of the installer to ensure that all components are installed properly to ensure optimum operation of the system.

1. Package Contents
   a. (1) wall mount enclosure
   b. Accessory packet, consisting of:
      i. (4) large cable ties
      ii. (1) danger label
      iii. (1) laser warning sticker
      iv. (1) grid label sticker

   Fully loaded versions also include connector adapter plates, adapters, pigtails, and trays OR stub cable, as specified by the purchaser.

   Check your purchase order for specifics.

   **NOTE:** For unloaded enclosures, blank adapter plates, loaded adapter plates, adapters, pigtails and splice trays must be ordered separately.

2. Set up: Hardware Assembly
   a. For TM versions: Attach adhesive fiber management clips. Remove the paper backing from the adhesive pads on the clips and press the pad firmly onto the clean surface of the enclosure. Let the adhesive “cure” for at least 15 minutes before putting any stress on the clip. Typical arrangement is shown in Fig. 2.
   b. For S/TM Versions: the splice and termination enclosures are equipped with a splice tray platform and a factory installed management clip. See Fig. 2.

   a. Remove dust covers from the fiber connectors and clean the connector end-face according to manufacturer’s recommendations or your standard practice
   b. If the enclosure is not pre-wired, install connectors into adapters from the back of the plate according to color code.
c. If the enclosure is pre-wired, install connectors into adapters from the front of the plate according to color code.

d. After the connectors are inserted, carefully straighten out the fiber lengths. Leave at least 30 inches of fiber for looping and splicing in the splice tray. This fiber will be trimmed to length during the splicing process.
e. Install the incoming distribution or OSP cable to the cable tie down (see Fig. 2). Remove all of the jacketing and strength members from the cable and clean away all filling compounds.

**Measurement:** measure at least 72 inches from the point where the jacket will be attached to the enclosure to the end of the cable. This is the minimum length needed to make one circuit around the enclosure, ensure enough service loop for ease in splicing, in case rework is required, and to leave enough fiber for splicing in the tray. See Fig. 3.

The cable is attached to the enclosure using two or more of the large ties through the mounting tabs.

f. Bring the sleeved fiber pigtail to the splice tray. Anchor the sleeved group to the tray using one or two of the small ties supplied with the trays. Very little pressure is required to hold the sleeves in place.

**DO NOT PINCH THE BUFFERED FIBER.**

The tie should be loose enough to turn in the slots. The sleeved pigtails must be anchored to the side of the tray opposite the incoming cable. After the incoming cable is in, place its multi-fiber buffer tube (or other incoming fiber) is anchored to the opposite side of the tray. **Fig. 5**

**IF THE INCOMING FIBERS ARE NOT IN A TUBE, USE A SHORT PIECE OF MESH TUBING TO PROTECT THE FIBERS AT THE TIE POINT.** See Fig. 4.
Measurements: Measure the pigtails or buffer tubes to be spliced. Measurements are made from the point at which the tubes or sleeved pigtails are anchored to the tray to the end of the fiber or tube.

Each fiber must be long enough to make at least one and one-half circuit around the inside of the tray.

Fiber being spliced and stored in the holder furthest from the entrance must be at least 24 inches long. Fibers stored in the closest holder must be at least 30 inches long to make the longer circuit around the inside of the tray.

g. Splice the fibers and apply the splice protection according to the manufacturer’s recommendations.

As each fiber splice is completed, store the protector in the holder starting from the furthest slot. This is accomplished by holding the splice protector over the tray in one hand and gently feeding the fibers under the ledges of the splice tray.

The fibers will naturally lay into the tray with a “figure-S” motion. When the fibers are in place, insert the protector into the splice holder slot. Continue until all fibers are spliced.

h. Once all fibers are spliced, inspect the tray to see that all the fibers are stored properly with no pinches or loose loops that may be caught by the cover or hold-down stud.

Place the cover on the tray and stack the tray on the stud, taking care to properly route the incoming tubes and sleeved pigtails.

Replace cover and lids, observing carefully that no fibers are being pinched.