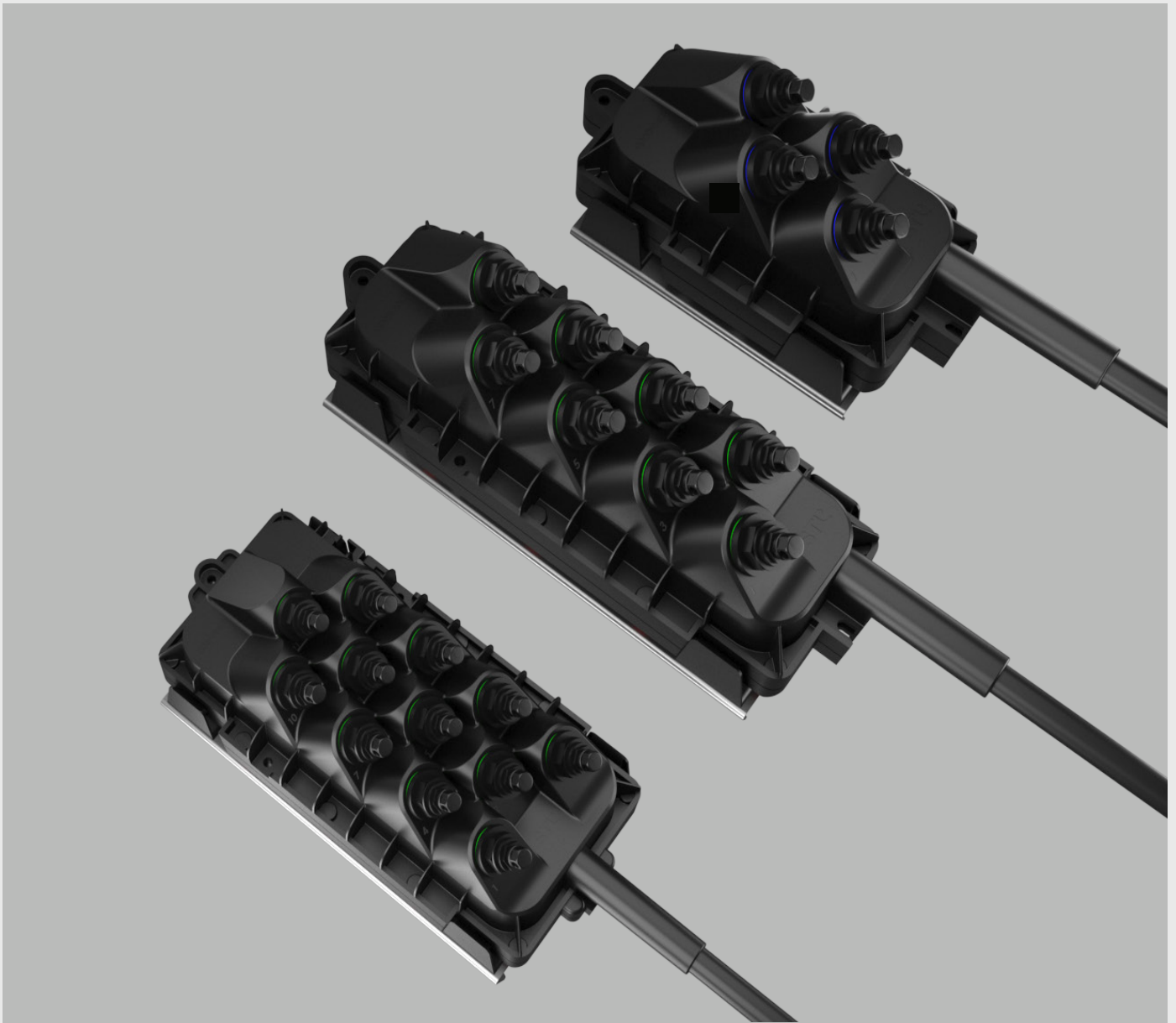# Installation Guide
STL OptoBlaze
Multiport Service Terminal (MST)

This guide shows the installation of STL MST for different installation techniques.

- Pole
- Under Ground
- Aerial

CONTENT

1. INTRODUCTION

The OptoBlaze MST is an essential component within the access network, facilitating the rapid connection between the Fiber Distribution Hub and subscribers. When customers opt for FTTH service, the OptoBlaze Terminal serves as the crucial link, connecting the drop cable to their residences.

This IP68 ruggedized pre-terminated solution offers a swift, secure, and user-friendly means of establishing connections in an ergonomically designed, low-profile housing. Tailored for Outside Plant (OSP) applications, it can be seamlessly deployed in various settings, such as hand-holes, pedestals, utility poles, or overhead cables, and securely fastened to any flat surface.

For added convenience, an adjustable universal mounting bracket featuring a simple hang-and-lock mechanism streamlines one-handed mounting and dismounting of the OptoBlaze Terminal. It arrives pre-stubbed, making it an optimal choice for a dependable deployment in access networks, whether for Point-to-Point (PtP) configurations or as a GPON distributor with preassembled PLC splitters.

2. PRODUCT KIT


Plastic Spacers

M6 Spring Nut and Pozi-Drive Screws

3. INSTALLATION USING X-BOARD

All STL MSTs are designed to be installed using the X-Board. Please be aware that not using the X-Board may cause damage to the MST and its cable.

1. Release the MST head from the tail coil taking care not to allow the head to drop unsupported. Mount the MST onto the X-board and the MST head on the top of the X-board and secure with a Velcro or cable tie strap (Fig 1, 2, 3 & 4). Do not cut the cable ties that hold the coil together.
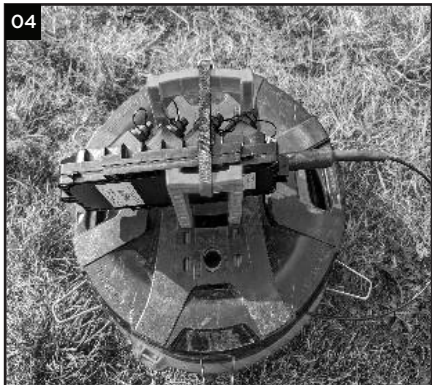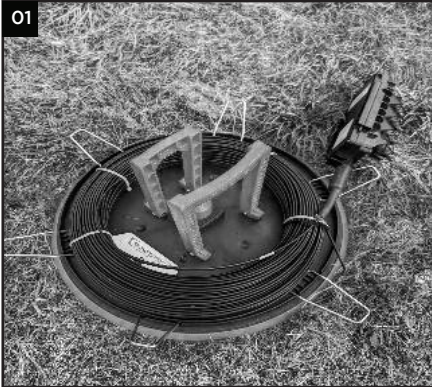

2. Cut the cable ties that hold the cable coil and pull the MST tail cable to install it as required for the installation. (Fig 5, 6 & 7).
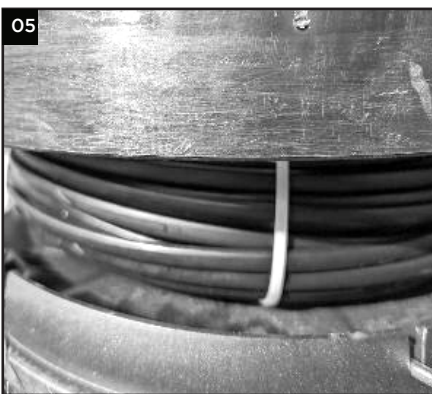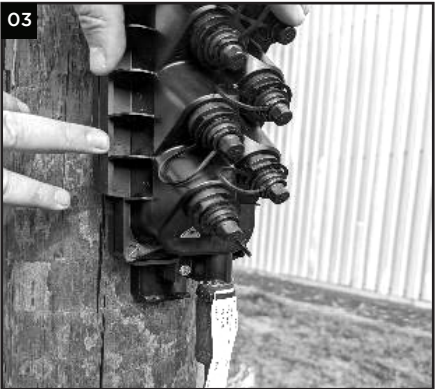
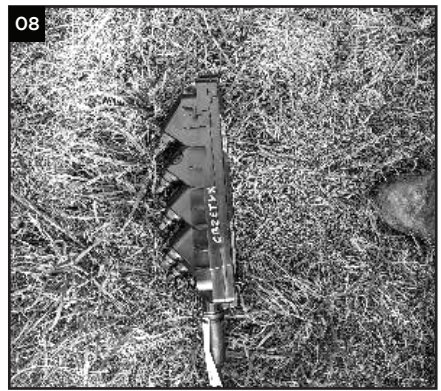## 4. POLE MOUNTING USING STAND-OFF BRACKETS

1. To mount the STL onto a pole directly using the stand-off brackets found in the accessories box that comes with the MST. These are attached by pushing them onto the back of the MST body top and bottom as per the images below. (Fig 1 & 2).
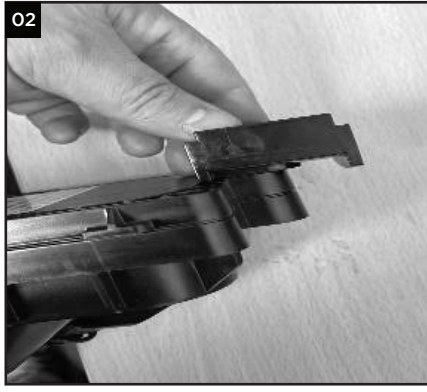
2. Place the MST onto the pole and screw through the MST mounting bracket top and bottom until the MST is securely fitted. (Fig 3, 4 & 5).


3. Cable manage the tail and label as per the current MST pole mounting procedure. (Fig 6, 7 & 8).

5. POLE MOUNTING WITHOUT STAND-OFF BRACKETS (DIRECT)

1. To mount the STL onto a pole directly without using the stand-off brackets, you must present the MST to the pole and screw in the bottom fixing screw leaving 10-12mm of the screw sticking out (Fig 1). Slide the MST onto the screw using the bottom open lugs (Fig 2&3). Then make sure the MST is straight, insert the top screw, and tighten (Fig 4). Check the MST is tight to the pole (fig 5). If the MST is loose (12 Port only), then remove the top screw, slide off the MST, and slightly tighten the bottom screw. Re-fix the MST following the fitting steps until MST is tight to the pole. MST 4/8 Port can be tightened with the MSTs fitted as the bottom screw is offset.
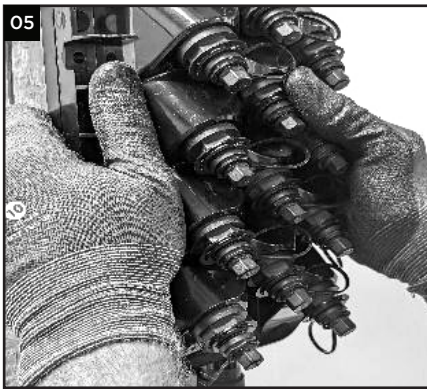
6. BACK-TO-BACK POLE MOUNT

1. Mount the STL MST without the stand mounts directly to the back-to-back mount. Screw the bottom fixing part way (10-12mm) onto the back-to-back mount and slide on the MST using the bottom lug via the bottom fixing. (Fig 1, 2 & 3).
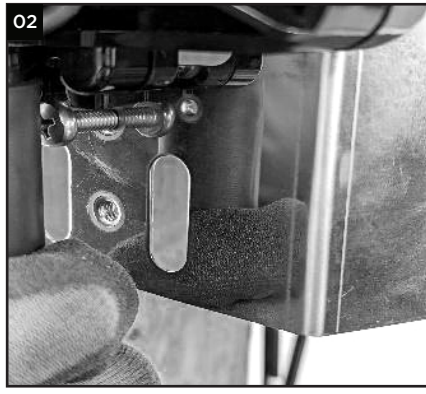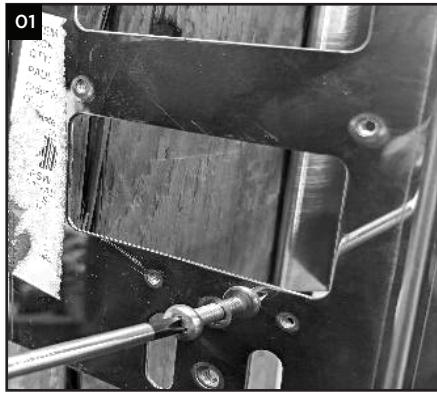
2. Then fix the top mounting point to the back-to-back pole mount. (Fig 3).

3. Tighten all fixing to ensure the MST is securely fixed to the back-to-back pole mount. (Fig 4 & 5).

7. UNDERGROUND INSTALLATION WITH MOBRA ARM

1. The STL MST is mounted on the mobra arm with fixings found in the accessories pack that comes with the MST. Remove the screws and mount the Zebedee springs into the mobra arm (Fig 1, 2 & 3).

2. Screw in the M6 bolt into the bottom Zebedee mounting leaving it out 10-12mm (Fig 1). Slide on the MST (Fig 2). Line up the MST top fixing with the top Zebedee mounting insert the M6 bolt and tighten both top and bottom bolts. (Fig 3 & 4). For 12 Port MST only- If the MST is loose then remove and screw in the bottom M6 bolt slightly. Check MST is securely mounted (Fig 5).
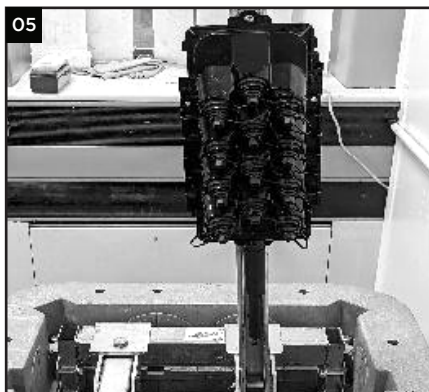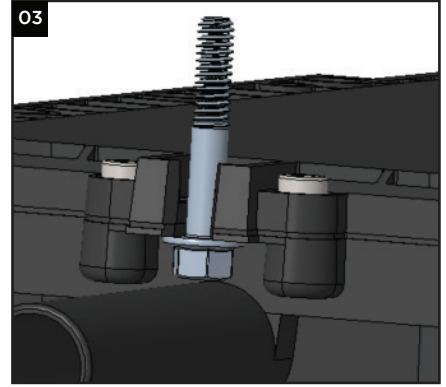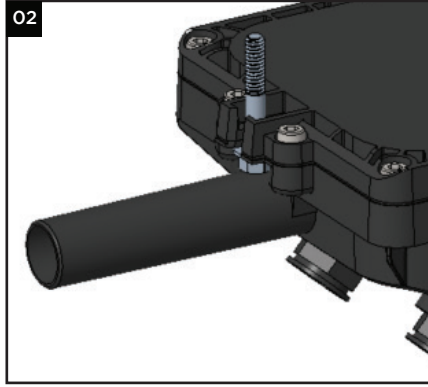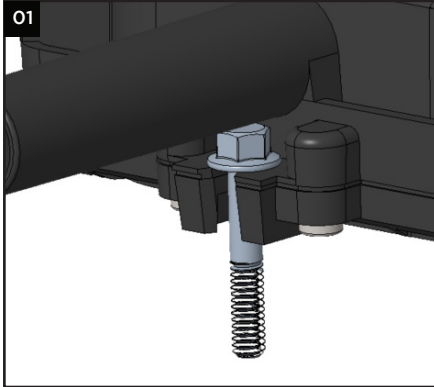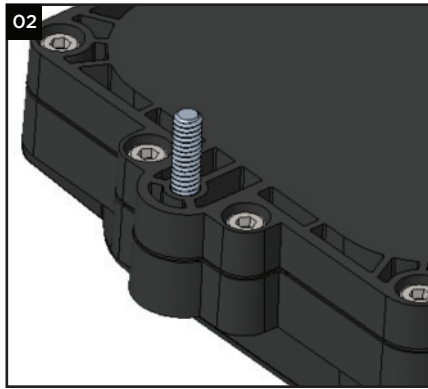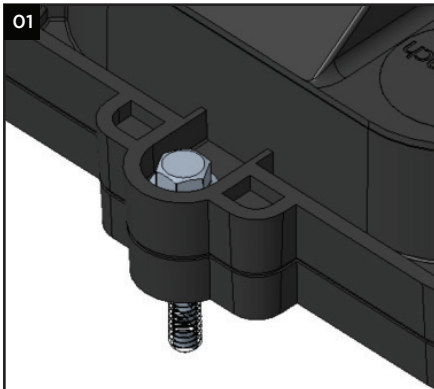
8. AERIAL INSTALLATION WITH UNVERSAL MOUNTING BRACKET

8.1. Installation Procedure for 6, 8, and 12 port MST
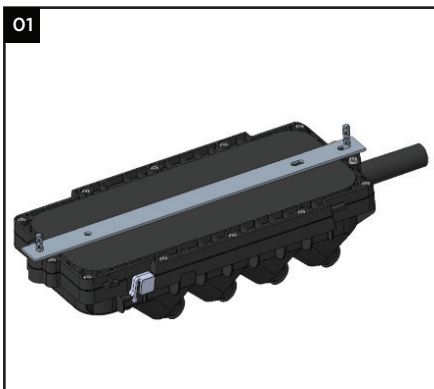
1. Add mounting bolt near cable entry port.
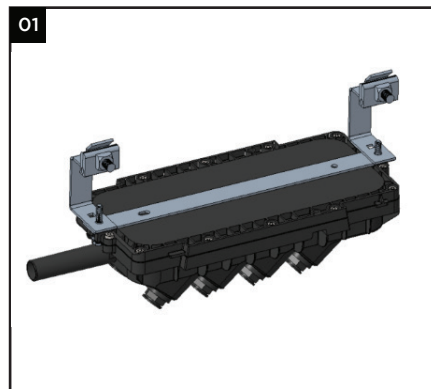

2. Add mounting bolt at opposite end.
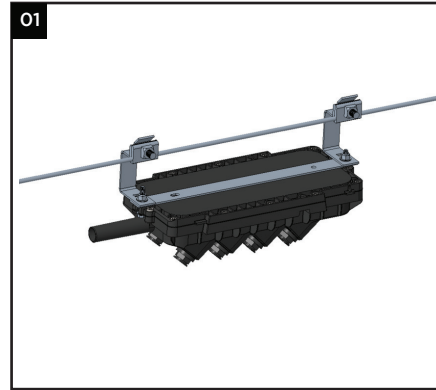

3. Add Universal Mounting Bracket.

4. Add aerial hanging brackets.
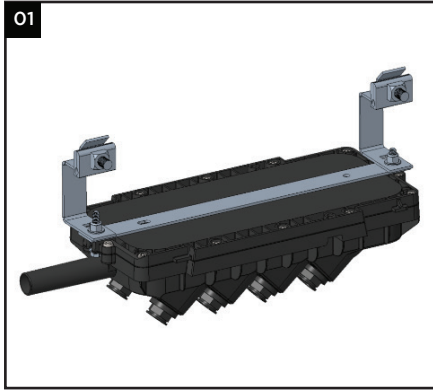
5. Using a standard can wrench, add locking nuts to secure bracket to terminal.

Note: Secure bolts using 20 in-lb. (2.3 N-m) of torque (maximum application using can wrench)

6. Using a standard can wrench, affix assembly to the strand.

8.2. Installation Procedure for 4 port MST

Repeat Steps 1-2 listed in Installation Procedure for 6, 8, and 12 port MST.

3. Add Universal Mounting Bracket
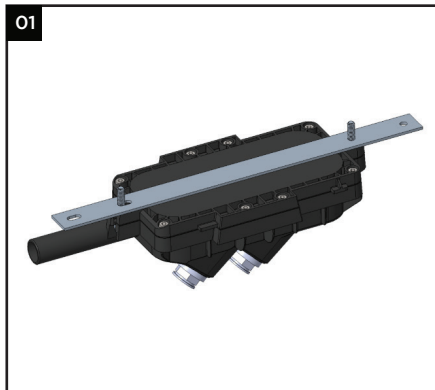
Repeat Steps 4-6 listed in Installation Procedure for 6, 8, and 12 port MST.

9. MST SST CABLE TAIL PREPARATION

The following is the recommended method required to prepare the SST tail cable on the STL MST.

Once you have cut the required length of cut for your installation mark from the cut end approximately 1.5m (Fig 1 & 2), then use the correct tool which is correctly adjusted for the cable to split the outer sheath(Fig 3,4 & 5).


Once the cable has been split you should then locate the two red draw cords (Fig 1), then pull the draw cords away and down the split sides of the cable (Fig 2 & 3).

Remove and cut the outer sheath, without cutting the ARP strength members, leaving approx 2cm of the sheath. at the butt end of the cable (Fig 1).
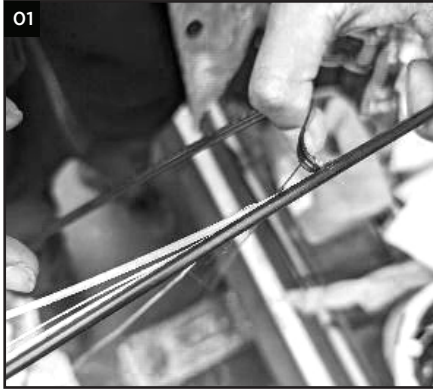
The fiber is in the gel-filled loose tube. Using the correctly adjusted loose tube cutter, start removing the loose tube at approximately 25-30cm pieces at a time. Remember to hold the fiber and butt end of the tube as you slide each piece of the fiber. Avoid any excess pulling of the fiber during this procedure (Fig 1, 2 & 3).
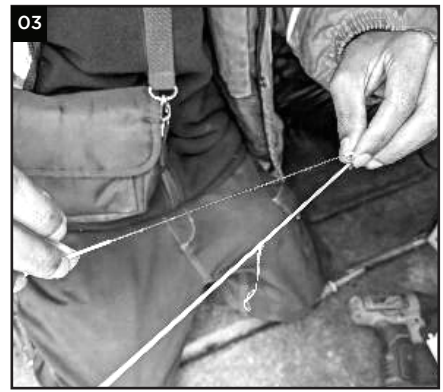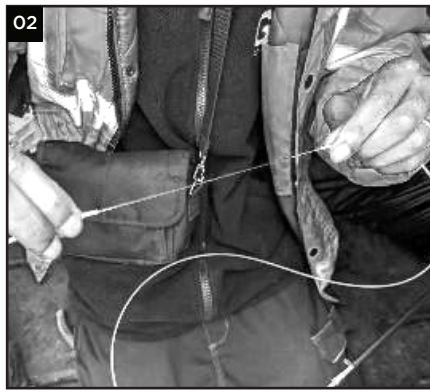
Once you have removed the required amount of loose tube, clean the fiber using recommended cleaning method. Remember to avoid excessive pulling of the fiber during the cleaning process (Fig 1, 2 & 3).

10. RECOMMENDED TOOLS FOR STL'S MST SST CABLES

Below is a and pictures of tools needed to prep cables for installations.

SST Stripping Tool
(item code 087376)

Mills Fiber Stripper 1A

Miller Fiber Tube Scoring Tool

Ideal Multi Fiber Stripper

Miller FO 103-T-250-J
Tri-Hole Stripper

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For additional information please contact your sales representative.

You can also visit our website at www.stl.tech

www.stl.tech