

ODU Installation

Note *Installers are responsible for supplying mounting bolts.*

Ground Mast All steel mounting structures attached to the building and the antenna mast must be connected to the building grounding system. If no grounding system or ring is available, ground the antenna mounting structures to the nearest structural beam. The grounding conductor should be set at least a # 2 (AWG) solid tinned copper wire. Use exothermic welds (Cad Welds) when possible to connect to the mounting structure and the building grounding system.

- Antenna Mounting**
1. Attach the ODU mounting bracket to a mast between 2- and 4-inches in diameter (1 in Figure 6-1).
 2. Remove the nuts and washers (2 in Figure 6-1) from one side of each of the two mounting clamps (3) and slide the mounting clamps off the bolts. Set them aside in a safe place.
 3. Slip the mounting rack (4 in Figure 6-1) around the mast.
 4. Reattach each of the two mounting clamps with the flat washer, lock washer, and nut.
 5. Tighten with a 1/2-inch socket wrench until secure.

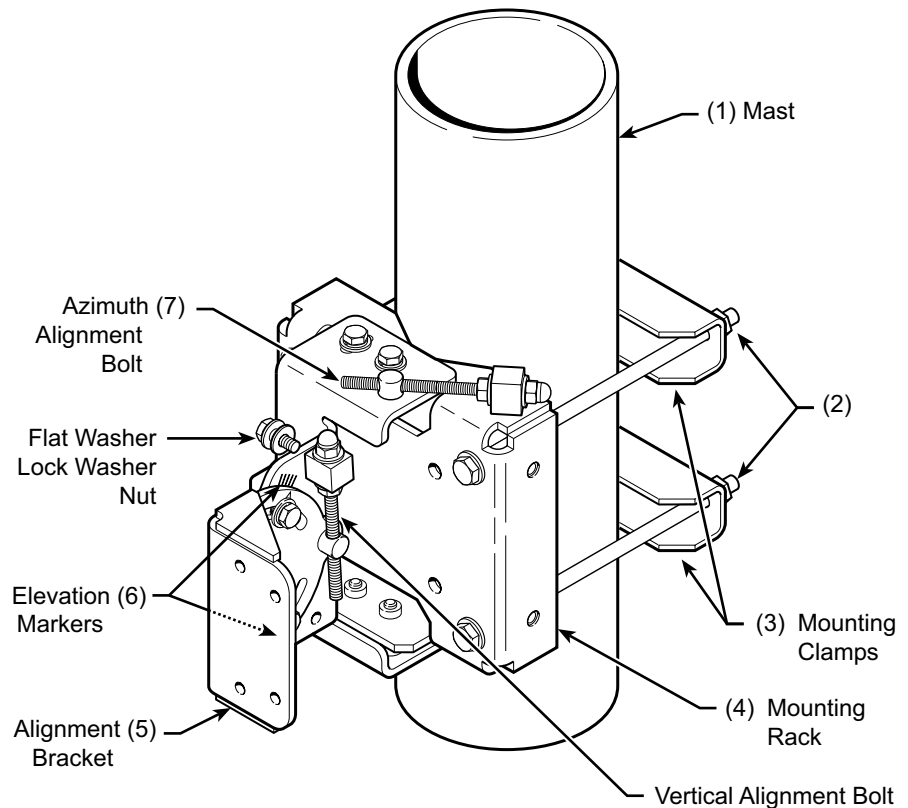


Figure 6-1. CPE Pole Mount Assembly

6. Attach the antenna to the mounting plate, orienting it for proper polarization (see the next sections) and LOS alignment with the base stations.
7. After aligning the antenna, tighten the mounting clamps.

Lightning Suppressor Installation

Note A lightning suppressor is not shipped with the ODU. See page 3-10 for the Ensemble-recommended lightning suppressor.

WARNING

It is not possible to guarantee that lightning protection will be 100 percent effective against a direct lightning strike.

Install one suppressor as close as possible to the point at which the cable enters the building. Another suppressor should be installed as close as possible to the ODU. See Table 6-2 and Table 6-3 for illustrations of the suppressor installation.

Note Connect the supplied ground strap from the ODU housing to the pole mount (antenna ground points), ensuring there is contact on the pole.

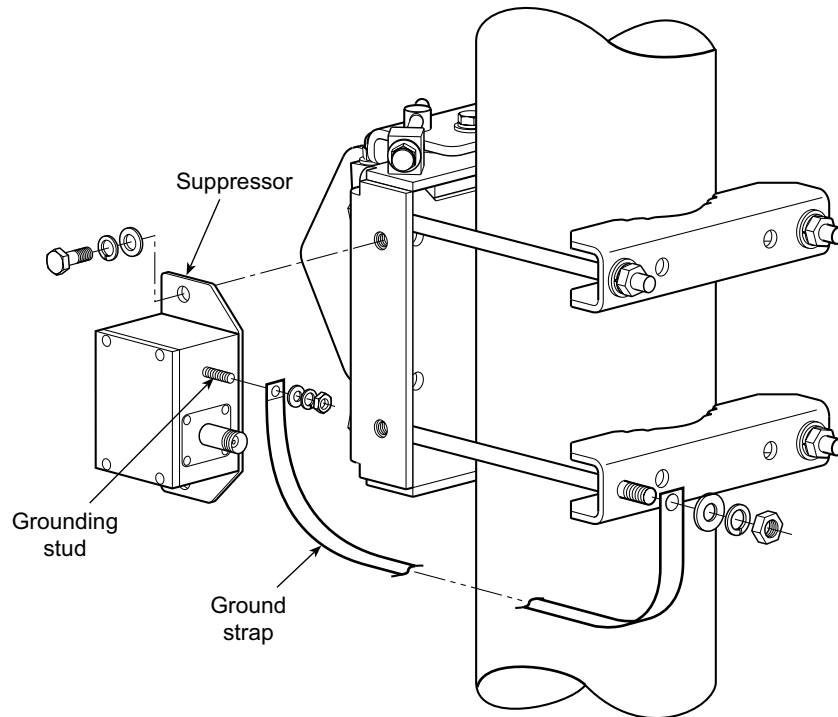


Figure 6-2. Lightning Suppressor Assembly

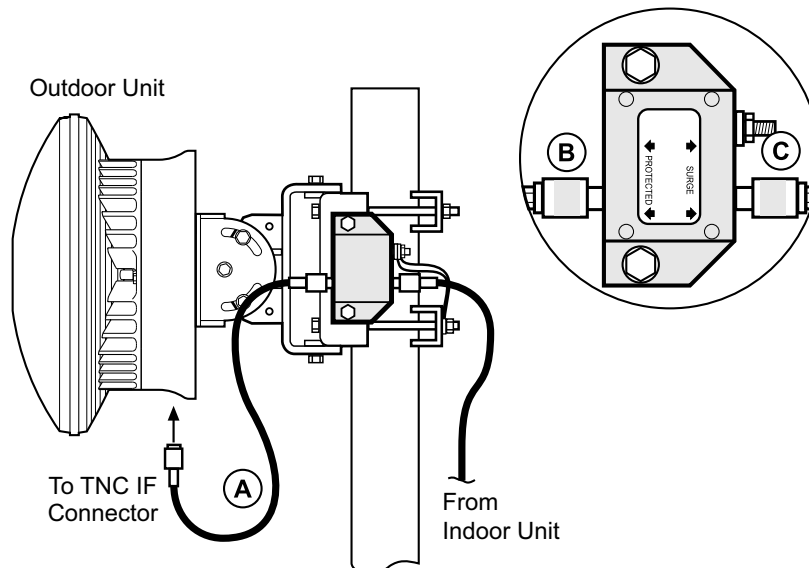


Figure 6-3. Lightning Suppressor Assembly Closeup

Vertical Antenna Polarization

- For a vertical polarized antenna, mount the unit with its two cable connectors facing down.
- Line up the bolts in the antenna with the four holes in the mounting bracket as shown in Figure 6-4.

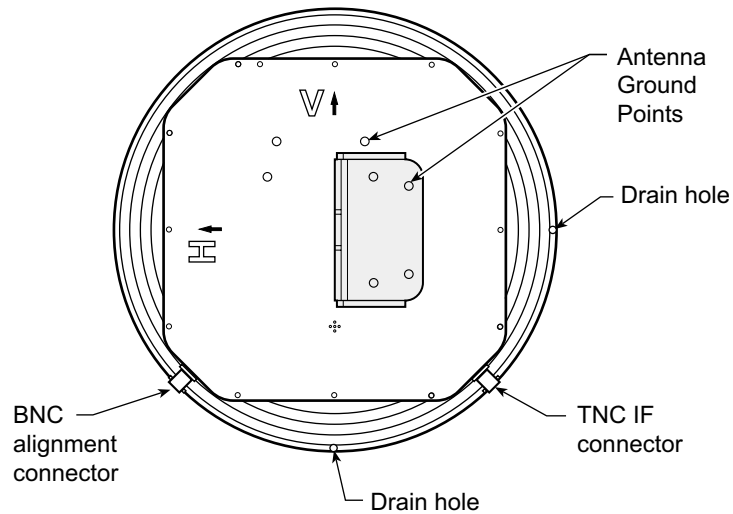


Figure 6-4. Mounting Vertically Polarized ODU

Horizontal Antenna Polarization

- For a horizontally polarized antenna, mount the unit with its two cable connectors facing sideways, so that the TNC connector points downward.
- Line up the bolts in the antenna with the four holes in the mounting bracket as shown in Figure 6-5.

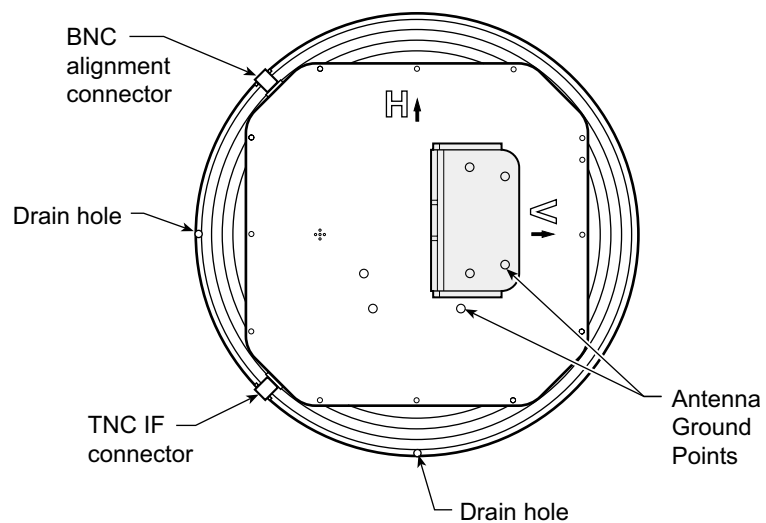


Figure 6-5. Mounting Horizontally Polarized ODU