PIVOTAL COMMWARE
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PIVOT 5G™ Installation Guide

Latest installation instructions

Support:
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Parts List

- Donor Unit (Faces gNb)
- Service Unit (Faces service area)
- Mounting Bracket (contains downtilt sticker)
- **Single Service RF Cable Kit**: 17-foot RF Cables
- 5” length, 7/16” head hex screw
- ½” length, 3/8” head hex screw
- 30-foot Power Cable
- 30-foot Ground Cable
- Pole mount (L) & wire wrap Velcro (R)
- COAX-SEAL

Dual Service Deployment

- 2nd Service Unit with mounting kit
- RF cable splitters
- 5” length, 7/16” head hex screw
- ½” length, 3/8” head hex screw
- **Dual Service RF Cable Kit**: 7-foot RF Cables
- Additional Power & Ground cable
- Pole mount (L) & wire wrap Velcro (R)
- COAX-SEAL

Not Included

- (3) Torque wrenches
  - 2.92mm RF cable connectors
  - 3/8-inch bracket-to-unit hex screws
  - 1/2-inch hex screws on the mounting bracket arm
- Band-It® Band and buckle kit (C27699)
- Standard banding tool (C00169)
- Band (C20499) and Buckle (C25499)

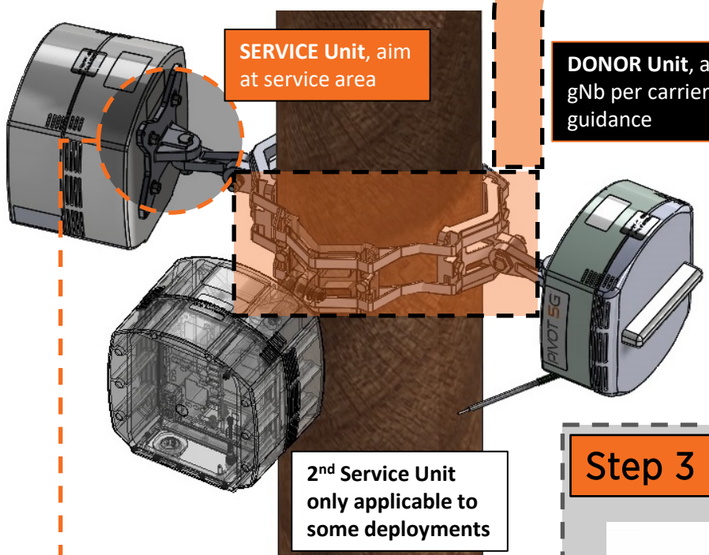
Recommended

Cable Box Package
- (1) Cable Box
- (3) Grommet plates
- (3) Velcro straps
- (4) Wire wraps
- (6) Pole mount Velcro
- (9) Wire wrap Velcro
- (2) 5” hex pole mount screws
- (12) 3/8” hex in-box mounting screws

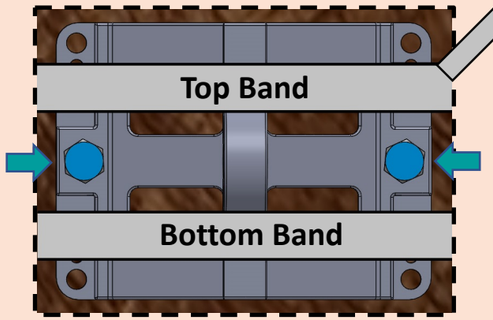
1-inch UV Resistant High Temp Split Loom cable sheathing

Part 1 – Mounting

Guidance from carrier will indicate the degree of separation of the units around the pole.



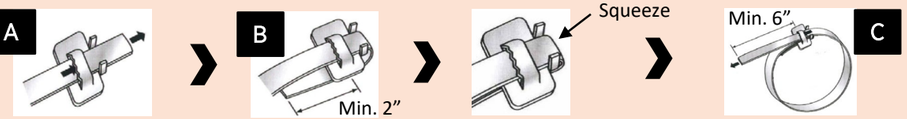
Step 1 Drill 5-inch pilot holes and screw bracket to the pole



Recommended bit size: 3/32-inches for softwood 3/16-inches for hardwood.

See bracket instructions for bracket assembly.

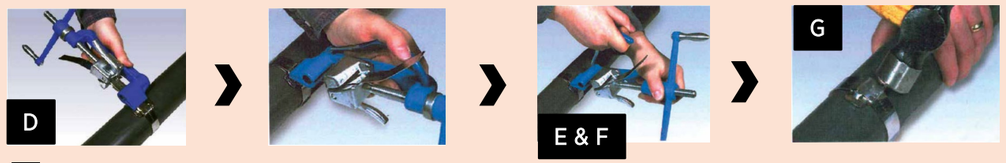
Step 2 Install bands over top and bottom of mounting bracket



A. The required band length is 4.5x the pole diameter for each single wrap. **DO NOT DOUBLE WRAP**.

B. With the ears pointing up and on the right side, slide the band through the buckle and bend at least 2-inches beneath the buckle . **DO NOT POSITION BUCKLE OVER MOUNTING BRACKET**.

C. Loop the band around the pole and slide back through the buckle with 6-inches of band past the buckle.



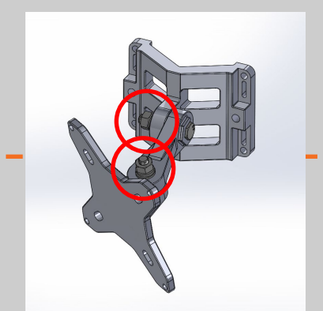
D. Slide the 6-inches of band into the open slot of tool nose and gripper block. Move into slot as far as possible. Turn the handle until the band stops moving through the buckle – this means maximum tension has been applied. **DO NOT OVER-TIGHTEN**.

E. Roll tool nose over the buckle, relieving a slight amount of tension by backing off tension handle (1/2 to 1 turn) **DURING** this fold-over.

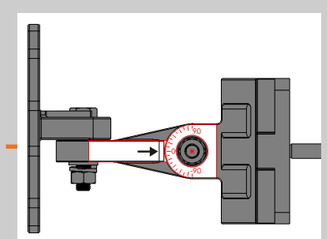
F. Slide the cutting tool back and make sure you have 6-inches of extra band and then pull cutting handle to cut the band.

G. Hold clamp tail down between buckle ears while hammering ears down to hold band stub in place.

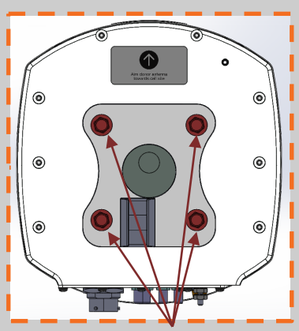
Step 3 Tighten bracket nuts on mounting arm and mount each unit



Tighten hex nuts on bracket arm to 18 ft-lbs (216 in-lbs)



A radial downtilt sticker and arrow indicator are available to attach to the mounting bracket



Tighten bracket-to-unit hex nuts to 4-5 ft-lbs (48-60 in-lbs)

If adding a second Service Unit to an existing configuration, **DO NOT** mount unit over the top of existing bands.

Finish **FULLY** mounting the units **BEFORE** attaching cables.

Cable instructions on back ↘

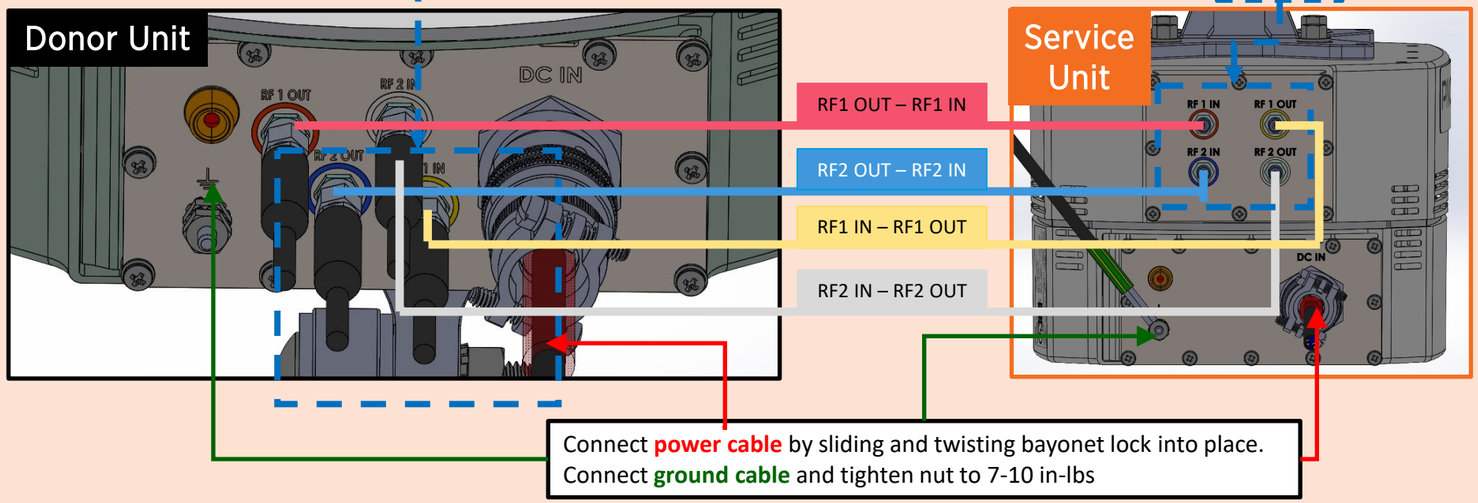
Part 2 – Connecting & Weatherproofing Cables

Step 4

Remove dust caps before connecting cables → Use Torque wrench to tighten RF cables to 8 in-lbs

Caps can be disposed of or recycled

Narrow Beam Service Unit (Service HBF): Connection configuration differs for the Narrow Beam SU.

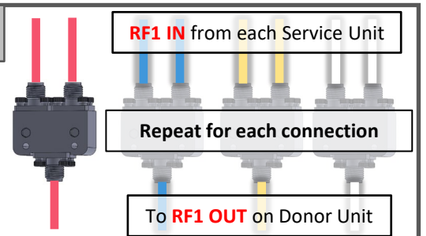


Connect **power cable** by sliding and twisting bayonet lock into place.
Connect **ground cable** and tighten nut to 7-10 in-lbs

Important: Record the Pivot 5G's serial number found on the bottom of both the Donor and Service Units. This will be needed for commissioning.

Step 4a Dual-Service Deployments

For dual-Service Unit deployments, connect the RF cables from each Service connection to the provided splitter and connect the single resulting cable to the Donor Unit.



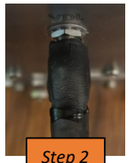
IMPORTANT: Dual-Service deployments require the ***Dual-Service RF Cable Kit*** consisting of 12 seven-foot cables.

Step 5 Coax Weatherproofing

1 to 1.5-inches of tape

Completely covers Connector

Step 1



1 to 1.5-inches of COAX-SEAL

Smooth for complete seal

Ok to run past end of tape

Step 2

1.5 to 2-inches of tape

Completely cover COAX-SEAL

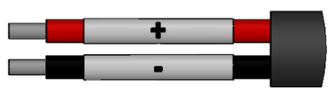
Smooth for tight coverage

Step 3

Make sure fittings are clean, dry, and connected to the proper torque.

1. Use 1 to 1.5-inches of ½-inch wide electrical tape to cover the connector. Smooth tape for a tight seal over each side of the connector.
2. Use 1 to 1.5-inches of COAX-SEAL to create an airtight seal over the tape and connector. It is okay to run over the tape. Smooth the COAX-SEAL to ensure complete, airtight coverage.
3. Use 1.5 to 2-inches of tape to completely cover the COAX-SEAL. Smooth the coverage area to ensure an airtight seal.

Step 6 Power Wiring



1. Install the Power System to be used.
2. Disable the output power from the Power System **before** wiring
3. Wire the power cabling:
   a. **Red wire (+)** – Connect to the positive 48V terminal of the power source.
   b. **Black wire (-)** – Connect to the negative 48V terminal of the power source.
4. Enable output power from the Power System.

Pivot 5G is designed to be powered from either a "Neg 48V" power source (with the + terminal connected to ground) or from an "isolated 48V" power source (with both terminals isolated from ground).

Pivot 5G **SHOULD NOT** be powered from a "Pos 48V" power source (with the – terminal connected to ground).

LED Behavior

Before Commissioning

- *Solid Yellow – Initial power-up sequence*
- *Blinking Yellow – Device is ready to commission*

After Commissioning

- *Blinking Red and Green – Identifying device*
- *Solid Green or Yellow (temporary, prior to no light) – Strong or medium signal from gNB*
- *Solid Red – Weak signal from gNB*
- *No Light – Ready for use*
- *Blinking Red – Error*

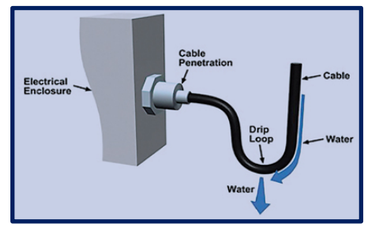
RF Cables

- **DO NOT** use plastic tie wraps.
- **DO NOT** remove dust caps on cables or connectors until connecting.
- **DO NOT** get water or dirt in cable connectors.
- **DO NOT** leave connections exposed (without dust caps). Install cables **IMMEDIATELY** after mounting and removing caps.
- **DO NOT** power on until all connections have been made and tightened to specifications.
- **DO NOT** crimp, crush, or tug on cables.
- Cables shall **NOT** be installed under tension or remain under tension once installed.
- **DO NOT** loop power or ground cables in smaller than 6-inch diameter loops or RF cables in smaller than 3-inch diameter loops.
- Use the lines below for **proper cable loop sizing.**

Ground Cable

- **DO NOT** route cable over unit. Route cable AWAY from unit.
- **DO NOT** bend ground cable ring more than 30°.

All Cables: Cables MUST run uphill to BOTH units to create a drip loop between units



This line must fit inside RF cable loops (1.5-inch bend radius)

This line must fit inside power and ground cable loops (3-inch bend radius)

Commissioning Instructions

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