



Sigma Eight Inc.

Solutions for Wildlife Tracking

ANT-YAG-4-BAL

Assembly Instructions

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1 PACKAGE CONTENTS



Included in the package should be the following parts (from top to bottom).

- 1) Director 1 (shortest length)
- 2) Director 2 (middle length)
- 3) Driven element (looped piece)
- 4) Reflector element (longest length)
- 5) Boom
- 6) UHF to BNC adaptor
- 7) The mounting bracket (will come in a bag disassembled)

2 REQUIRED TOOLS



- 1) No 2. Philips head screwdriver
- 2) 7mm (or 9/32") socket driver/wrench
- 3) (Not pictured) 10mm (or 13/32") socket driver/wrench for U-Bolt
- 4) (Not pictured, optional) A mast between 25 - 45mm (1.00 - 1.75") in diameter for mounting

3 ASSEMBLY

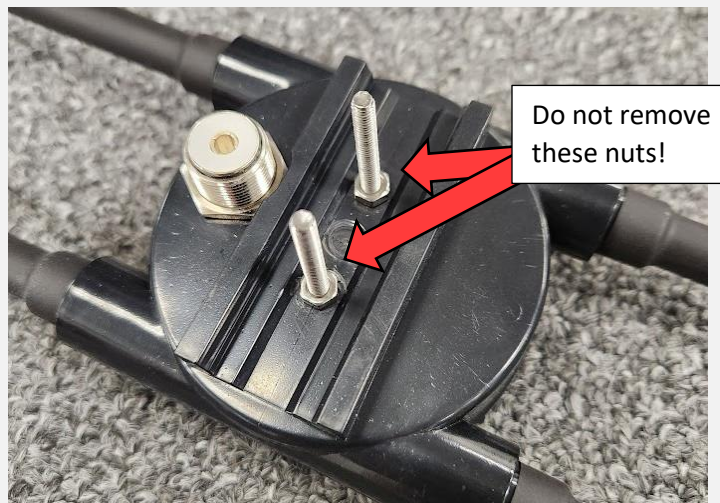
To assemble the Yagi, the antenna should be put together, then the bracket (if required for mounting to a permanent location).

3.1 ANTENNA

Place the elements on the boom, with the washer, lock washer, and nut on one side.



Figure 1: From left to right: washer, lock washer, nut



Note: Do not remove the nuts closest to the driven elements tuning enclosure.

Be sure to match the colour on the element to the position on the boom. If any stickers have fallen off, it is simply the shortest boom at the front of the antenna, with the longest at the back. The order is two director elements, then driven, and finally the reflector. Finally, screw the UHF to BNC adaptor on.

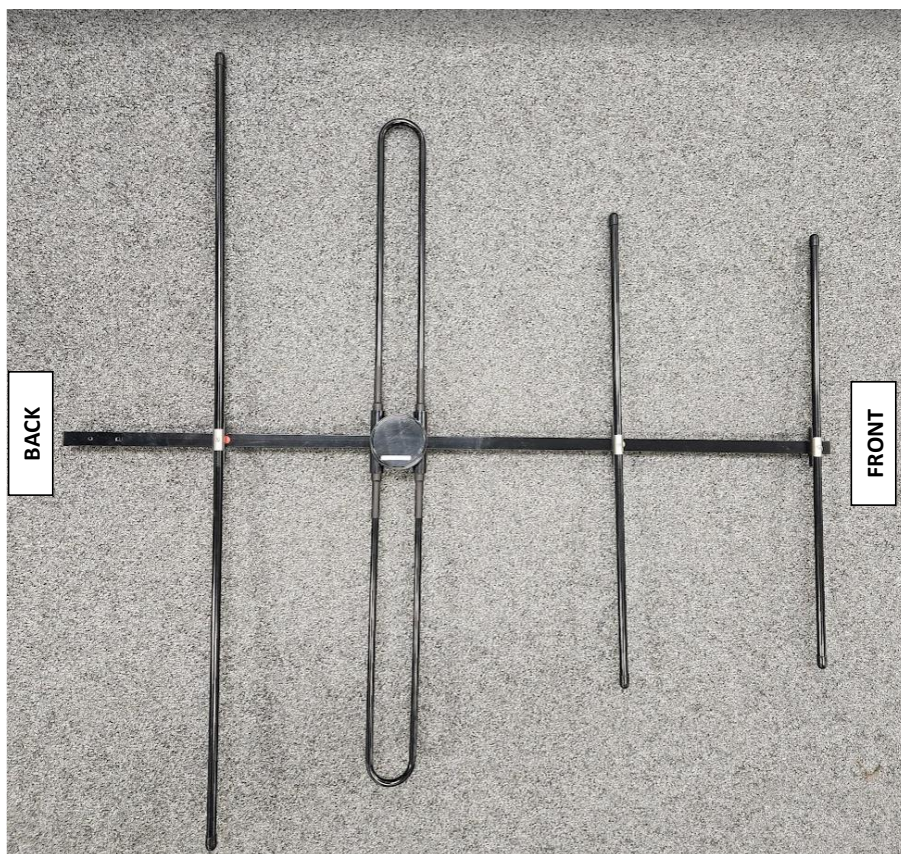
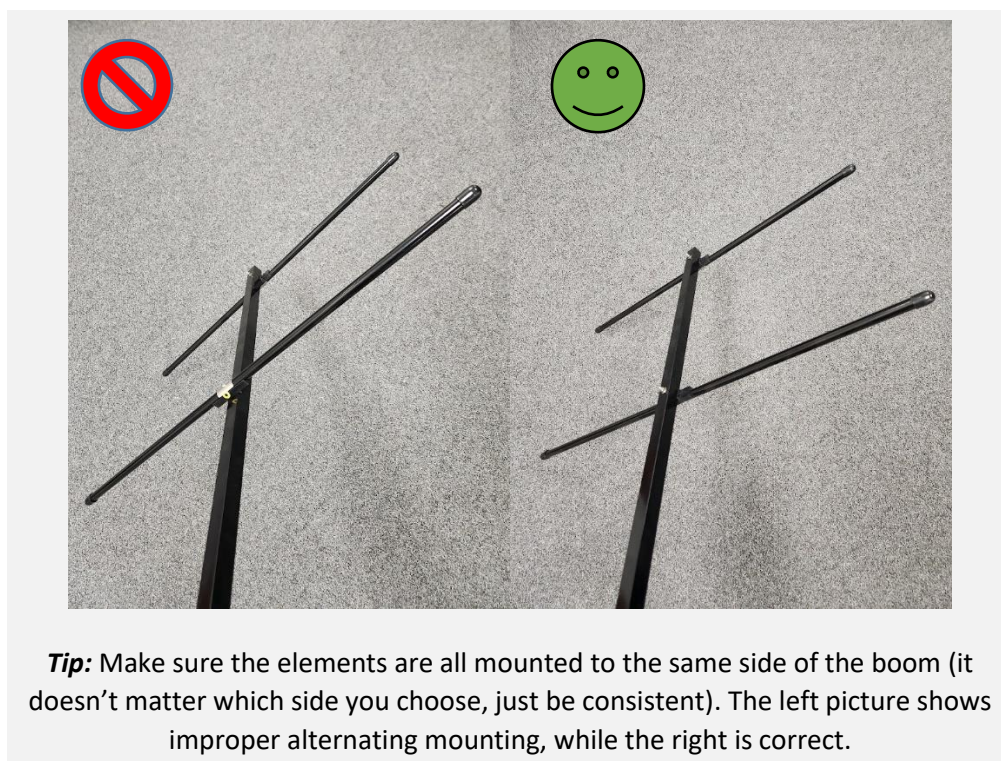


Figure 2: Assembled antenna



3.2 ANTENNA BRACKET

If the antenna will be mounted to a permanent location, assemble the bracket like below.

Note: Do not tighten any of the nuts down yet!



Figure 3: Mounting bracket

Note: Make sure the piece that slides over the boom is parallel to the U-Bolts, like pictured above.

The nuts on the U-bolts are 10mm (9/32"), and accept a mast between 25-45mm (1.00-1.75").

3.3 FINAL ASSEMBLY

For final assembly, slide the boom through the bracket and put the two long 4-40 screws through and tighten down all the nuts.

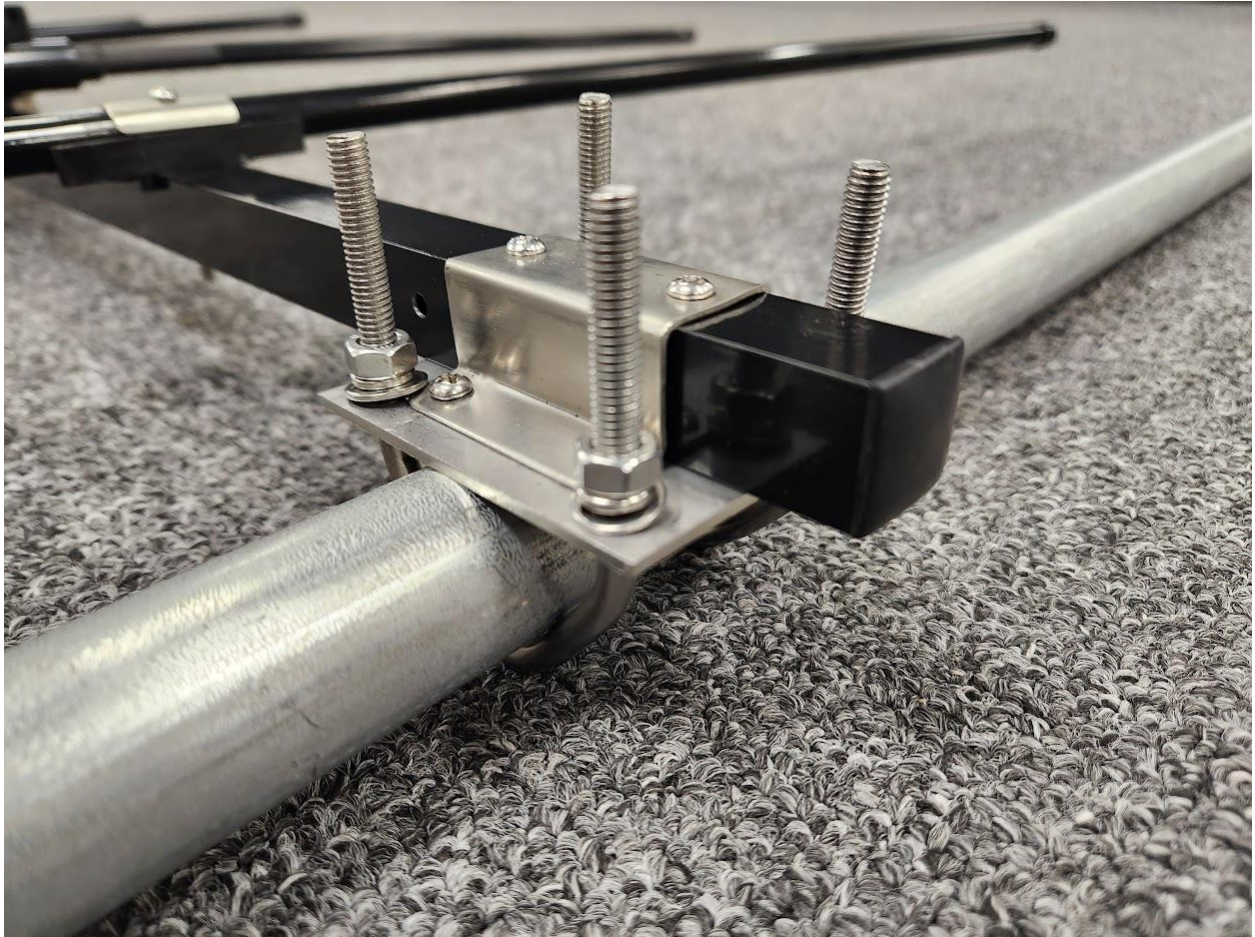


Figure 4: Bracket mounted to antenna and mast.

3.4 A NOTE ON POLARIZATION AND INTERFERENCE

When mounting the antenna to a mast, we generally recommend vertical polarization like shown below.

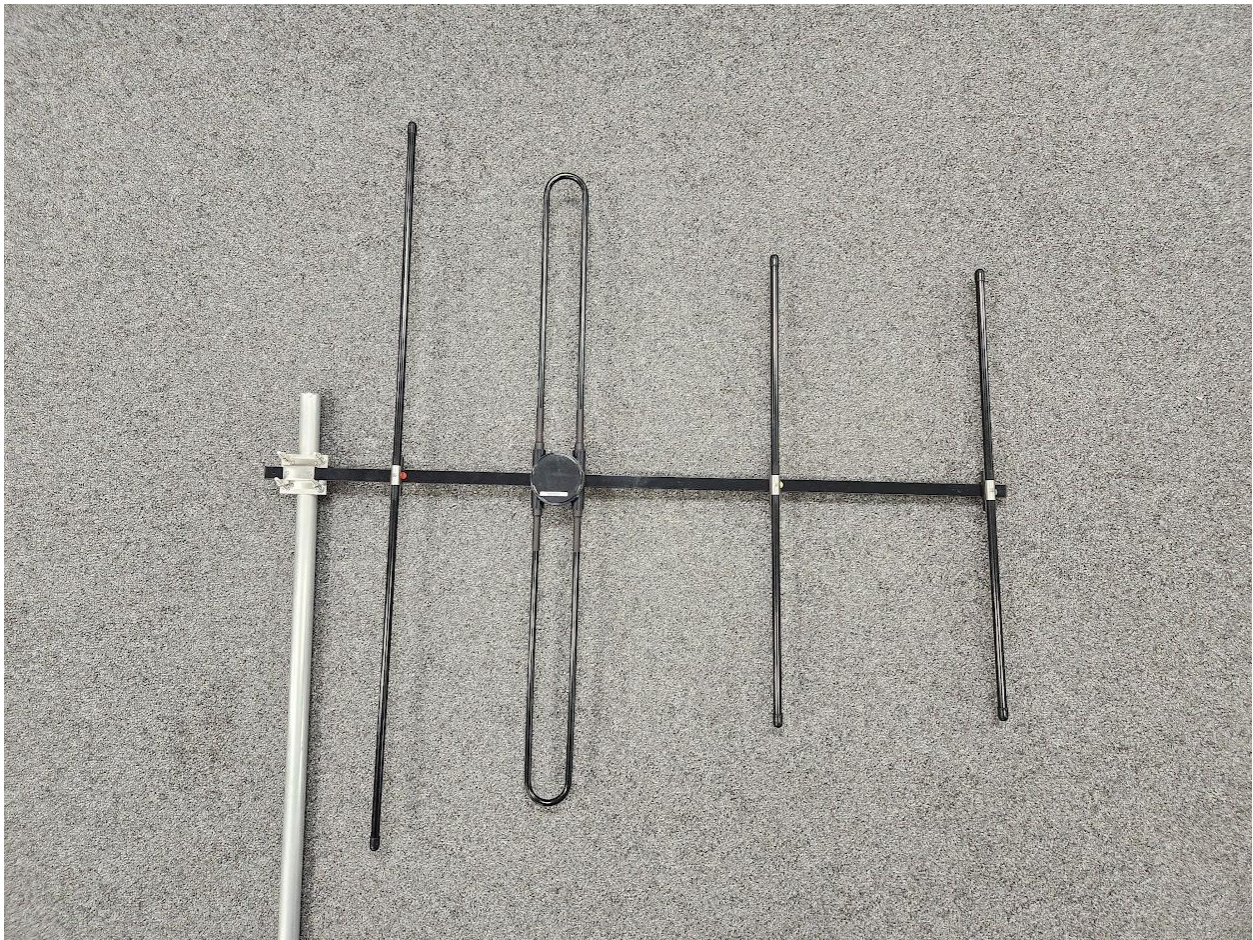


Figure 5: Vertical polarization

If horizontal polarization is required, take the boom out of the mounting bracket and rotate it 90 degrees so the elements are horizontal (i.e. parallel to the horizon).

Note: Make sure that there is nothing conductive (ex. Metal) in between the elements, and there are no large flat, reflective surfaces within 1m of the antenna (ex. A concrete wall).

These may influence the radiation pattern and distort incoming signals.