

K5OE Handi-Tenna (RARS Version)

Description:

A folded 3-element Yagi designed for receiving satellite downlinks in the 432Mhz band.

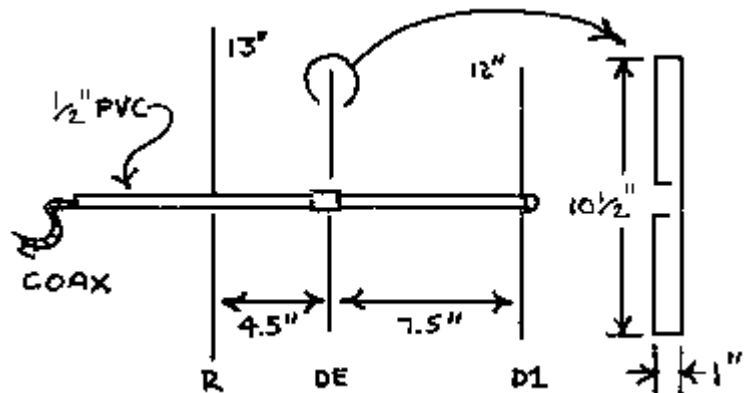
Contents:

2	½"x9" PVC pipes	1	½" PVC coupler	50	inches #10 wire
2	large ring terminals	2	small ring terminals	2	#6/32 stainless screws
2	#6/32 stainless nuts	4	#6 flat washers	4	cable ties
1	Coax feed line w/BNC				

NOTE: Unless otherwise stated, measurements must be within 1/16" of specified values.

Directions:

1. Check kit for correct parts
2. Strip coax feed line back approximately ¾". Install small ring terminals on shield and center conductor.
3. Measure and cut 12 inches of wire (director D1).
4. Measure and cut 13 inches of wire (reflector R).
5. Form remaining wire into a 10 ½" x approx 1" loop (driven element DE). Fold ends of loop inward. Leave a gap the width of the PVC coupler (see diagram).
6. Strip ends of loop and install large ring terminals.
7. Pass the coax feed line through one of the PVC pipe pieces.
8. Place feed line shield terminal and a washer inside of the PVC coupler. Align with the holes and pass screws through the coupler. Proper sequence is (from inside to out), screw head, washer, feed line terminal, PVC coupler, DE terminal, washer, nut. Use a small, flat screwdriver to hold the screw head using the edge of the screwdriver rather than the tip. Tighten the nut with pliers. Repeat for the feed line center terminal. Polarity does not matter.
9. Insert both pipe pieces into either end of the PVC coupler to complete the boom.
10. Loosely attach director (12" wire) to the director to top of the boom using a pair of cable ties in an X. Leave it loose enough to slide the director up and down the boom.
11. Move the director to the correct point exactly 7 ½" from the driven element. Align the director with the DE so the two are parallel.
12. Repeat steps 10 and 11 for the reflector (13" wire), which should be installed 4 ½" behind the driven element.
13. (Optional) glue the rear boom piece to the coupler to prevent rotation. **DO NOT GLUE BOTH PIECES!** You will never be able to re-tighten the screws if you do so.



Design courtesy of Jerry Brown K5OE. More info available at: <http://web.archive.org/web/20050204095036/members.aol.com/k5oejerry/handi-tenna.htm>