

Directive Systems & Engineering

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13cm Loop Yagi Kit, Model DSE1376LY (w/sub-boom)

SPECIFICATIONS

Frequency range:	2.28 to 2.35 GHz	Gain:	$\cong 23.4$ dBi
Number of elements:	76	3 dB Beamwidth	
Boom length:	144 inches	(E plane):	$\cong 10.7^\circ$
Boom diameter:	Dual 0.5" & 0.75"	F/B ratio:	≥ 25 dB
Mast diameter:	1 1/2 in. max	Maximum Power:	400 W average
Weight: (assembled)	5.2 pounds	Stacking distance:	24.5 inches' vertical
Connector:	Type-N female		25.25 in. horizontal

Note: All hardware is Stainless Steel unless otherwise noted.

Anti-Seize Compound - Apply a small amount of the supplied Anti-Seize Compound to the aluminum joints and to the threads of the U-Bolts to prevent galling.

BEFORE INSTALLING YOUR NEW ANTENNA, PLEASE BE SURE TO READ THE ENCLOSED WARNING PAMPHLET.

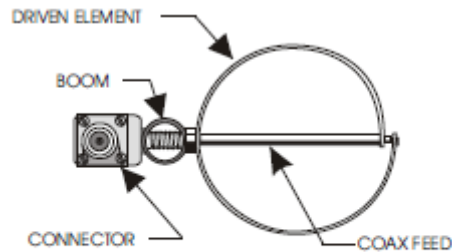
ASSEMBLY INSTRUCTIONS

- 1) Unpack the antenna and locate the hardware package. Some antennas are shipped in two sections, in which case the boom is broken between directors 37 & 38. Remove D37 and D38 from the rear boom section and slide the two boom pieces together. Align the elements. Replace D37 & D38 and retighten.
- 2) Straighten any misaligned elements and tighten hardware if necessary. **But do not touch R1, DE or D1, as these have been factory set for minimum SWR.**
- 3) Install the U-bolt into the boom to mast bracket so that the mast comes up directly under the boom. Note that the bracket can be installed for either vertical or horizontal polarization. (See drawings below)



HORIZONTAL POLARIZATION

(Can be up or down)

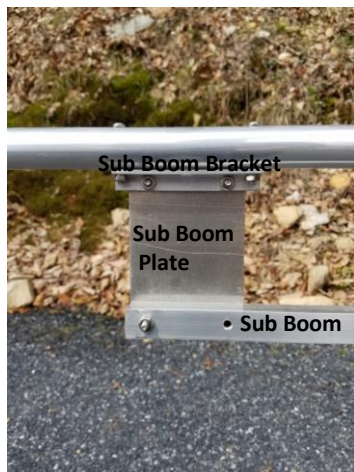


VERTICAL POLARIZATION

(Can be left or right)

- 4) Attach the feed line, and tape it to the mast. The connector should be sealed with electronic grade RTV or equivalent.
- 5) The antenna SWR has been adjusted at the factory for less than 1.5:1. Additional tweaking can be accomplished by adjusting the distance between the driven element and R1 and D1, or by adjusting the shape of the driven element. **NOTE: Do not attempt this adjustment unless the proper equipment and qualified personnel are available.**
- 6) If antennas are to be stacked, see "Instructions for Stacking Loop Yagis".

Refer to photo and the next few steps for clarification on the Sub Boom:



- 7) Mount the boom to mast bracket (square tubing piece) to the center boom section, using 8-32 X 2" screws, lock washers and nuts. Mount the boom to mast plate to this bracket using 8-32 x 1 1/4" screws, lock washers and nuts. Note: There may be extra holes in the plate that may be used for different applications.
- 8) There are two sub-boom brackets consisting of 1/2" aluminum angle and sub-boom plates. Mount the angle brackets on the front and rear boom sections using 8-32 x 1 3/8" screws, lock washers and nuts. Mount the sub-boom plates to these brackets using 8-32 x 1/2" screws, lock washers and nuts.

9) Mount the sub-boom (3/4" thick wall aluminum square tubing) to the sub-boom brackets and boom to mast plate using 8-32 x 1 1/4" screws, lock washers and nuts. NOTE: Do not tighten any of this hardware until sub-boom assembly is complete.

DO NOT, UNDER ANY CIRCUMSTANCES, APPLY ANY TYPE OF SEALANT OR COATING TO THE DRIVEN ELEMENT, T-ARMS OR CONNECTOR ASSEMBLY, OTHER THAN KRYLON® CLEAR COAT. ANY OTHER COATING WILL ADVERSELY AFFECT THE SWR AND VOID YOUR WARRANTY.

Directive Systems Warranty Policy

All Directive Systems antennas are built with the finest materials available. We take great pride in building a quality product that will give years of good service and performance. If there is a defect in materials or workmanship within 90 days of purchase, Directive Systems will repair or replace the defective part, free of charge, to the original purchaser. **DO NOT RETURN ANYTHING WITHOUT PRIOR AUTHORIZATION FROM DIRECTIVE SYSTEMS.** Please contact us either by phone or email describing the problem and we will work to resolve it.

If, after examining a new antenna you received, you are not satisfied, contact us immediately for return authorization and refund. **ANY ANTENNA THAT HAS BEEN MODIFIED WILL BE SUBJECT TO A RESTOCKING CHARGE. IF AN ANTENNA IS SO MODIFIED AS TO MAKE IT UNUSABLE, DIRECTIVE SYSTEMS RESERVES THE RIGHT TO REFUSE TO ACCEPT THE ANTENNA FOR RETURN.**