

# Directive Systems & Engineering

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## 23cm Loop Yagi Kit, Model DSE2355LY (w/sub-boom)

### SPECIFICATIONS

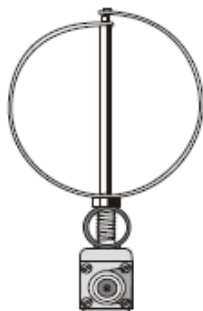
Frequency range:	1.27 to 1.30 GHz	Gain:	21 dBi
Number of elements:	55	3 dB Beamwidth	
Boom length:	180 inches	(E plane):	14°
Boom diameter:	1 inch	F/B ratio:	≥20 dB
Mast diameter:	2 inches max	Maximum Power:	550 W average
Weight: (assembled)	7 ½ pounds assembled	Stacking Distance:	27 inches' vertical
Connector:	Type-N female		30 inches' horizontal

*Note: All hardware is Stainless Steel unless otherwise noted.*

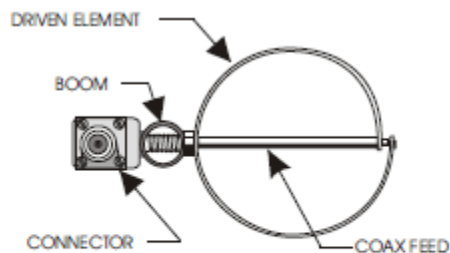
**BEFORE INSTALLING YOUR NEW ANTENNA, PLEASE BE SURE  
TO READ THE ENCLOSED WARNING PAMPHLET.**

### ASSEMBLY INSTRUCTIONS

- 1) Unpack antenna and locate the three preassembled antenna sections and the hardware package. The boom is broken between elements D21 and D22 & D42 and D43. Remove D22 & D43 from the boom pieces and slide boom pieces together to alignment marks. Replace D22 & D43 and retighten. (D22 is the element approximately 0.5 inch from the end of the boom section; it will only fit together one way.) The booms are marked for your assembly.
- 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) Attach the boom to mast plate to the boom with the hardware provided. Install the U-bolts 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 bottom of the boom. The connector should be sealed with electronic grade RTV or equivalent.
- 5) As shipped, the antenna SWR will be 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 photos in 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.**