

# Directive Systems & Engineering

2702 Rodgers Terrace  
Haymarket, VA 20169-1628

[www.directivesystems.com](http://www.directivesystems.com)

703-754-3876

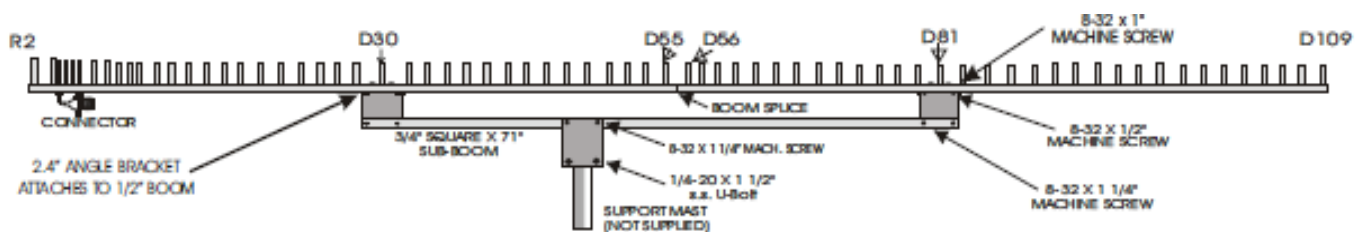
## 3456 MHz Loop Yagi, Model DSE9112LY

### SPECIFICATIONS

Frequency range:	3.40 to 3.50 GHz	Gain:	$\cong 25.2\text{dBi}$
Number of elements:	112	3 dB Beamwidth	
Boom length:	144 inches	(E plane):	$\cong 8.7^\circ$
Boom diameter:	Dual 0.5" & 0.75"	(H plane):	$\cong 9.0^\circ$
Mast diameter:	1 1/2 in. max	F/B ratio:	$\geq 25\text{ dB}$
Weight: (assembled)	4.62 pounds	Maximum Power:	300 W average
Connector:	Type-N female	Stacking distance:	21 inches vertical
Wind area:	1.0 sq. ft.		22 inches horizontal

### PARTS LIST

Quantity	Description
2 pcs	assembled boom halves
1	.75" square sub-boom
2	3 x 4" sub boom bracket
1	3 1/2 x 4" boom to mast plate
2	1/2" x 2.4" angle bracket
1	U-bolt with nuts & saddle
1	Bag, misc 8-32 hardware



## ASSEMBLY INSTRUCTIONS

- 1) Unpack the antenna and locate the hardware package. Antennas are shipped in two sections. In addition, a "sub-boom" is supplied (see drawing above.) The boom is broken between directors 55&56. Remove D56, D57 and D58 from the front boom section and slide the two boom pieces together. Use the alignment marks on the boom to correctly connect the boom pieces. Align the elements. Replace D56,57& D58 Note that D56-58 are all similar in size. Tighten the elements on the boom.
- 2) Attach the 2.4" angle brackets and sub boom plates (2) with 8-32 hardware. Use 1" screws to attach the angle brackets to the 1/2" boom and 1/2" screws for the sub-boom plates to the angle brackets. The mounting centers are D-30 & 81. Attach the 3/4" square sub-boom to the two 3 X 4" brackets using 8-32 x 1 1/4" hardware. Align the center mounting holes on the sub boom toward the rear of the antenna so that the holes are at the antenna balance point. Install the 3 1/2 x 4" bracket and U bolt at the balance point of the antenna. Use 8-32 x 1 1/4" hardware. The antenna will appear slightly front heavy with no coax attached to the feed.
- 3) Attach the feed line and tape it to the sub-boom. Seal all connections with silicone RTV or equivalent.
- 4) The SWR should be under 1.5:1 or better. Additional tweaking can be accomplished by adjusting the distance between the driven element and R1 or by adjusting the shape of the driven element.
- 5) If antennas are to be stacked, see "Instructions for Stacking Loop Yagis".

### 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, free of charge, the defective part. **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.**