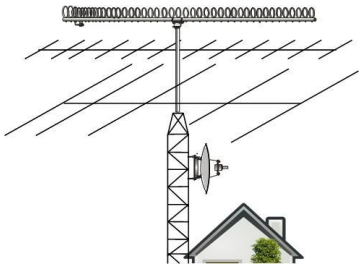


Directive Systems & Engineering

2702 Rodgers Terrace
Haymarket, VA 20169-1628

www.directivesystems.com

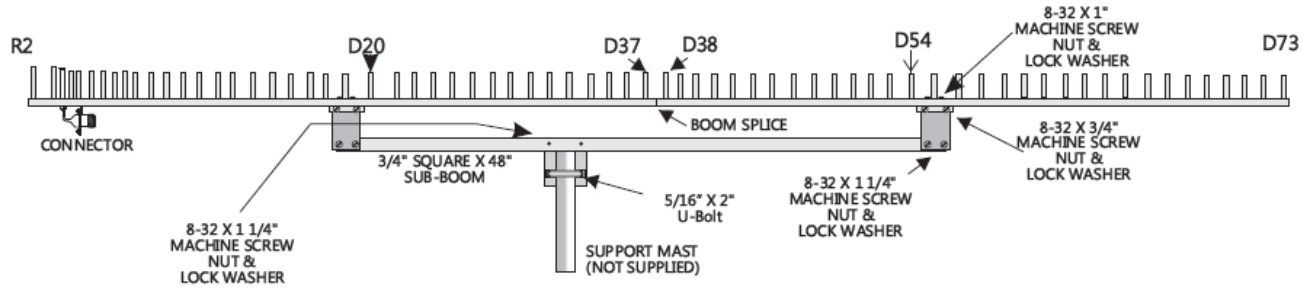
703-754-3876

9cm Loop Yagi, Model DSE976LY (w/sub-boom)

SPECIFICATIONS

Frequency range:	3.4 to 3.5 GHz	Gain:	≅23dBi
Number of elements:	76	3 dB Beamwidth	
Boom length:	96 inches	(E plane):	≅11.6º
Boom diameter:	0.5” & 0.75” sub boom	F/B ratio:	>25 dB
Mast diameter:	2 inches max	Maximum Power:	200 W average
Weight: (assembled)	3.5 pounds	Stacking distance:	16 5/16 in. vertical
Connector:	Type-N female		17 in. horizontal
Wind area:	0.65 sq. ft.		

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 the antenna and locate the hardware package. Antennas are shipped in two sections. In addition, a 48" long "sub-boom" is supplied (see drawing above.) The boom is broken between directors 37 & 38. Remove D38, D39 and D40 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 D3839 & D40 Note that D38-40 are all similar in size. Tighten the elements on the boom.

2) Straighten any misaligned elements and re-tighten if necessary. **But do not touch R1, DE or D1, as these have been factory set for minimum SWR.**

3) Attach the two 3 x 4" sub boom plates to the angle brackets on the1/2” boom with the 8-32 x 1/2” hardware provided. Install the sub-boom to the two plates with the two mast plate mounting holes offset towards the rear (for mechanical balance). Use the 8-32 x 1 1/4" machine screws. Install the mounting plate with the remaining 8-32 x 1 1/4” screws. Install the 1 1/2" U-bolt in the holes provided.

4) Attach the feed line and tape it to the bottom of the boom & sub-boom. The connector should be sealed with silicone RTV or equivalent. On quad arrays it is possible to install the power divider near the driven elements suspended from the short semi rigid phasing lines and the hardline feeder.

5) The antenna SWR has been adjusted at the factory for less than 1.5:1 VSWR. Additional tweaking can be accomplished by changing the shape of the driven element slightly and by adjusting the distance between the driven element andR1 and D1. R1 is the reflector closest to 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".

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.**