

# Directive Systems & Engineering

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## 1850-2000 MHz Loop Yagi, Model DSE1445LY

### SPECIFICATIONS

Frequency Range:	1.85-2.00 GHz (any 25 MHz segment)
Number of elements:	45
Boom Length:	90 inches
Boom diameter:	0.625 inch
Mast diameter:	1 1/2 inch
Weight (Shipping)	3 pounds
Connector:	Type N female
Gain:	$\cong$ 20.0 dBi
3 dB Beamwidth (E Plane):	$\cong$ 16 degrees
F/B Ratio:	$\geq$ 20 dB
Maximum Power:	400 Watts average
Stacking distance:	15 inches Vertical (H) 17 inches Horizontal (E)

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

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

**CAUTION:** *While we strive to remove all burrs from all machined parts, there is always the possibility of sharp edges. We strongly suggest checking the edges and use a fine file, or 400 grit sandpaper, to remove any burrs that may have been left.*

### ASSEMBLY INSTRUCTIONS

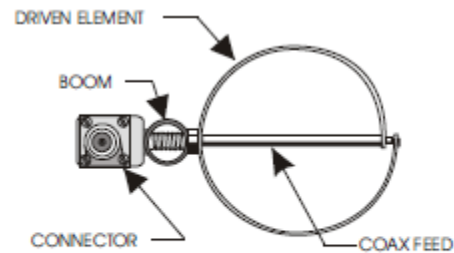
1) Unpack antenna and locate the hardware package. Some antennas are shipped in two sections, in which case the boom is broken between directors 21 and 22. Remove D21 and D22 from the rear boom section, slide the boom pieces together, replace the D21 and D22 elements, align and retighten. Note the boom markings for correct assembly order.

2) Straighten any misaligned elements and tighten hardware if necessary. **But do not touch R1, DE or D1, as these are factory set.**



### HORIZONTAL POLARIZATION

*(Can be up or down)*



### VERTICAL POLARIZATION

*(Can be left or right)*

- 3) Attach the boom to mast "L" bracket to the boom with the 8-32 x 1" screws, lock washers and nuts and the plate to the bracket with the 8-32 x 1/2" screws, lock washers and nuts provided. Install the U-bolt so that the mast comes up directly under the boom.
- 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) The antenna SWR has been adjusted for less than 1.5:1 at the factory. Additional tweaking can be accomplished by adjusting the distance between the driven element and R1 and D1, or by slightly 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"

**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.**