

# Directive Systems & Engineering

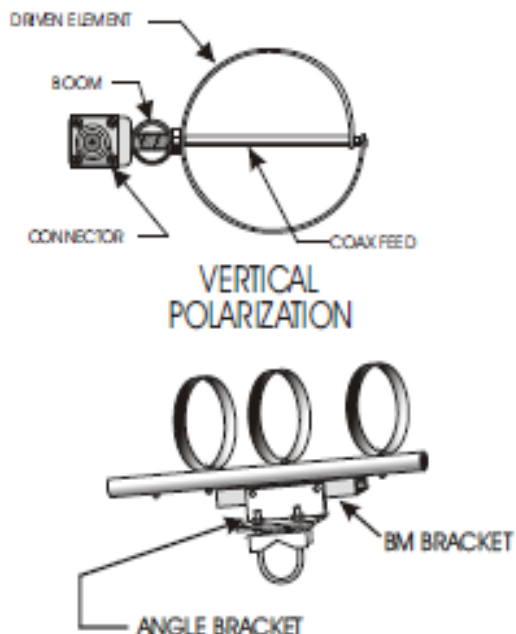
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703-754-3876

## Cellular Loop Yagi, Model DSE3319LYCEL

### SPECIFICATIONS

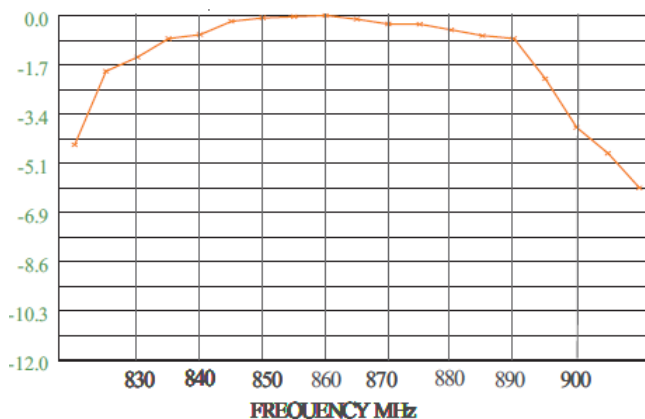


Frequency Range:	826-896 MHz
Number of elements:	19
Boom Length:	72 inches
Boom diameter:	1 inch
Mast diameter:	1 1/2 inch max.
Weight:	5 lbs (6 lbs(ship))
Connector:	Type N female
Gain:	16.5 dBi
3 dB Beamwidth (E Plane):	≈28°
F/B ratio:	>20 dB
Maximum Power:	550 W. average
Stacking Distance:	
H Plane	18 inches vertical
E Plane	20 in. horizontal

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

The 3319LYCEL has been designed to produce very high gain in the Cellular phone band, and as such finds many uses in improving marginal cellular telephone installations. Special care has been given to produce an antenna that combines extremely high forward gain with no compromise in antenna pattern: The ability of an antenna to pickup signals in the desired direction, while rejecting signals from unwanted directions.

### 3319LYCEL GAIN BANDWIDTH



**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.**

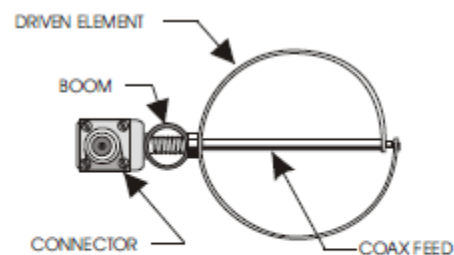
## ASSEMBLY INSTRUCTIONS

- 1) Unpack antenna and locate the hardware package. If the antenna is shipped in two pieces, remove Director 9, Connect the two boom pieces together at alignment marks. Re-install D9 and tighten 4-40 nut to secure boom.
- 2) Straighten any misaligned elements and tighten hardware if necessary. **But do not touch the gold colored (brass) loop or the loops on either side of it, as these have been factory adjusted.**
- 3) If the boom-to-mast "L" bracket isn't already attached to the bracket, do so now with the hardware provided. (See diagram on opposite page. Polarization may be easily adjusted by loosening the two hose clamps. Hydrogen line radiation is mostly randomly polarized.)



**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) 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.**