



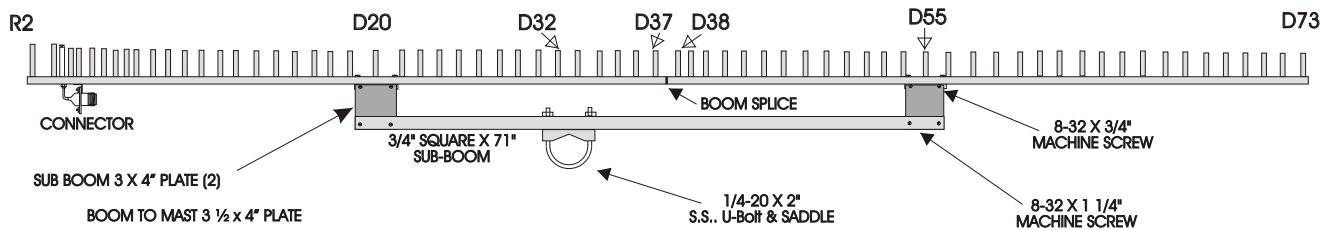
# DIRECTIVE SYSTEMS

177 DIXON RD.  
LEBANON, ME. 04027  
TEL: 207-658-7758 FAX: 207-658-4337  
www.directivesystems.com

## 2401 MHz AO-40 Loop Yagi Model 1276LY

### SPECIFICATIONS

Frequency range:	2.37 to 2.47 GHz
Number of elements:	76
Boom length:	144 inches
Boom diameter:	0.5 inch & 0.75 inch sub-boom
Mast diameter:	2 inch maximum
Weight:	5.2 pounds (assembled weight)
Wind area:	0.95 sq.ft.
Connector:	Type-N female (UG-58/U)
Gain:	$\cong 23.4$ dBi
3 dB Beamwidth (E plane):	$\cong 10.7$ degrees
F/B ratio:	>25 dB
Maximum Power:	300 watts average
Stacking distance:	24.5 inches vertical (H) 25.25 inches horizontal (E)



### ASSEMBLY INSTRUCTIONS

1. Unpack the antenna and locate the hardware package. Antennas are shipped in two sections. In addition, a 71" long "sub-boom" is supplied. (See drawing above.) The boom is broken between directors 37 & 38. Remove D38 and D39 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 D38 & D39 and retighten.
- 2) Attach the two 3 x 4" sub boom plates to the 1/2" boom and the attached angle brackets with the 8-32 x 3/4" hardware provided. Install the sub boom to the two plates with the U-bolt holes offset towards the rear (for mechanical balance). Use the 8-32 x 1 1/4" machine screws to attach the sub boom to the two plates. Install the 2" U-bolt in the holes provided in the sub-boom.
- 3) Attach the feedline and tape it to the bottom of the boom & sub-boom. The connector should be sealed with silicone RTV or equivalent. A small downconverter may be attached to the rear of the sub boom to minimize feedline losses. 32" of low loss coax will be adequate. Route the IF and power cables along the sub boom and the cross boom of your installation.
- 4) Straighten any mis aligned elements and re-tighten if necessary.
- 5) The antenna SWR has been adjusted at the factory for less than 1.2:1 VSWR. Additional tweaking can be accomplished by changing the shape of the driven element slightly and by adjusting the distance between the driven element and R1 and D1. R1 is the reflector closest to the driven element. If you do not have a microwave return loss bridge or coupler, leave it alone! The antenna will typically be better than -20 dB return loss right out of the box! Happy Dxing on AO-40!