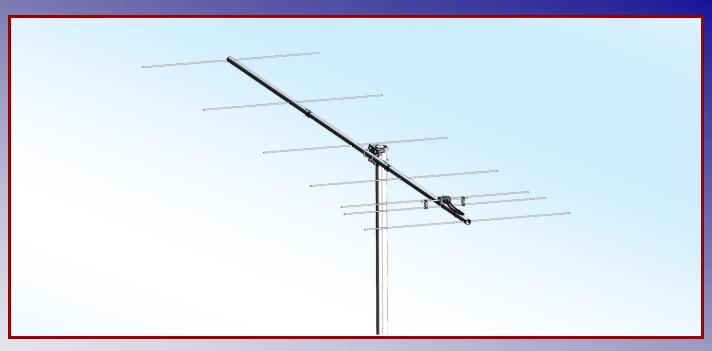


## M2 Antenna Systems, Inc. Model No: 263-7



#### **SPECIFICATIONS:**

-			
Model	263-7	Power Handling	1.5 kW
Frequency Range	260 To 266 MHz	Boom Length / Dia	65" / 1"
*Gain	12.78 dBi	Maximum Element Length	23" / 3/16"
Front to back	21 dB Typical	Turning Radius:	
	"T" Match	Stacking Distance	Call
Feed Impedance	50 Ohms Unbalanced	Mast Size	1-1/2" to 2" Nom.
Maximum VSWR	1.2:1 Typical	Wind area / Survival	0.9 Sq. Ft. / 100 MPH
Input Connector		Weight / Ship Wt	
		- '	

#### \*Subtract 2.14 from dBi for dBd

#### **FEATURES:**

Performance has been computer optimized to meet your application. Physical construction emphasizes long term electrical and mechanical durability. Elements are 3/16" 6061-T6 aluminum rod, mounted through the boom on UV stabilized polyethylene button insulators, and locked in position with stainless steel shaft retainers. The "T" Match driven element, uses a CNC machined central block with O-ring sealed connectors. Internal connections are encapsulated in a silicone gel with a dielectric strength 3.7 times greater than air for enhanced power handling. Balun connectors are triple O-ring sealed to the coax

### **263-7 ASSEMBLY MANUAL**

For assembly, useful tools include a 1/2" x 7/16" end wrenches, an 8-32 spin tight or end wrench, flat blade screwdriver, pliers, tape measure and a little patience.

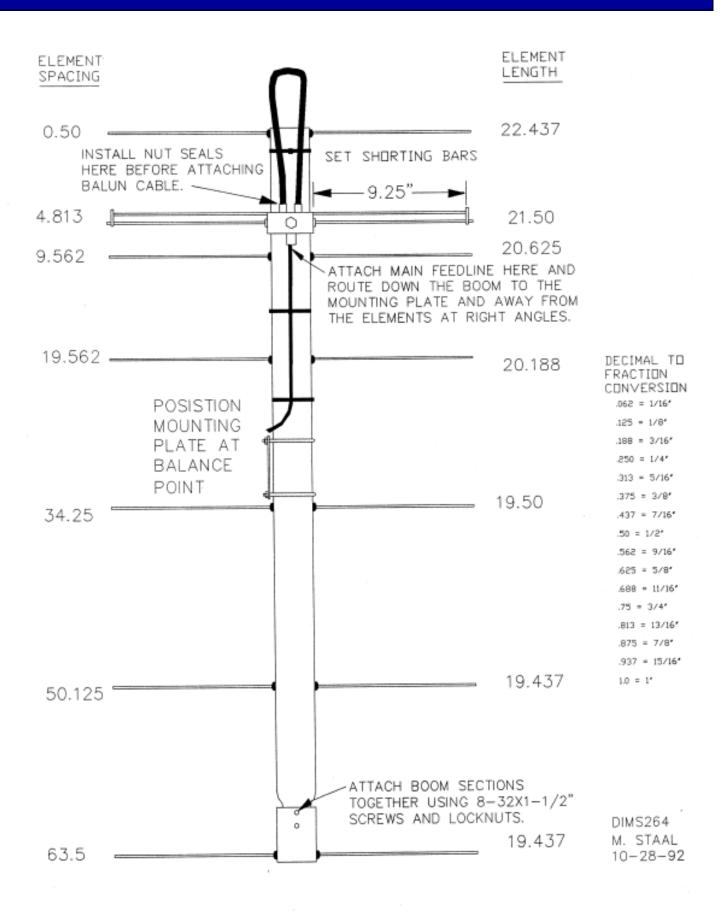
- 1. Assemble the boom as shown in the dimensions drawing. Use the 8-32 x 1-1/2" bolts and locknuts and tighten down securely.
- 2. Using the dimension drawing, insert the elements into the boom. Make sure you match up the correct spacing with lengths. Insert the elements in the boom and add black button insulators to both sides. DO NOT ADD KEEPERS YET.
- 3. Use a tape measure and center each element. Sight down the element tips from the rear and look for any tip that is in or out from the others. Check centering again and correct if necessary. Using the push tube 3" x 3/8" provided to help push the STAR KEEPERS (shaft retainers) on to one element half. Preload the element by grasping the boom and element and push the first keeper up tight against the button insulator. If the element slips on the first try, remove the element, re-center and repeat the keeper installation. Then install the second keeper on the other side. Continue until all the elements including the second part of the driven element have keepers.
- 4. The driven element block mounts on the boom with the "N" connector forward. Use and  $8-32 \times 1-1/4$ " screw to attach the block. Use a  $8-32 \times 1-1/4$ " screw and tighten. Add the shorting bars to the driven element and move them into the position designated by the dimension drawing. Tighten the shorting bars using  $8-32 \times 1/4$ " set screws and an Allen wrench provided.
- 5. Install the two nut seals on the female connector for the driven element block with the black seal facing out. Then install the balun cable and tighten the connectors gently with a 7/16" wrench. Then hold the back shell of the connector with a 7/16" wrench and tighten the nut seals gently with a 1/2" wrench. Run the nut seals up tight against the face of the male connector. Form the cable close to the boom back toward the reflector. Use a black cable tie to hold the balun in place.
- 6. Locate the boom to mast plate by picking up the antenna and finding the balance point. Attach the boom to the plate using the 1" U-bolts.

This completes the assemble of this antenna.

Carefully designed and manufactured by:

M2 Antenna Systems, Inc. 4402 N. Selland Ave. Fresno, CA 93722 (559) 432-8873 Fax (559) 432-3059 www.m2inc.com email: sales@m2inc.com

### **263-7 DIMENSION SHEET**



# **263-7 PARTS & HARDWARE**

DESCRIPTION	QTY
BOOM SECTION, 1" X .058 X 7" STR	
BOOM SECTION, 1" X .058 X 60" SOE	
ELEMENT SET, 3/16" X SEE DIMENSION SHEET	7
DRIVEN ELEMENT ASSEMBLY	
BALUN, RG-6	1
BOOM TO MAST PLATE, .188 X 3" X 4"	1
ASSEMBLY MANUAL	1
IN HARDWARE BAG	
SHORTING BAR, .25 X .75 X 1.532	2
U-BOLT, 1"	
U-BOLT AND CRADLE, 1-1/2"	2
SCREW, 8-32 X 1-1/2" SS	2
SCREW, 8-32 X 1-1/4" SS	1
SET SCREW, 8-32 X 1/4" SS	4
NUT, 5/16-18 SS	4
NUT, 1/4-20 SS	4
LOCKWASHER, 5/16 SPLIT RING SS	4
LOCKWASHER, 1/4-20 SPLIT RING SS	
BUTTON INSULATOR, 3/16"	14
ELEMENT KEEPER, 3/16" SS	14
NYLON TIE, 6"	4
ALLEN WRENCH, 5/64"	1
PUSH TUBE 3/8" X 3"	1

M2 Antenna Systems, Inc. 4402 N. Selland Ave. Fresno, CA 93722 (559) 432-8873 Fax (559) 432-3059 www.m2inc.com email: sales@m2inc.com