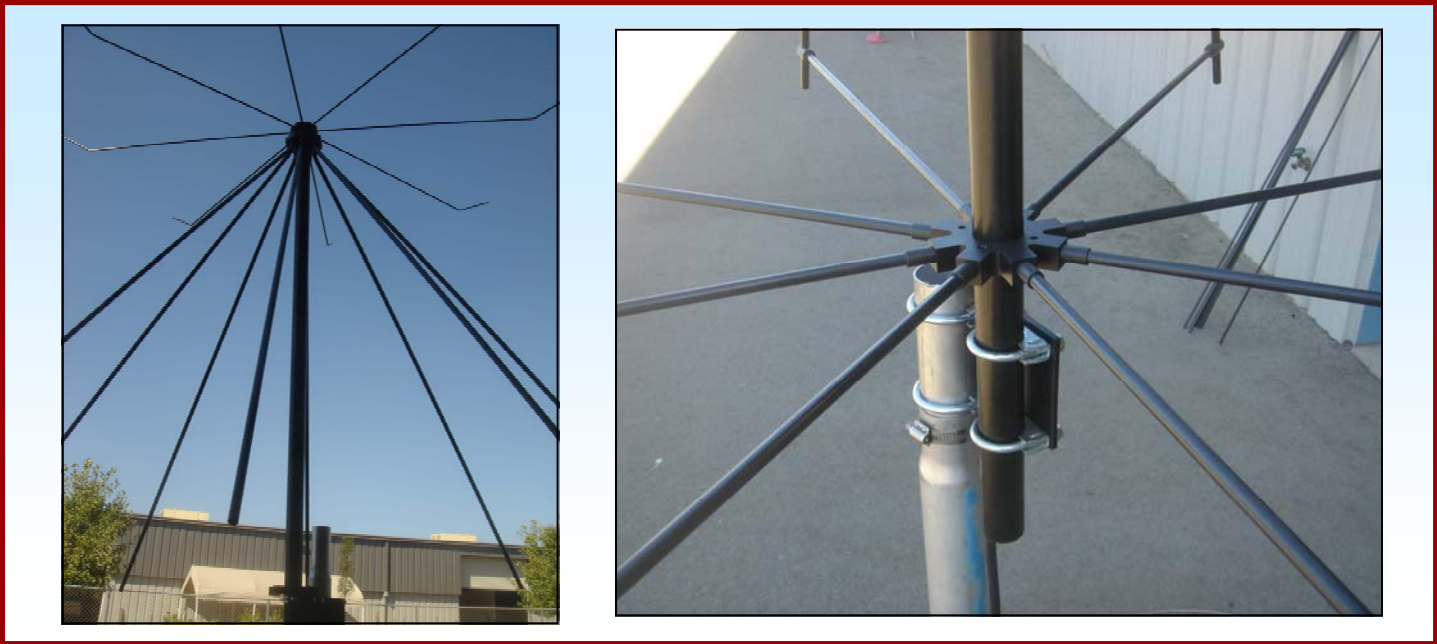




M2 Antenna Systems, Inc. Model No: 30-500 DISCONE ANTENNA



SPECIFICATIONS:

Model30-500 DCN
 Frequency Range.....30-500 MHz
 *Gain Nominal2 dBi
 VSWR.....3.1 MAX
 Connectors“N” Female

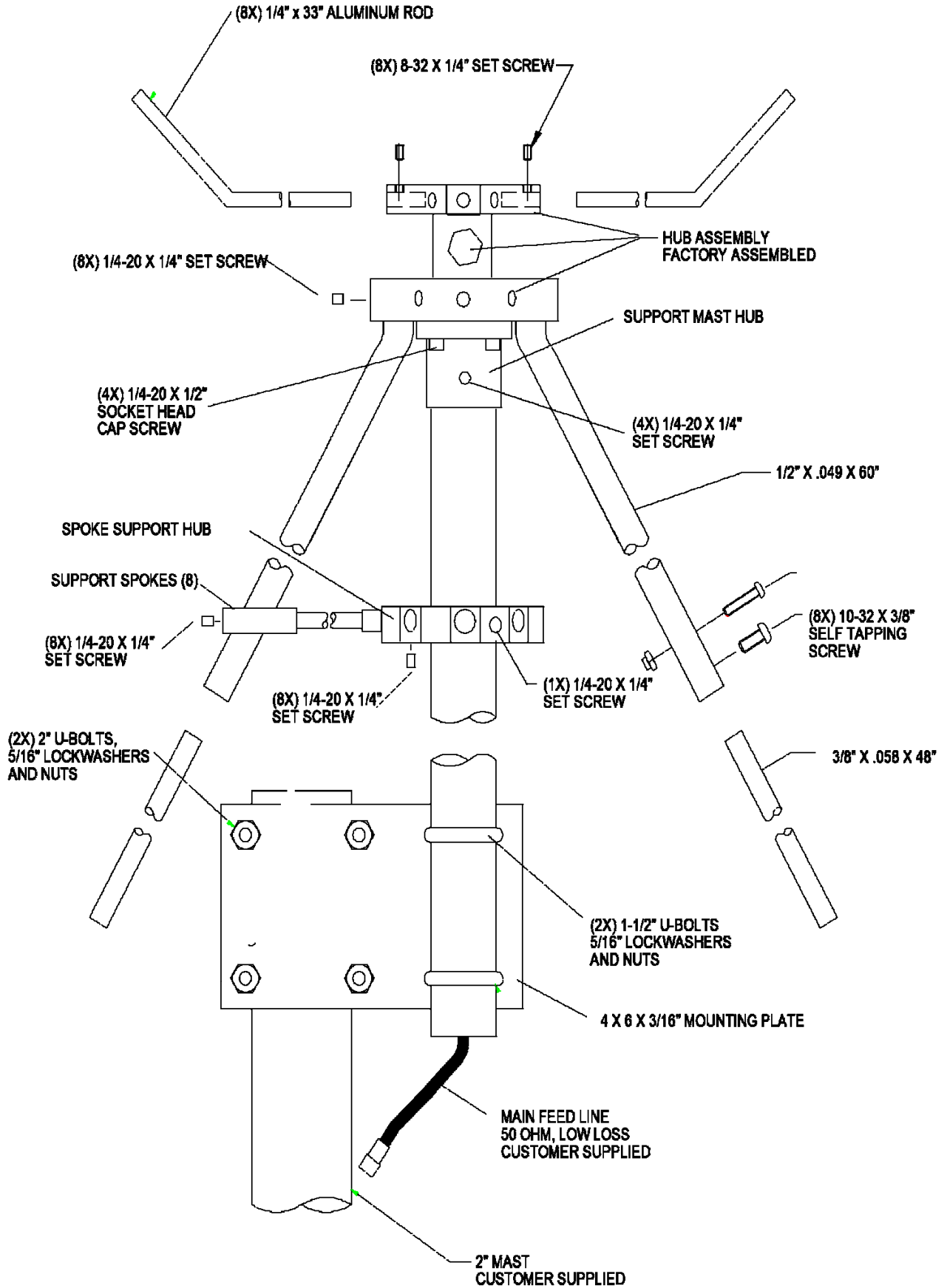
Power Handling1KW
 Height / Dia.....1.0 M / 1.11 M
 Polarization.....Vertical
 Wind area / Survival0.5 Sq. Ft. / 150 MPH
 Weight5Lbs.

***Subtract 2.14 from dBi for dBd**

FEATURES:

The M² 30-500 MHz Discone antenna is no toy and is ideal for use where broadband omnidirectivity is required. This is a heavy commercial grade antenna designed for many years of trouble free operation. Machined components, 6061-T6 aluminum materials and an “O” ringed connector means this unit is as weather proof as we can make it. All hardware is stainless steel.

30-500 DISCONE ANTENNA ASSEMBLY MANUAL

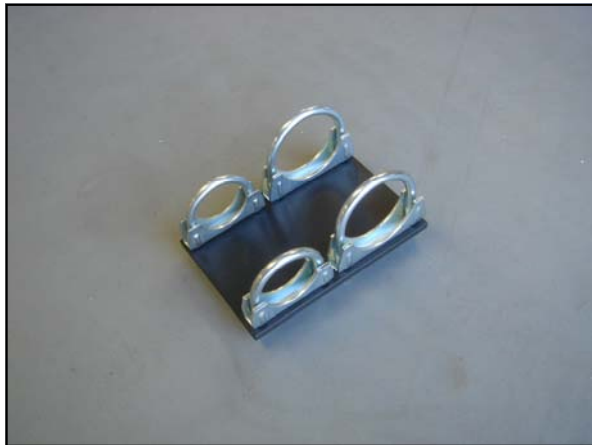


30-500 DISCONE ANTENNA ASSEMBLY MANUAL

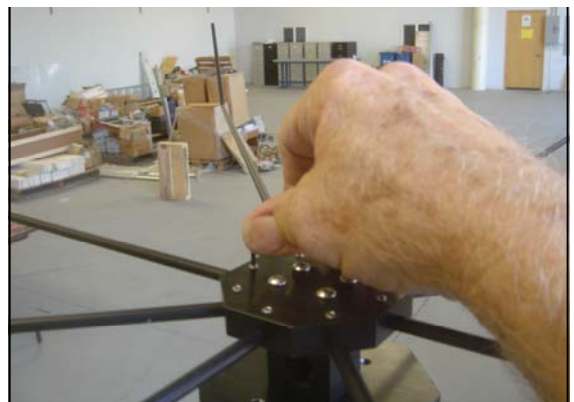


Zinc paste has been provided to lubricate during assembly and reduce long term corrosion. A small amount should be used on every screw thread, and on each metal to metal joint.

1. Install (8) 8-32 x 1/4" set screws in the top plate of the hub. Install (8) 1/4-20 x 1/4" set screw in the main hub. Attach the male 'N' connector of your good quality 50 ohm feed line. Then attach the MAST FLANGE using 1/4-20 x 1/2" cap screws and tighten securely. Add (4) 1/4-20 set screws to the hub and insert the 1-1/2 x 60" support tube. Tighten the set screws.
2. Slide on the spoke support hub on the support tube.



3. Assemble the mounting plate using (2) 1-1/2" U-bolts and (2) 2" U-bolts as shown. Mount the plate on a temporary pole for the following assembly steps. Begin inserting the bent ends of the 1/2" x 60" radial tubes into the main hub. Align the radials carefully and tighten the set screws. The tightening process is important because the set screws must break through any plating on the tube so good electrical connection is made. Now insert the horizontal "disc" rods, align and tighten the set screws securely.



30-500 DISCONE ANTENNA ASSEMBLY MANUAL



4. Raise the assembly and begin installing the support spokes as shown. Install 1/4-20 set screws in the spoke hub and in the ends of the spokes as shown. Insert the spokes into the hub and tighten the inner set screws.



5. Insert the 3/8 x 48" radial tips. First, install the top 8-32 x 3/4" screw and locknut and tighten. Then dip the end thread of a 10-32 x 3/8 self tapping screw into the zinc paste (provided) and drive the screw into the lower hole in the joint. The self tapping screw breaks through any plating on the tube surfaces and insures a solid electrical connection at this joint. Finally install the last 1/4-20 x 1/4" set screw into the spoke hub and tighten on the support tube. This completes the assembly.



30-500 DISCONE ANTENNA PARTS & HARDWARE

DESCRIPTION	QTY.
Hub Assembly, factory assembled	1
Top Elements, 1/4" x 33" alum. rod bent	8
Radial Tubes, 1/2" x 60"	8
Radial Tips, 3/8" x 48"	8
Support tube hub	1
Mast Flange	1
Support spokes	8
Support tube 1-1/5 x .125 x 60"	1
Mast Mounting Plate 4 x 6 x 1/4"	1
Assembly Manual	1

IN HARDWARE BAG

2" U-Bolts	2
1-1/2" U-Bolts.....	2
5/16"-18 Nuts, ss.	8
5/16" Split Ring Lockwashers, ss.....	8
1/4-20 x 1/2 Socket headcap screw, ss.....	4
1/4-20 x 1/4" Set Screws, ss.....	30
10-32 x 3/8 self tapping screws, ss	8
8-32 x 3/4" Screws, ss	16
8-32 Nylon Nuts, ss	16
8-32 x 1/4" Set Screws, ss.....	8
5/32" Allen Wrench	1
1/8" Allen wrench	1
Penetrox (zinc paste) cup	1

THIS COMPLETES THE ANTENNA ASSEMBLY.

M² ANTENNA SYSTEMS, INC.

4402 N. Selland Ave.

Fresno, CA 93722

(559) 432-8873 FAX: 432-3059

www.m2inc.com Email: sales@m2inc.com