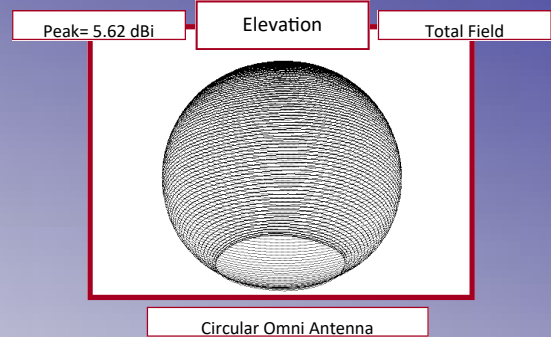
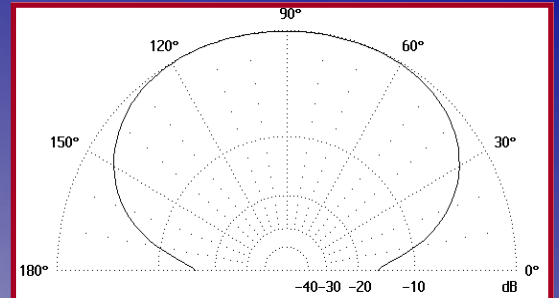
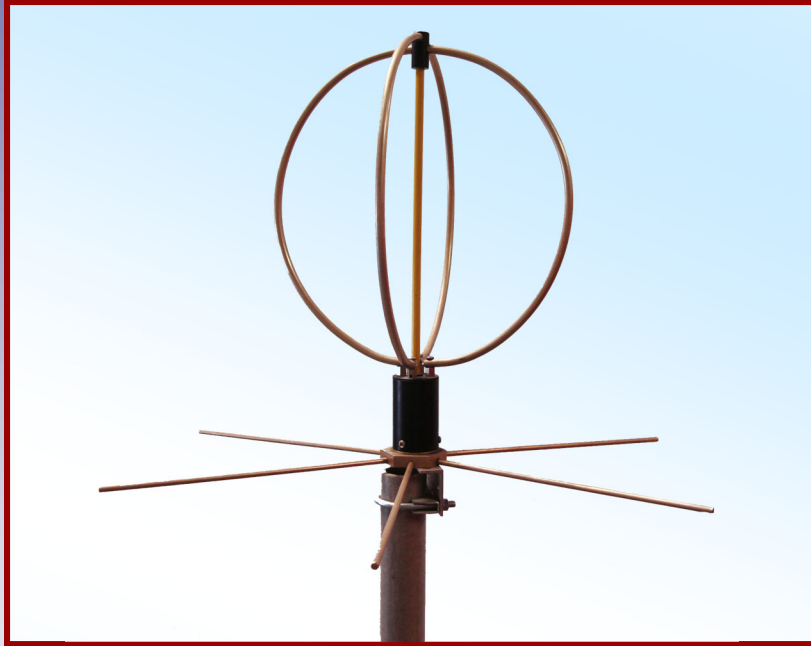


M2 Antenna Systems, Inc.

Model No: EB-310

Eggbeater Satellite Antenna



SPECIFICATIONS:

Model EB-310
 Frequency Range..... 225 To 405 MHz
 Gain, Overhead 90° 5.5 dBic Typical
 Impedance 50 Ohms
 VSWR < 2.0:1
 Pattern..... Omni Directional
 Polarity RH Circular Overhead
 Polarity Horizontal @ Horizon

Power Handling..... 1kW
 Mounting To 3/8-24 Male Thread
 Connector..... "N" Female
 Size 20" H x 20" W
 Wind Survival 100 MPH
 Weight / Ship Wt. 4 Lbs. / 5 Lbs.

FEATURES:

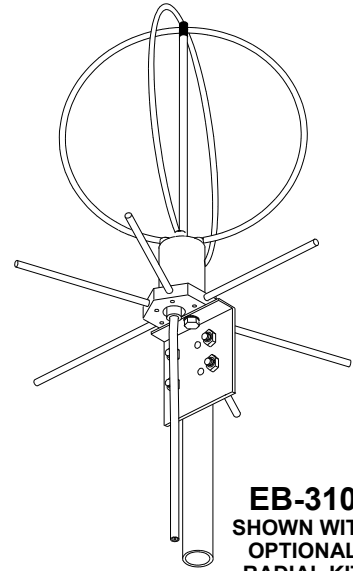
The M²EB-310 **EGGBEATER** antenna offers performance characteristics for specialized fixed and mobile operations within the 225-405 MHz frequency. The **EGGBEATER** produces a smooth, horizontally polarized omnidirectional pattern at the horizon. Above the horizon, the hemispheric pattern transforms to RIGHT HAND CIRCULAR polarization, making it a natural for aviation, ELINT, MILSATCOM, or other specialized use. No rotation or steering is required, producing instantaneous communications in all directions. The **EGGBEATER**'s rugged, weatherproof construction suits mobile and marine applications as well as fixed, land based installations in hostile environments. Operations with little room or budget for larger antennas will experience a new standard of performance with the EB-310.

EB-310 ASSEMBLY MANUAL

TOOLS: 7/16" & 9/16" open ended wrenches

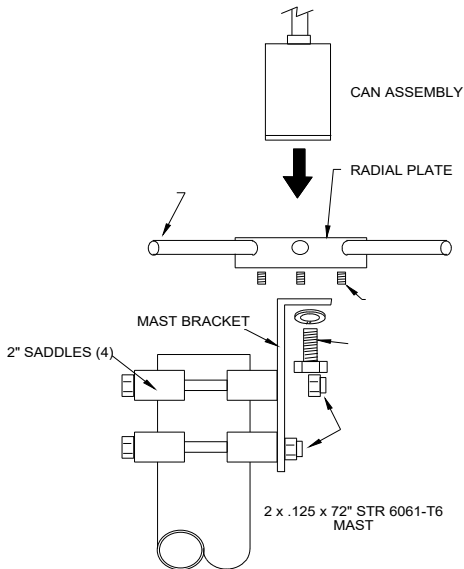
MAY BE SHIPPED ASSEMBLED AT THE FACTORY'S DISCRETION

1. Unpack the two loop elements. Insert each loop through the crossed holes of the insulator located at the top of the can assembly. Pull the loops all the way through until the insulator lies at their midpoints.
2. Align the ends of the elements carefully with the four mounting terminals on top of the can assembly case. Install the four screws with a screwdriver and tighten.
3. (OPTIONAL) Locate the radial plate and six 1/4 x 12-3/8" radials. Insert all six radials into the radial plate and tighten the six 8-32 x 1/4" set screws.
4. Attach the mast bracket and radial assembly to the can assembly using the supplied 3/8-24 x 1" bolt and lockwasher.
5. Lastly, assemble the 4 saddle clamps and attach them to the mounting bracket.



EB-310
SHOWN WITH
OPTIONAL
RADIAL KIT

OPTIONAL GROUND PLANE HARDWARE DETAIL



GENERAL INSTALLATION GUIDELINES:

1. If lightning is prevalent in your area, an Eggbeater used in a fixed installation should have the case or mast grounded.
2. Feedline should be good quality RG-58 or RG-213 type 50 ohm coax cable. Belden 8214 or 9913 are excellent low-loss foam types and RG-8X is also good. Connect the male "N" to the Balun case connector and, if a mast is used, secure the cable to the mast with tape or nylon ties, beginning 4-6 inches below the connector and repeating every 12" down the mast. Be sure to leave a little slack where the cable passes the spring.
3. The Eggbeater produces an omnidirectional, circularly polarized pattern overhead and a linear polarized pattern at the horizon.

This completes the assembly.

EB-310 PARTS LIST

DESCRIPTION	QTY	HARDWARE BAG DESCRIPTION	QTY
CAN ASSEMBLY	1	BOLT, 5/16-18 x 3", SS	4
LOOP ELEMENT, 3/8 TUBE.....	2	5/16-18 LOCKNUT, SS	4
SCREW, 10-32 X 3/4, SS	4	BOLT, 3/8-24 X 1" SS.....	1
SADDLE CLAMP, 2".....	4	LOCKWASHER, 3/8" SS	1
MAST BRACKET, 4 x 4"	1		
ASSEMBLY MANUAL.....	1		
RADIAL KIT (OPTIONAL)			
RADIAL, 1/4 x 12-3/8" AL ROD.....	8	8-32 X 1/4" SETSCREW	8
RADIAL PLATE, 1/2 x 2.5" HEX, AL.....	1	5/64 ALLEN WRENCH	1

Model EB-310
Frequency Range 250 To 405 MHz
Usable Frequency Range 225 To 405 MHz
Impedance 50 OHMS
Gain 5.5 dBic Typical,
Straight Overhead
VSWR < 2.0:1
Pattern Omni Directional
Polarity Horizontal @
Horizon & RH Circular
Overhead
Power Handling 1kW
Mounting To 3/8-24 Male
Thread
Connector "N" Female
Size 20" H x 20" W
Wind Survival 100 MPH
Weight / Ship Wt. 4 Lbs. / 8 Lbs.