

CREDITS

Thanks to Carl Gosselin, KG6WTF for his original design.

BUILD THIS FULL SIZE BUDDIPOLE HORIZONTAL THREE ELEMENT BEAM FOR IMPROVED GAIN AND FRONT TO BACK RATIO.

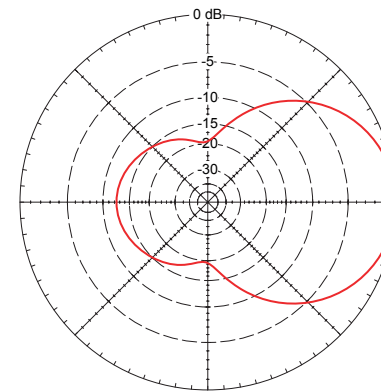
DESCRIPTION

The three elements of this horizontally polarized beam consist of a reflector, a driven element and a director mounted to a boom made with four rigid arms and attached to the mast at the center point by an IT adapter.

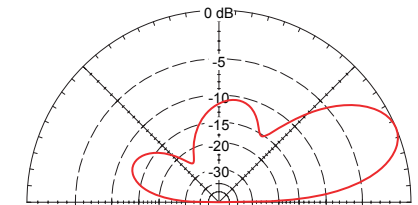
SPECIFICATION

FORWARD GAIN	11.5 dBi at 23 ° elevation
FRONT TO BACK RATIO	12.4 dB
BEAMWIDTH	72 degrees
VSWR	1.1:1 at 50.6MHz
VSWR BANDWIDTH	4MHz (1.7:1 VSWR)

PERFORMANCE



Radiation Pattern (Azimuth)



Horizontal Polarization

Frequency = 50.6 MHz
 0 dB = 11.5 dBi
 Antenna Height = 12 ft

Radiation Pattern (Elevation)

PARTS LIST

- 1 6 x Buddipole 9' 3" (2.8x m) telescopic whips
- 2 4 x Buddipole 22" (560 mm) arm
- 3 1 x Buddipole Versatee
- 4 3 x IT adapter with soft touch knob
- 5 2 x Yagi collars
- 6 1 x Buddipole Telescopic Mast, 8' (2.44 m) or 16' (4.88m)

ASSEMBLY

MAST

Set the mast to a convenient working height and mount the Versatee to the mast. Use a soft knob to attach an IT adapter to the top of the Versatee as shown in the side view. The Versatee supports the driven elements and the IT adapter supports the boom.

DIRECTOR AND REFLECTOR BOOMS

The boom is constructed as two identical sections connected by the central IT adapter.

Assemble the director boom by attaching one 22" arm to the central IT adapter (see inset) and add a 22" arm to the outboard end of the arm to form a 44" boom.

On the other end of the central IT adapter, assemble the reflector boom by attaching a 22" arm to the adapter and adding a 22" arms to the outboard end of the arm to form a 44" arm.

Slip a Yagi collar on to the end of each boom and attach an IT adapter to the end of each boom using a soft knob.

DIPOLE

Thread two whips to the VersaTee to complete the dipole, and adjust the length of each whip so that the overall length (tip to tip) is 111". Connect the feed cable to the Versatee as shown in the detail inset view and fasten the cable to the mast using the velcro strap.

REFLECTOR

Thread a whip on each side of the reflector IT adapter to complete the reflector, and adjust the length of each whip so that the overall length (tip to tip) is 120". Swivel the reflector IT on the boom so that the reflector is horizontal. Tighten the lock screw on the Yagi collar at the reflector end.

DIRECTOR

Thread a whip to each side of the director IT adapter to complete the director, and adjust the length of each whip so that the overall length (tip to tip) is 98". Swivel the director IT adapter on the boom so that the director is horizontal. Tighten the lock screw on the Yagi collar at the director end.

PICTORIAL VIEW

