

Vertical Dipole Array Measurements*

A Vertical Dipole Array is similar to a yagi beam stood on edge. It offers Lower cost and ease of packaging and transportation compared to a metal yagi-style beam. They are frequently used for DX-peditions, Field Day, etc.

<u>Band</u>	<u>Mast Spacing</u>	<u>Reflec/Jumper</u>	<u>Dipole Top/Bottom</u>
20M	9' 6"	29' 11" / 3' 2"	17' 1/2" / 15' 1"
17M	8'	24' 2 1/2" / 1' 5 1/2"	12' 11 1/4" / 11' 10"
15M	7'	20' 10 1/4" / 1' 6"	10' 7" / 10' 7"
12M	6'	17' 9 1/2" / 9 1/2"	9' 2 1/2" / 8' 10 1/2"
10M	5'	16' 7" / 6"	7' 9 3/8" / 7' 9 3/8"

CONSTRUCTION:

1. All VDA elements should start 1' from ground on the masts. Do not raise the elements on the masts. This will negatively affect the F/B ratio of the VDA.
2. The working elements are simply wire taped to non-metal masts.

NOTES:

1. You may use two reflector/director elements to make a 3 element beam. The jumper is merely connected to make a reflector on one end while the jumper is removed on the opposite side to make it a director.
2. Mast spacing is essentially the same on both sides of the driven element.
3. Both passive elements may have the jumper removed to make the antenna Bi-directional at reduced gain in two directions.
4. Any non-metal masts may be used. The 33 foot MFJ collapsible masts work well. Guy ropes are recommended. Light rope is fine for this light load.
5. A 1 to 1 balun is suggested and the coax should come away from the

Dipole at a 90 degree angle. You may secure the coax to one of the guy ropes to help bring it away horizontally/ 90 degrees from the driven wire element.

6. Note the different length on the two sides of the driven element.

*used at Steamboat Lake State Park, KØYY