

DA3000 Wide band discone aerial

The DA3000 is a 16 element 'receive' wide band discone aerial providing a useable frequency coverage from 25MHz to 2GHz. Many of the 16 elements are of different lengths ensuring true wide band characteristics including one 'loaded' element to enhance the low frequency performance. This aerial is designed and manufactured in Japan to exacting standards. The DA3000 is supplied with 15m of quality RG58/U coaxial cable terminated in a BNC plug for the radio connection and a TNC plug in the aerial base. Clamps are also provided to fasten to a suitable pole up to 52mm.

What is a discone:

For wide coverage in the VHF-UHF bands a compromise has to be met and the most popular aerial is a discone (a disk of elements over a cone of elements). Their appearance is like a large spider or umbrella without the covering material, the better models have about 16 elements... avoid discones with only a few elements (such as six). Typical usable coverage starts from about 25 MHz and extends continuously to 500 MHz, 1300 MHz or even 2000 MHz. The coverage peaks and dips throughout it's range as the elements interact to provide the widest possible coverage. Due to their necessary construction discone aerials are a little prone to "wind noise" & possible damage in severe gales.

DA3000 discone antenna assembling

- Screw two "A" elements diagonally with washers in upper screw holes of main unit.
- Screw two "B" and four "E" elements (threaded) diagonally with washers in upper screw holes. (A-A vertical to B-B, E-E vertically another E-E)
- Select two 'no mark' elements with threaded head and joint them 3. with two "C" elements to be the longest elements. Insert two combined "C" elements to slant hole of main unit just below "A" elements and tighten set screws by wrench included.
- Insert and tighten two "D" elements similarly just below "B" 4. elements.
- 5. Insert and tighten four "E" elements (non threaded) below each "E" elements (threaded) of above 2.
- Attach two mast mounting brackets to aluminium pipe with 6. proper spacing of approx. 300mm.
 Feed coaxial cable "TNC" plug side through aluminium pipe and
- 7. connect the plug to the main unit.
- Insert the main unit into aluminium pipe and tighten a screw. 8.
- Install whole unit to suitable mast (not supplied) by "U" shape bolts

Useable frequency range:	25MHz to 2GHz
Impedance:	50 OHM
Acceptable support mast:	30 - 52mm diameter
Size:	height approx 1m,
	diameter approx 0.9m
Coaxial cable:	15m of Quality RG58/U
	with BNC plug
Weight:	Approx 1kg



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