

ApexRadio 703G-DA Compact Discone Antenna

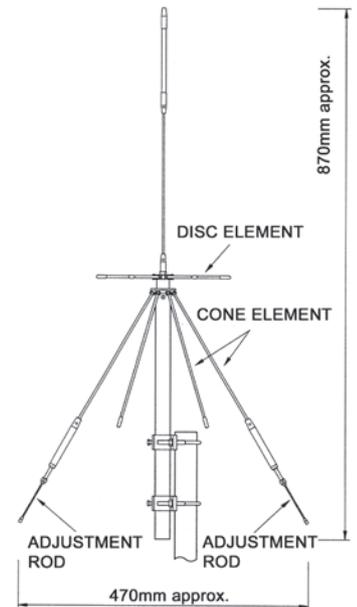
The 703G-DA antenna is designed to receive across the frequency range of 70MHz to 3000MHz (3GHz) employing a compact discone configuration.

The small size and relatively light weight design is ideal for installation in a confined space such as an apartment balcony. Upon unpacking, take time to locate and familiarise yourself with the parts described in the right-hand table.

PARTS	QTY
Loading base (w/ upper element)	1
Disc element, 10cm with cap	6
Cone element, 26cm with cap	4
Cone element , 43cm with loading coil	2
Fixing screw (with washer)	1
Support pipe	1
Fixing hardware	2
U-bolt (with nut & washer)	2
L shaped allen key	1
Coaxial cable N/BNC plugs	1

Each element is supplied with a nut

Note: all measurements and weight are approximate.



Receive frequency	70 - 3000 MHz
Impedance	50 OHM
Type of connector	N-type socket protected by support pipe
Height	0.87 m
Weight	690 g (antenna section only)
Resistance to wind speed	40 m/sec
Pole size	20 - 38 mm diameter

Assembly

1. Securely attach the support pipe to a suitable mast (not included) using the U-shape bolts.
2. Feed the coax cable (N-type plug end) through the support pipe and connect to the N-type socket of the loading base.
3. Securely fix both the loading base and the support pipe together using the cross head 'FIXING SCREW' and spring washer.
4. Install all six disc elements (small) and six cone elements to the matching holes as per the diagram. Two of the cone elements have loading coils and are installed facing each other on opposite sides (180 degrees). Use a spring washer on each element, screw the element into the loading base as far as it will go then tighten the locking nut using a spanner.
5. Make sure that each antenna element is correctly installed with nuts and washers in place and re-tighten as required.

Tuning

Over the 144MHz band, optimum resonance can be obtained by re-calibrating the adjustment rods which are located at the end of the two loading coil elements (there is no adjustment to the top loading coil). Use the allen key to loosen the grub screw and adjust the sliding rod. Repositioning of the rod by 1cm will vary the resonance point by 2MHz (longer is lower frequency). Make sure the grub screw is re-tightened.

Warning

Sensible precautions must be taken while assembling & erecting the antenna in order to prevent any accident or damage to personnel or property. It is recommended that the aerial is regularly inspected for loose nuts and bolts. Make sure that the antenna remains stable all the times. Do not use the antenna for non-intended purposes other than receiving radio signals.

