

## Off the Shelf - Limited Space and \$ antenna's

Well this question is asked nearly every time one of you ask about HF Antennas. With the CW requirement about to go, I guess there will be a few more of us considering just what is available. We would all love to have 100' Towers with a 7 Element Yagi... But for three good reasons most of us may never achieve it. Not only is there huge costs in antenna, rotator and tower, but you'll nearly pay that much again just to get a building consent and engineers report. Then there's the real problem, pleasing the neighbours, usually all 3 of them. With the size of sections these days you'd never get resource consent. If it was to fall over, you'd probably take out the neighbour as well!

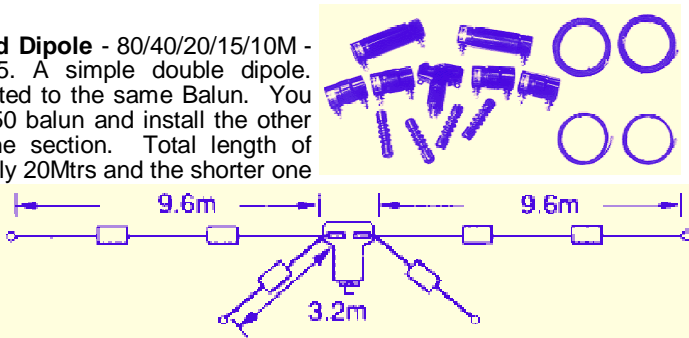
If you do have the space, then reconsider what you are about to read! It is true you get what you pay for... If money is not a problem and space is plentiful—Go for it! Give us a call. We do stock HF Yagis, Rotators and we often know of customers retiring from the hobby and trying to get rid of their old tower. So, back to the limited space and funds, what is available here in New Zealand - off the shelf (*usually*) - Take home relatively easy to install and is reasonably priced!

**The Rotatable Dipole** - 10 - 15 - 20 and 40M. Designed to be rotated but you don't have to. You could even mount it vertically if space is tight and you want the inconspicuous look. You get to operate on four bands for only \$295.00

**The Diamond W735 Trapped Dipole** - 80/40M - A simple dipole. Comes with insulators and balun. It is reasonably long, 26Mtrs but invert it from the apex of your house roof, and you should be able to fit it in. Remembering 26Mtrs is max length. Unless you manage to place it in a perfect location and it is perfectly flat, and both ends are 180 degrees apart, it will end up being shorter. All this for only \$225.00



**The Diamond W8010 Trapped Dipole** - 80/40/20/15/10M - Another version of the W735. A simple double dipole. Basically 2 separate dipoles fitted to the same Balun. You could in fact purchase the BU-50 balun and install the other dipole somewhere else on the section. Total length of longest dipole (80/40/15M) is only 20Mtrs and the shorter one (15/10M) is 6.5Mtrs. For only a few extra dollars over the W735 and you get the extra 3 Bands - Just \$75 more. These antennas have been around a long time and for the price, there's little wonder. The 5 main HF bands for only \$295.00



**The Diamond BU-50 1:1 Balun** - All you need to make a simple single or multi band dipole. How much more basic do you want to get. All you need to provide is a bit of standard copper wire and insulators each end. They start to look a bit ugly with multiple bands hanging off the one balun, but for the cost... so what. Remember also that although the W8010 and W735 cover 80M and are very short in length... They are also very narrow banded. The W735 is pretty good, but the W8010 has two sets of traps on the 80M section, hence why it is only 20Mtrs total length. However when space is limited you've really got no choice but to go with the W Series. The BU-50 balun is capable of 1.kW, subject of course to a good SWR! The BU50 will perform equally as well on your HF Yagi.



**Trident 10M Bullwhip** - 1/2 Wave 10M Vertical - Screws onto a piece of 1 1/2" water pipe.. \$150.00. All you'll need when 10 Mtrs is open.

**Mobile Antenna** - There are many times when hams have mounted Mobile HF Antennas on the roof of their homes, and although a real huge compromise to what you would like... Sometimes something is better than nothing. Yaesu have designed a ground-plane kit for the Mobile ATAS120 Antenna because there are so many operators using them as base antennas. Other big plus — this antenna will auto tune on Yaesu rigs and cover from 40M to 70CM.

**The Diamond DPCP-6** - Trapped Vertical - 80/40/20/15/10/6M - You could be living in the most prestigious home in Auckland, with little to no section and still get away with one of these! Tuned radials mean no need for a grounding mat... The best option for those of you living in a small flat. If you are moving into a retirement home and selling up your station, You don't need to. These are perfect and more than capable keeping those regular sched's alive.

# DIAMOND

## CP6 - 6 Band Trap Vertical — 80 ~ 6m

The CP6 are multi-band trap-vertical antennas for HF bands, covering the 80\*, 40, 20, 15, 10m & 6m amateur bands. Made from heavy-duty aluminium, the CP5 & CP6 are easily assembled, yielding excellent performance and reliability from a compact base station antenna.

### Antenna Location and Mounting.

The CP6 are compact vertical antennas using loading-coil radials. The compact size offers many options on mounting location. When choosing a mounting location, keep the following factors in mind:

Resonant frequency of HF antennas can change based on location.

Antenna should be mounted away from trees, buildings and other antennas.

If mounting near house or on balcony, best performance will be achieved if mounted at least 15 feet away from structure. To avoid unsafe conditions, do not install near electrical or power lines.

### Specifications

Frequency: 80\*–40–20–15–10–6m  
\*80m CW only. SSB requires a tuner.

**Power Rating:** 200 watts P.E.P.

**Impedance:** 50 Ohms

**VSWR:** 1.8:1 (nominal)

**Element Phasing:** (6m) 1/4 wave trap vertical ground plane.

**Radials:** CP6—six Trap Design

**Grounding:** Direct Grounding Antenna element and radials connected to mounting pipe.

**Max Wind Rating:** 80 m.p.h.

**Mast Dia:** Acceptance: 30 mm to 65 mm

**Length:** 4.6 m trs

**Weight:** 4.9 kg

**Connector:** SO-239 female

