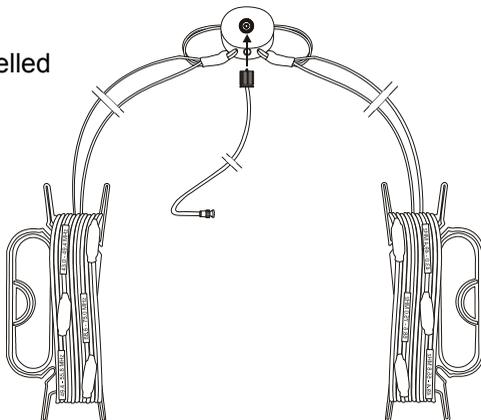


Rapid deployment VHF multiband dipole antenna

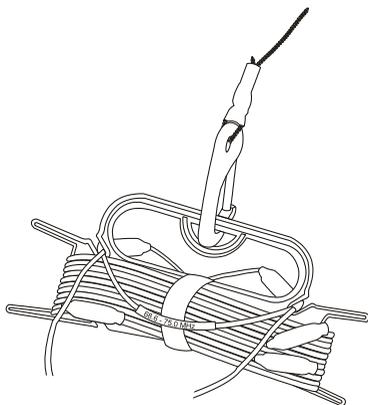
P/N 2081-02-01

Contents Overview

- Small balun
- 2 x Kevlar core antenna wire, labelled with frequency markers
- 2 x Large winders
- 2 x 10m Throwing cord
- 2 x Lead throw weights
- 10m RG-58 coax (20m RG-213 P/N 2085-02-01)
- Carry bag (No carry bag P/N 2085-02-01)
- Instruction sheet



The Rapid Deployment VHF Multiband Dipole Antenna is a tuned antenna with frequency labels to indicate lengths for each band of operation. When tuned to a band, the antenna covers the full 6.4MHz band spread, with VSWR 3:1 or better.



For operation, each side of the antenna is unwound to the tuned length for the band required. The antenna wires are placed in notches in the winding handle, with the label visible on the antenna side of the winder, and the cross-wire joiner placed behind the notch so that the wire will not pull through.

To ensure correct frequency tuning, the remaining (excess) wire should remain neatly bundled on the winding handle. A Velcro strip is provided for this purpose.

Rapid deployment VHF multiband dipole antenna

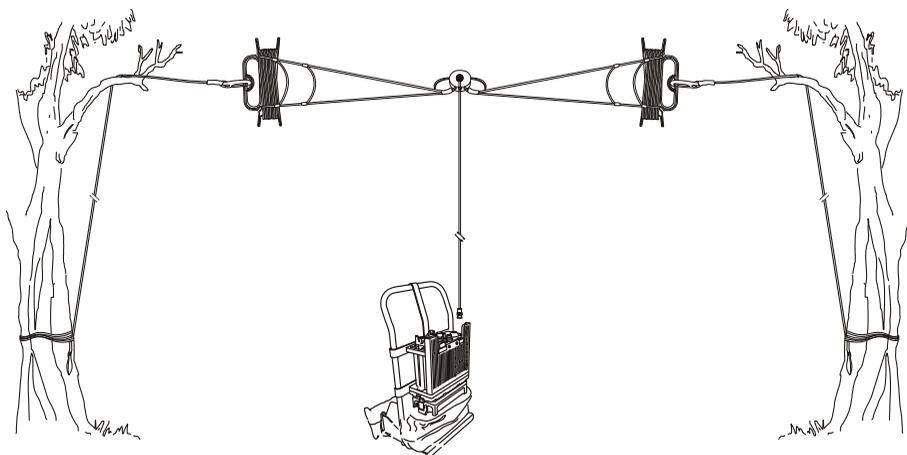
P/N 2081-02-01

For operation on the lowest frequency band, the antenna should be completely unwound.

Two throwing cords are provided on a separate winder, and attach to the antenna winders through loops in the handles. These cords can be used to elevate the antenna. Ideally, the coaxial feeder cable should come away from the antenna at a right angle to the radiating wires. Some deviation is acceptable, but the coax should not run parallel to the antenna any closer than 2 metres. The antenna will handle 50W average/continuous transmit power. The antenna can be used in a number of configurations, depending on structures available for elevation, and the desired radiation polarisation.

Horizontal Dipole

The horizontal dipole has maximum gain on the broadsides of the antenna, and reduced gain along the axis. The radiation will be horizontally polarised, and channel gain will be reduced when communicating with stations with vertical antennas (e.g. mobile/manpacks).



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Vertical Dipole

Operation as a vertical dipole will generally provide best performance. Gain will typically be 3 to 5 dBi, in an omnidirectional pattern. The radiation will be vertically polarised, giving optimum performance when communicating with vertical antennas such as used with vehicle mobiles, manpacks, and handheld radios.

One throwing cord should be used to hoist the antenna up to a suitable non-conducting mast or other fixture such as a tree. The other throwing cord should be used to hold the antenna reasonably straight, so that the antenna reaches its full tuned length. The coax feeder should come away from the antenna before coming down to the ground.

