

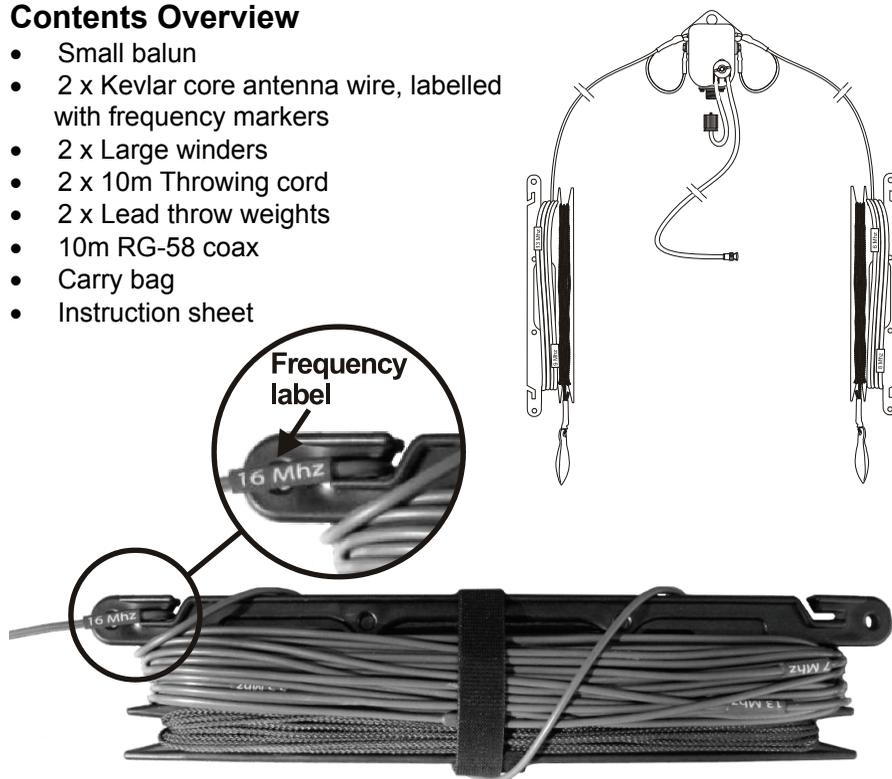


## Rapid deployment tunable wire dipole antenna - 40 W PEP

P/N 2090-02-01

### 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
- Carry bag
- Instruction sheet



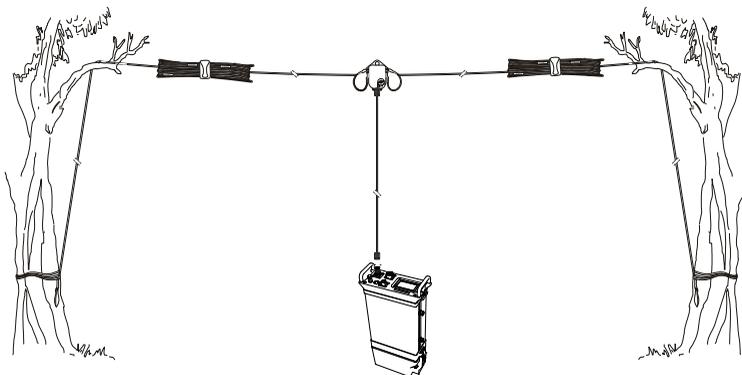
The Rapid Deployment Tuned Dipole Antenna is a tuned antenna with frequency labels to indicate tuned lengths. For operation, each side of the antenna is unwound to the tuned length for the frequency required. For operation at a labeled frequency, the label should be level with the end of the winder as shown in the picture below. Lengths for intermediate frequencies should be estimated and tied off appropriately. The remaining wire remains on the winder. The throwing cord can then be used to elevate the antenna. The antenna will handle 40W continuous data and CW transmission. The antenna can be used in a number of configurations, depending on structures available for elevation.

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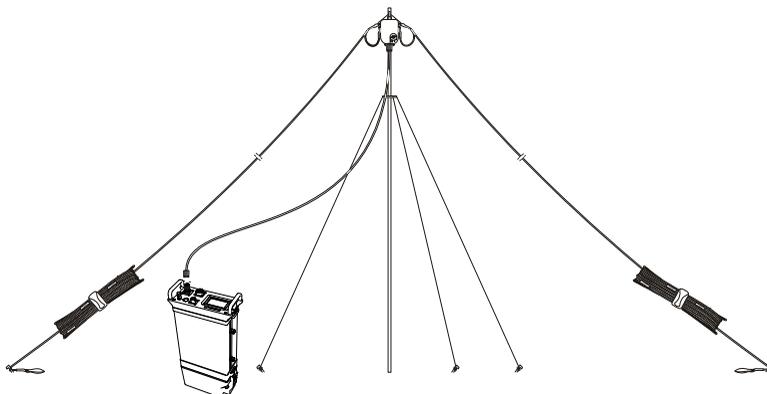
### Horizontal Dipole

The horizontal dipole has maximum gain on the broadsides of the antenna, and reduced gain along the axis. Height above ground affects radiation angle. Lower heights give higher angle radiation, better for NVIS (short distance). Higher heights give lower radiation angle, better for long distance communication.



### Inverted V

The inverted-V has a more omni-directional pattern than the Horizontal Dipole, with lower maximum gain. The ends of the antenna should be at least 1m above ground. Suitable mainly for NVIS and medium distance.

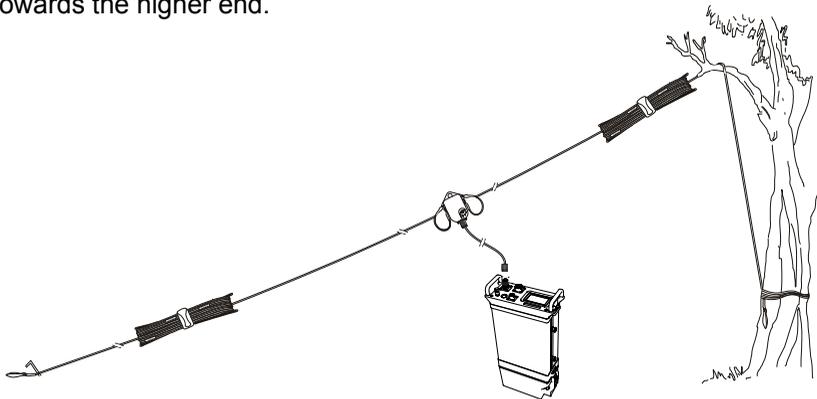


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### Sloping Dipole

Radiation with the Sloping Dipole becomes somewhat asymmetrical, with increased gain in the direction of the lower end of the antenna, and reduced gain towards the higher end.



### Single Ended

For rapid deployment, with reduced but still acceptable efficiency, the antenna can be operated single ended. In this configuration, one side of the antenna (labelled "antenna") is unwound to the desired frequency and tied to an elevated structure. The central balun should be located close to the ground, and the remaining side of the antenna ("earth") partly unwound (5 to 10m) and stretched out on the ground below the radiating element.

