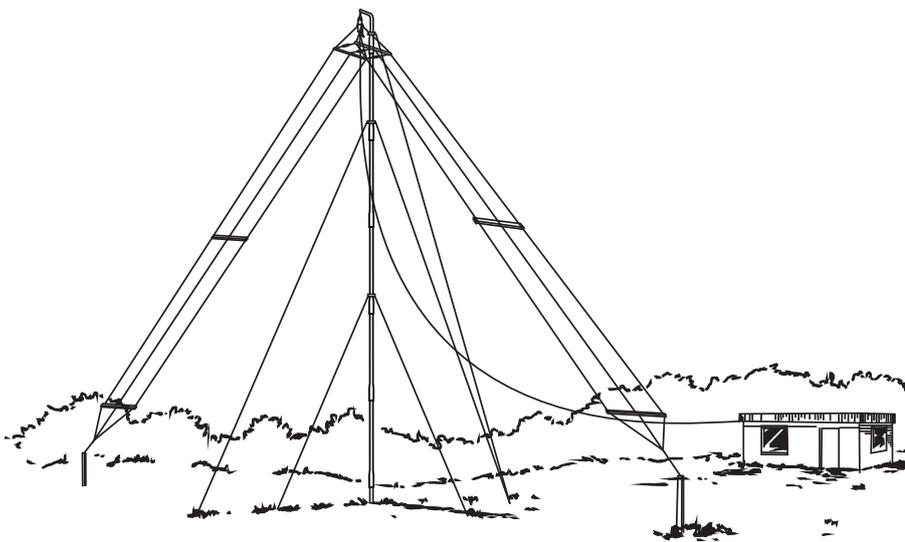
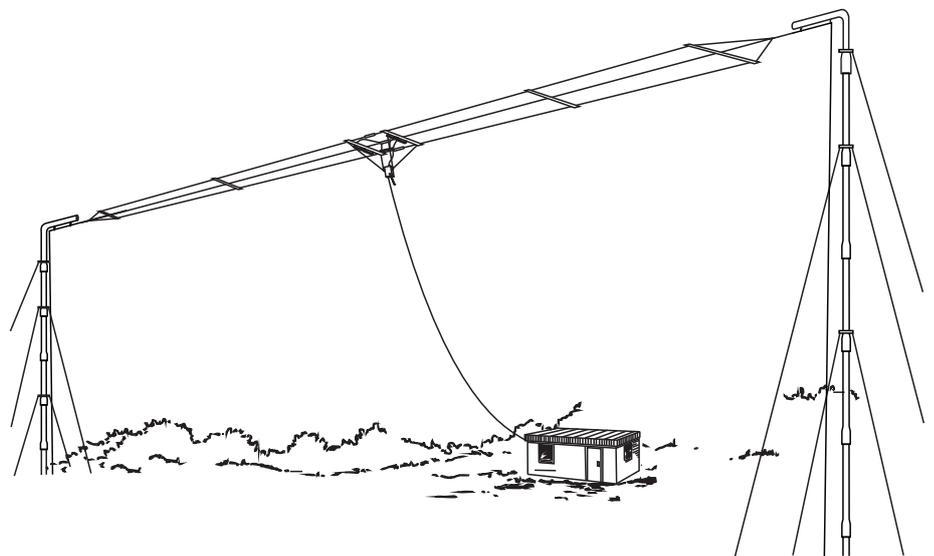


User Guide

912 Multi-wire Broadband Dipole Antenna 150W

P/N BC91200/2090-02-10 (27m)



P/N BCM91200/7

Introduction

PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE ATTEMPTING INSTALLATION.

This kit contains the following:

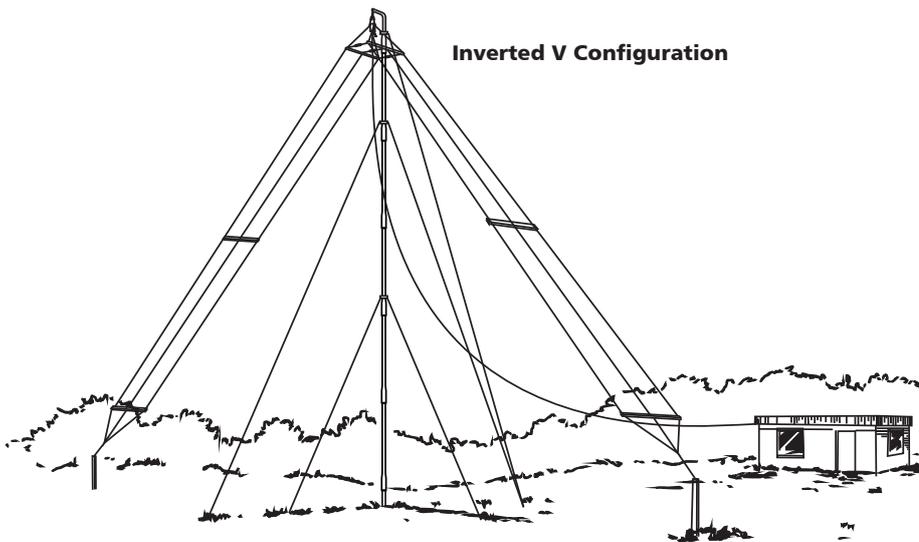
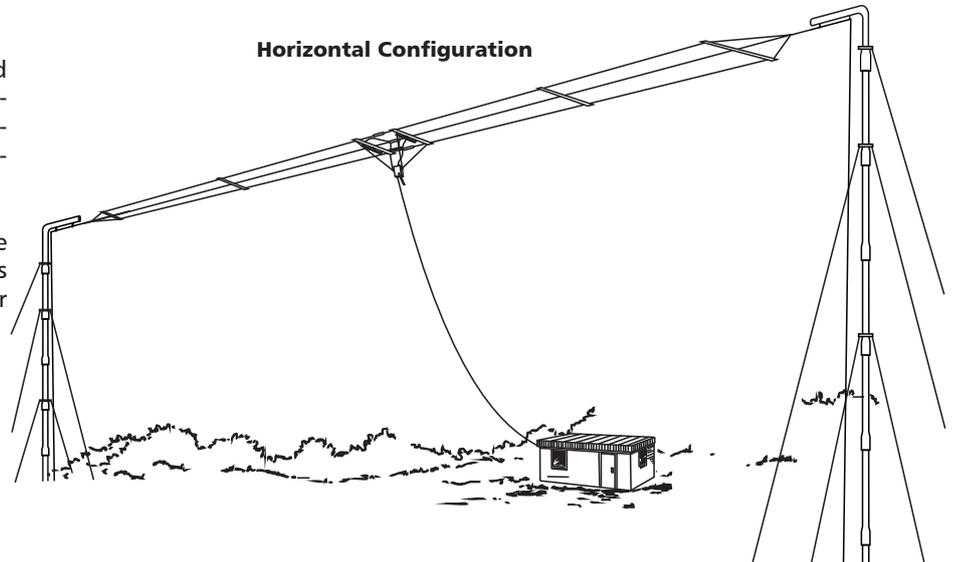
1x Antenna Assembly
1x balun
1x coaxial cable

Compatible masts

10m Mast with nylon guys (P/N BC90205/FR/PR)
10m Mast with stainless steel guys (P/N BC902906/FR/PR)

Barrett 912 Multiwire broadband (150W) can be mounted in a horizontal configuration with a 12-15m mast or in an Inverted V configuration with a 10-15m mast.

The required minimum distance between the masts is 32 metres for BC91202 (27m antenna) for horizontal configuration.



Halyards and pulleys required to hoist and support the antenna are not supplied, however they can be purchased separately from Barrett Communications (Halyard and Pulley Kit P/N BCA91201). It is recommended that the halyards used to support the antenna be either UV stabilised dacron cord or wire rope and that pulleys be of stainless steel construction.

For a 10-15m mast with an antenna in inverted V configuration, rods or stakes should be inserted into the ground at least 9m away from the mast in order to secure the antenna ends.

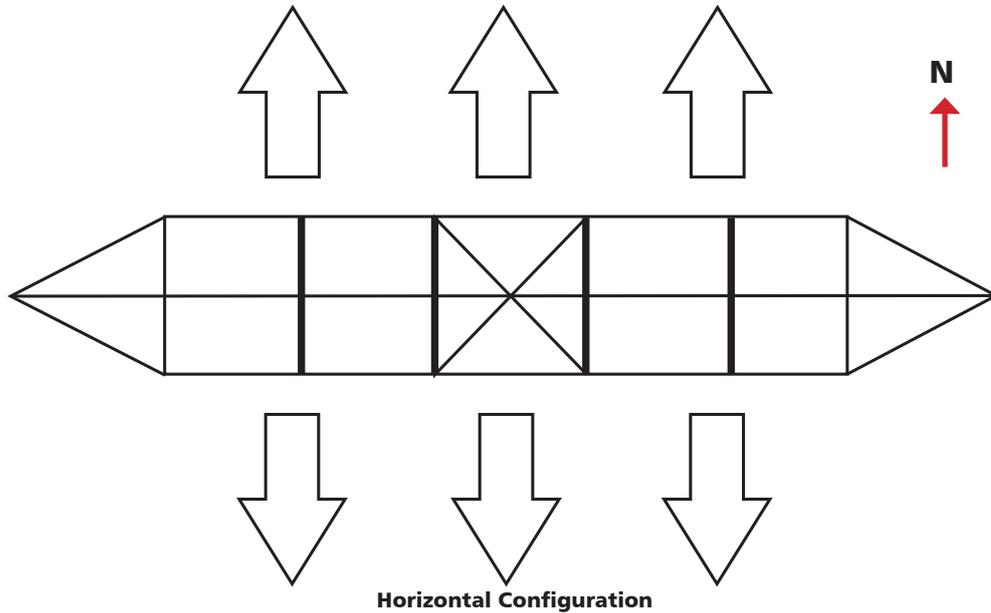
As with all antenna installations, ensure the antenna is as far from sources of electrical interference as possible and in a position that makes it impossible for the antenna to come in contact with high voltage overhead mains wiring.

It is highly recommended that antennas be installed by suitably qualified personnel.

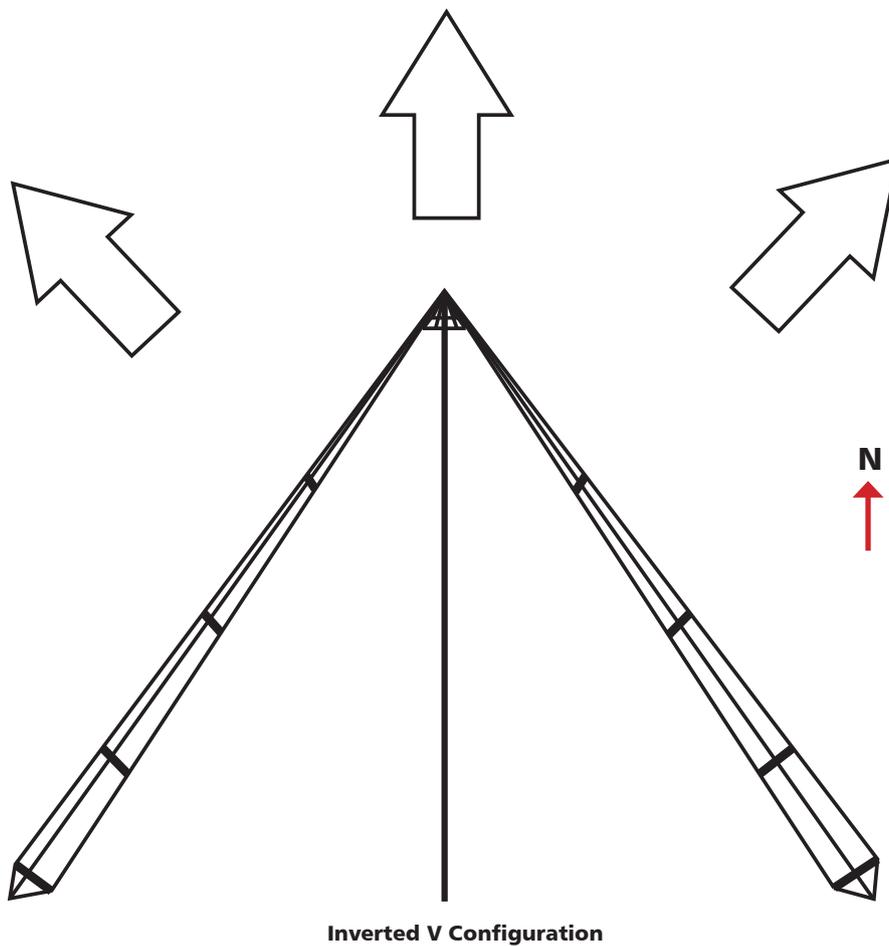
Antenna Orientation

The orientation of the antenna at the site is vitally important.

In Horizontal configuration, the radiation is broadside to the antenna i.e. if transmissions need to travel in a predominantly North-South direction, the antenna should be set up with the ends pointing East-West.

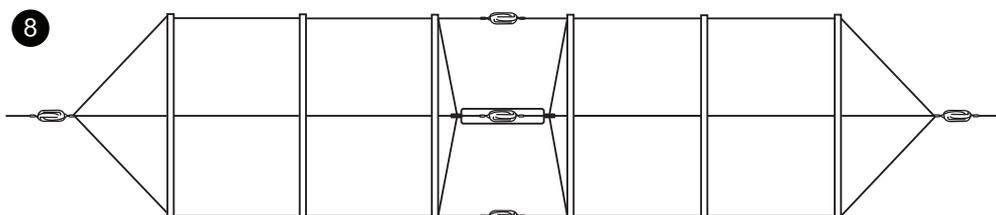
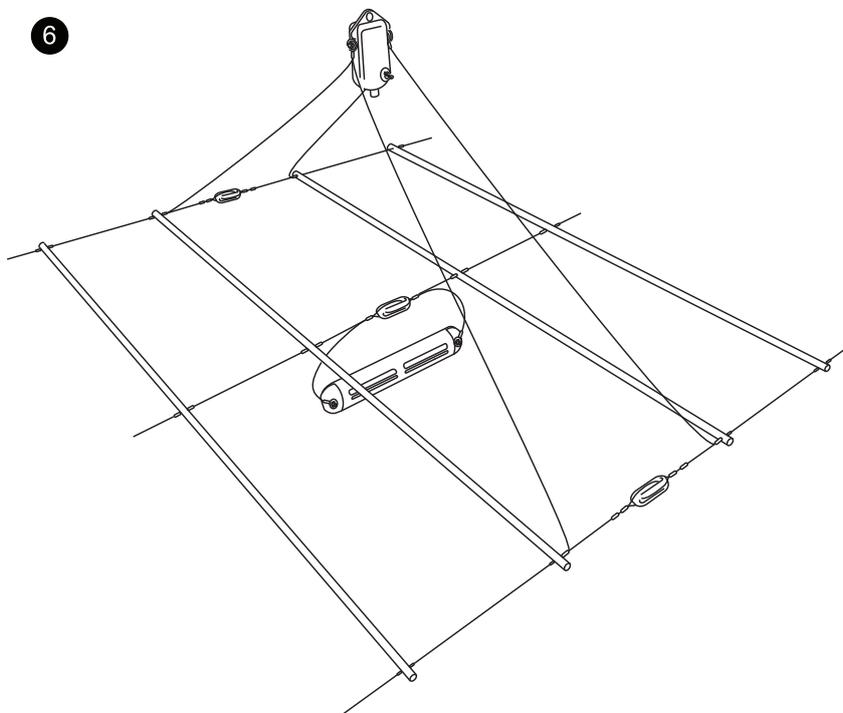
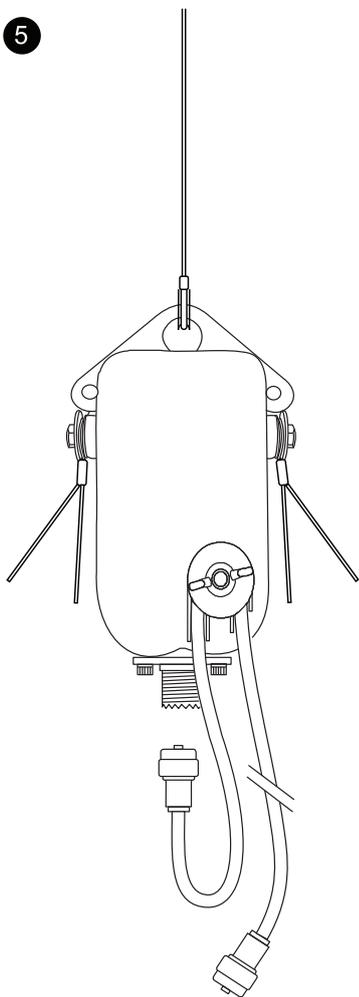


For Inverted V, the antenna becomes more suitable for NVIS, with radiation being directed at high angles, but omnidirectional around the antenna on a horizontal plane.



Installation - Inverted V

1. Take the antenna in its box to its installation point, below the hoisting rope.
2. Carefully remove antenna from box and - with **RESISTOR LOAD FACING DOWN** - lay on ground.
3. Carefully remove tape and cable ties and extend each section one at a time until extended to full length.
4. Attach a hoisting cord to the balun. Slowly raise to about eye level ensuring that the wires do not tangle.
5. When at a convenient working height, connect the coax cable to the plug at the base of the balun. Remember to use the strain relief on the back of the balun (pass the coaxial cable between the washer and balun, and tighten the wing nut).
6. Raise the centre of the antenna to the required height.
7. Attach cord to the insulator at each end of the antenna.
8. Apply sufficient tension to straighten the antenna cables. A slight curve in the antenna is normal.
9. Tie these cords to convenient points to secure the antenna in position. Ideally these should be tied at a height, or in a safe area to avert possible contact and risks of minor shocks or burns.



Installation - Horizontal Configuration

1. Take the antenna in its box to its installation point, below the hoisting halyard.
2. Carefully remove antenna from box and lay it on ground ensuring that the balun and resistor load are facing down. Ensure wires do not tangle.
3. Carefully remove tape and cable ties and extend each section one at a time until extended to full length (see below). Ensure that tangles are avoided.
4. Attach ends of antenna to hoisting halyards and hoist until antenna is at a workable height off the ground. Note that the balun will hang below the antenna.
5. Connect the coaxial cable to the connector on the bottom of the balun (it may be necessary to invert the balun by loosening the set screws on either side, allowing the coaxial connector to face downwards).
6. Hoist antenna to full height and secure. Note: the antenna will curve downward slightly when suspended.

