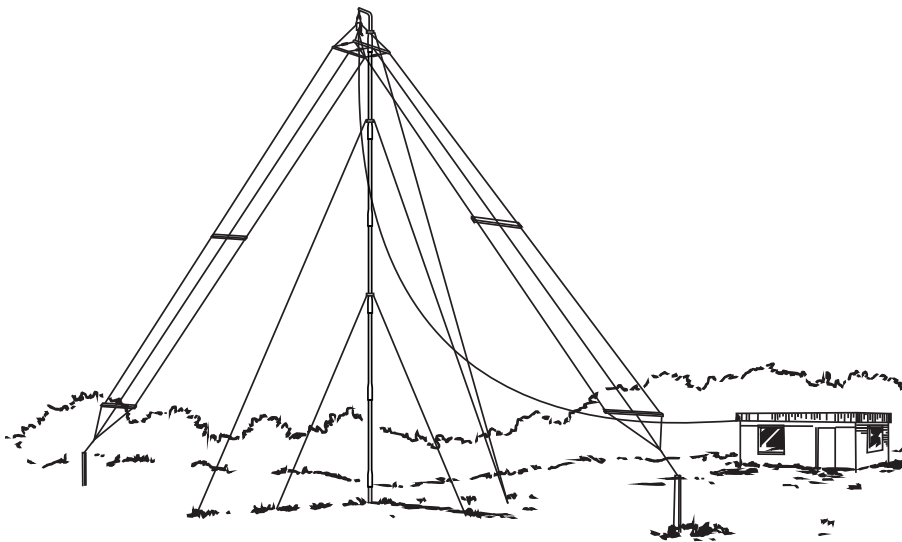
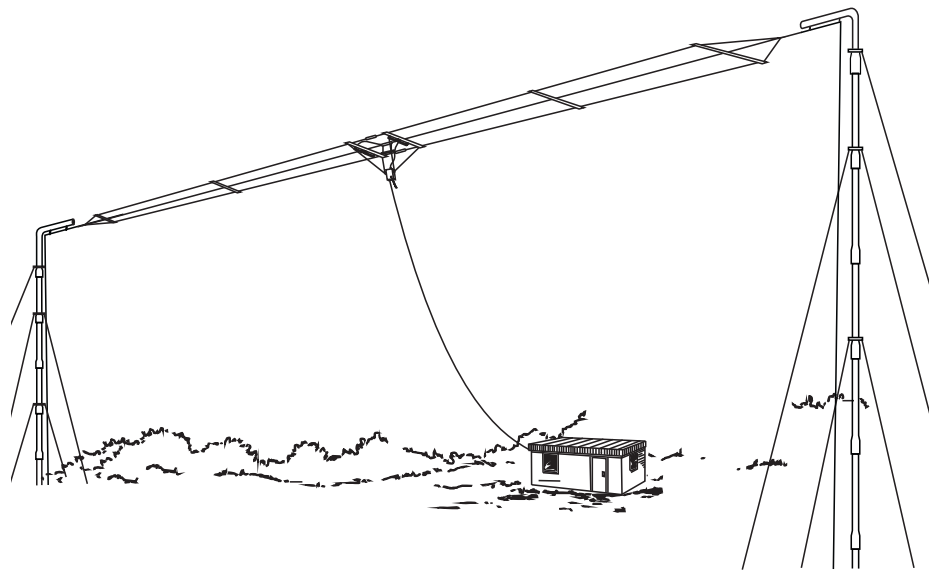


User Guide

912 Multi-wire Broadband Dipole Antenna 500W

P/N BC91202 (27m)



P/N BCM91202/7

Introduction

PLEASE READ THIS MANUAL IN ITS ENTIRETY BEFORE ATTEMPTING INSTALLATION.

This kit contains the following:

- 1x Antenna Assembly
- 1x balun
- 1x Pigtail strain relief fitting
- 1x coaxial cable
- 1x Inverted V mounting kit (1x yoke, 1x insulated cable)

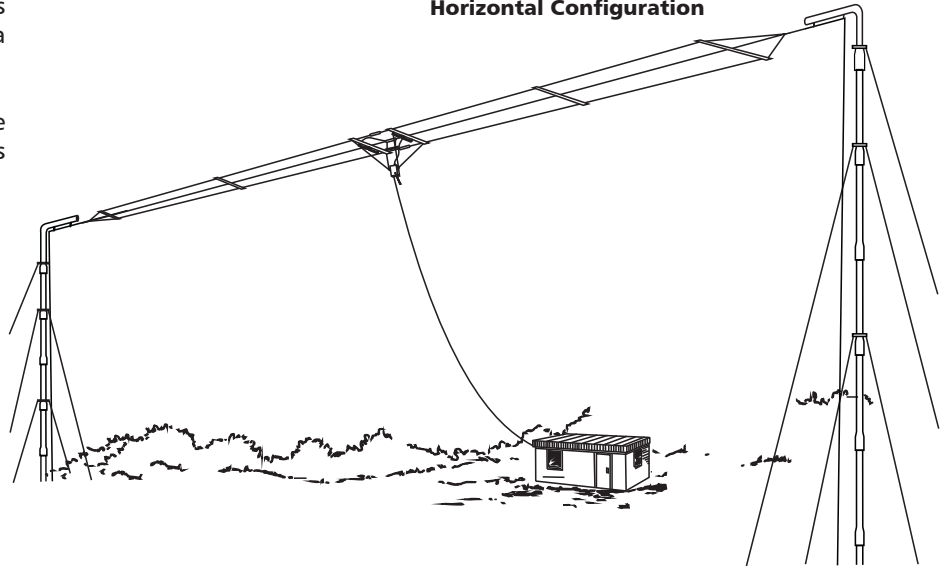
Compatible masts

- 12.7m Lattice Tower (P/N BC90216)
- 10m Mast with nylon guys (P/N BC90205/FR/PR)
- 10m Mast with stainless steel guys (P/N BC902906/FR/PR)

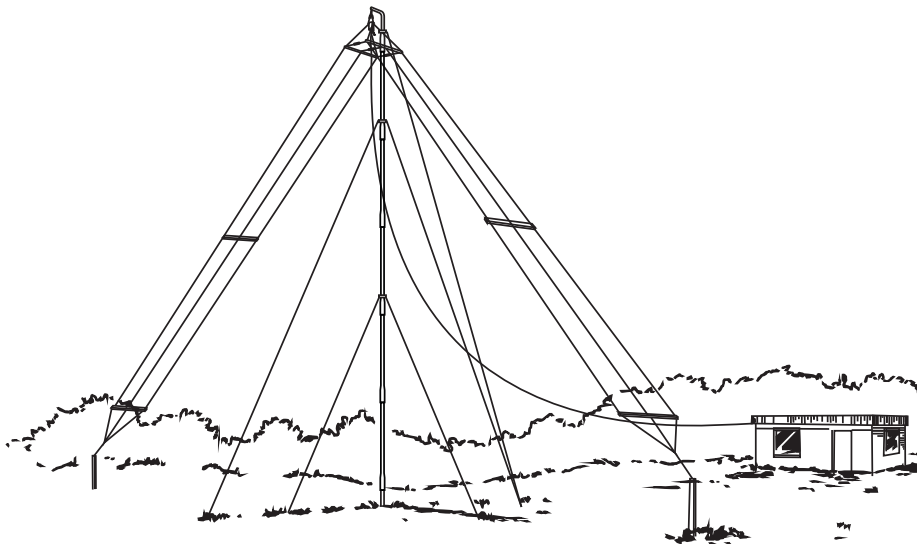
Barrett 912 Multiwire broadbands (500W) can be mounted using a 10-15m mast.

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

Horizontal Configuration



Inverted V Configuration



Halyards and pulleys required to hoist and support the antenna are supplied with the antenna.

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.

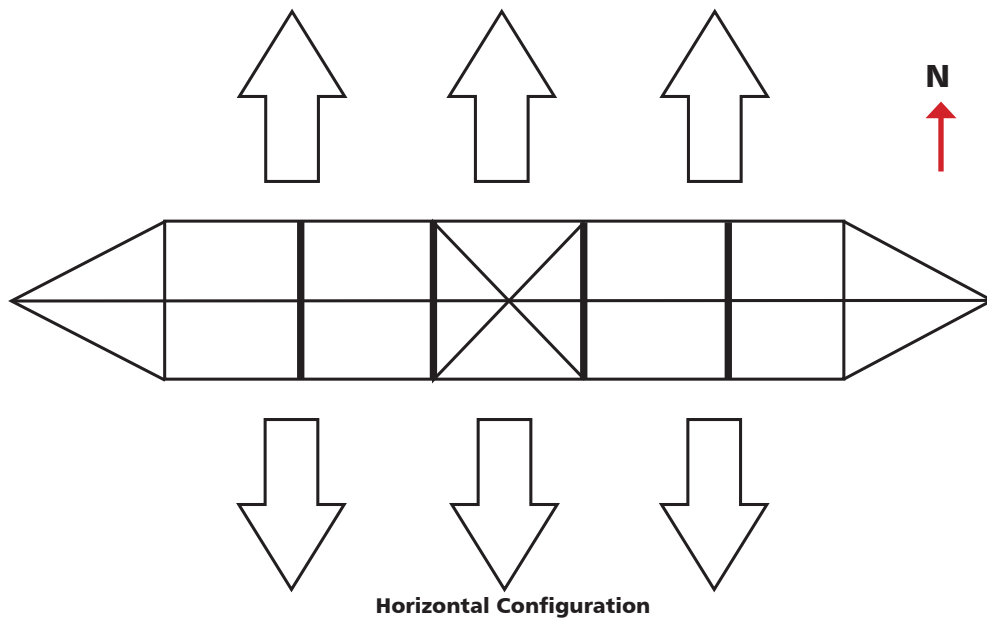
As with all antenna installations, ensure the antenna is as far from sources of electrical interference as possible and in a position that makes it impossible for the antenna to come in contact with high voltage overhead mains wiring.

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

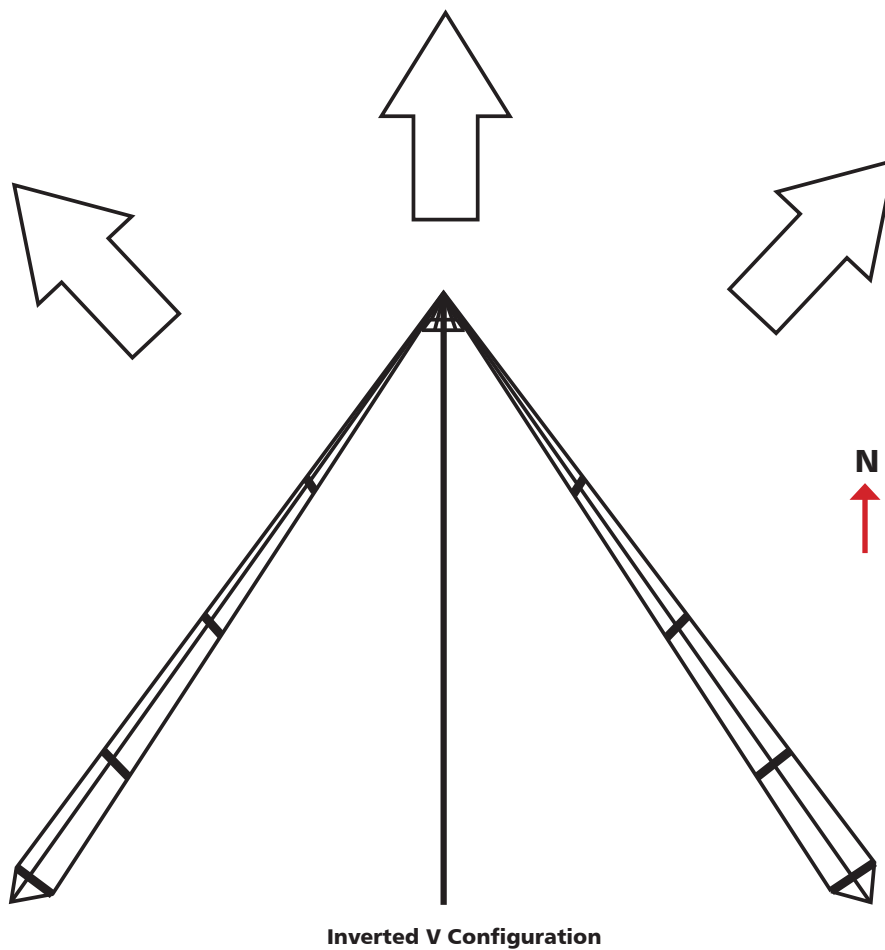
Antenna Orientation

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.

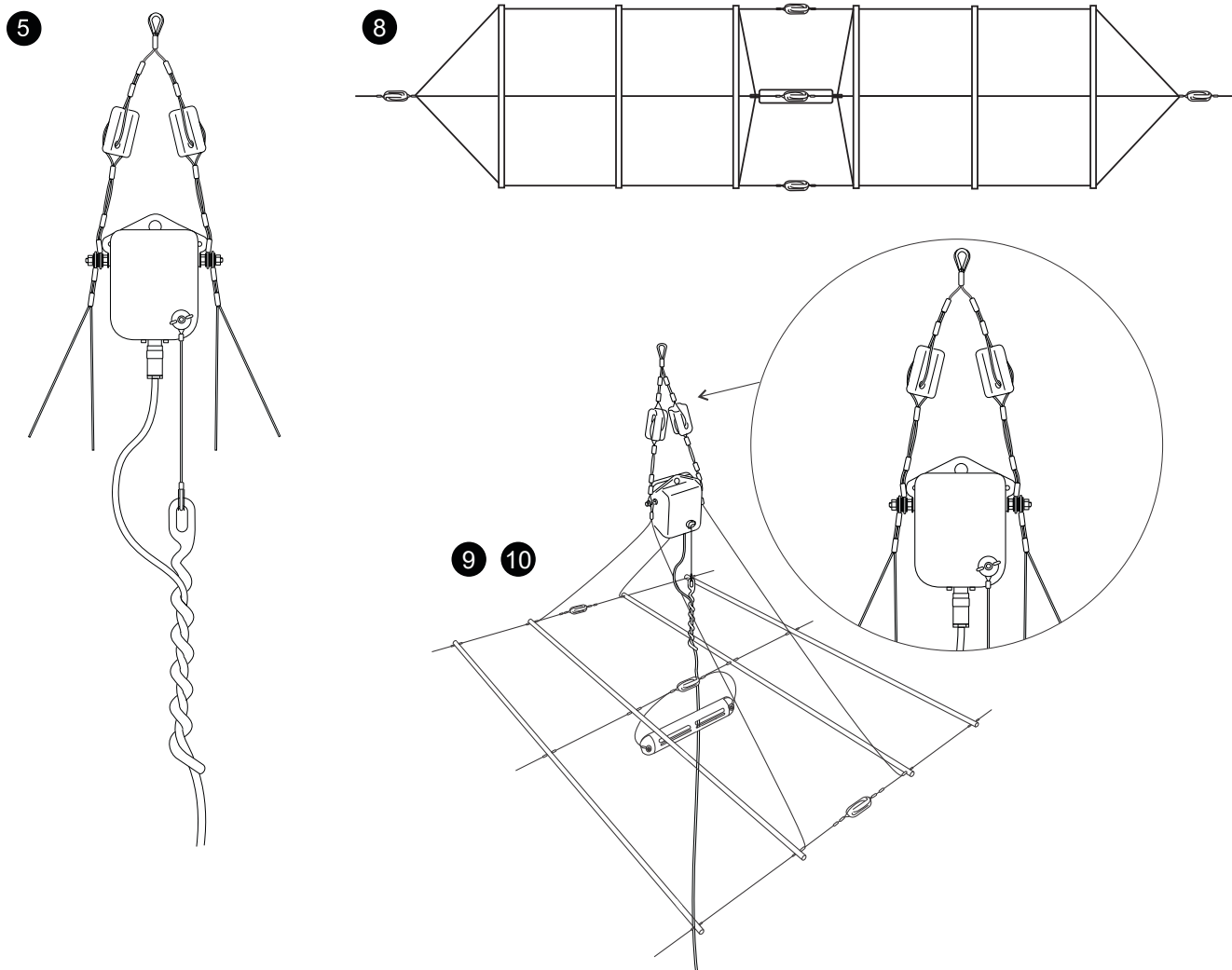


For Inverted V, the antenna becomes more suitable for NVIS, with radiation being directed at high angles, but omnidirectional around the antenna on a horizontal plane.



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. Remove balun and Inverted V mounting kit from box.
4. Locate the 'drop wires'. They should be on the top side of the antenna.
5. Connect the loops of the drop wires to either side of the balun along with the inverted V suspension yoke. Tighten nuts to finger tight only.
6. Attach the suspension halyard to the suspension yoke and slowly raise the balun until the connecting wires have taken some weight.
7. Further tighten the nuts on the balun.
8. Carefully remove tape and cable ties and extend each section one at a time until extended to full length.
9. Slowly raise to about eye level ensuring that the wires do not tangle.
10. Connect the coaxial cable to the UHF type connector at the bottom of the balun and fit the coax pigtail strain relief fitting (see below left). This is connected to the strain relief connection point.
11. Raise the centre of the antenna to the required height.
12. Attach cords to the insulators at each end of the antenna.
13. 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 the ground ensuring that the resistor load is facing down. Ensure wires do not tangle.
3. Locate the 'drop wires'. They should be on the under side of the antenna.
4. Connect the loops of the drop wires to either side of the balun. Tighten nuts.
5. 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.
6. 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.
7. Connect the coaxial cable to the connector on the bottom of the balun and fit the coax pigtail strain relief.
8. Hoist antenna to full height and secure. Note: the antenna will curve downward slightly when suspended.

