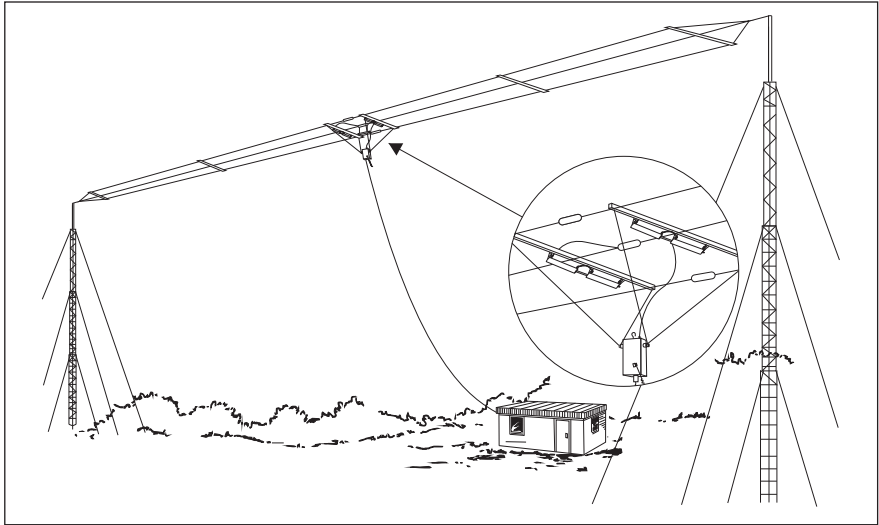


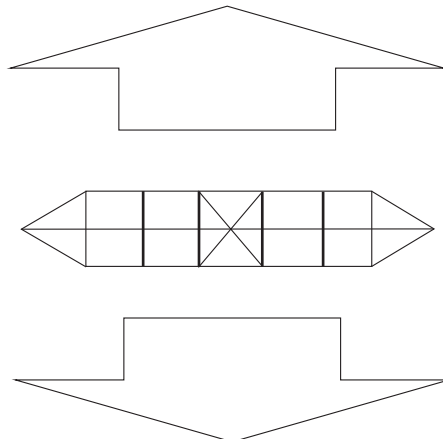
## 912 Multiwire broadband dipole antenna - 1Kw (54M/27M)

P/N BC91203/BC91207

BARRETT 912 Multiwire broadband dipoles can be mounted either in a horizontal or inverted 'V' configuration. The minimum distance between the masts is 32 metres for the 27 metres mast and 60 metres for the 54 metres mast. The recommended mast height is 15 metres. The balun hangs below the antenna.



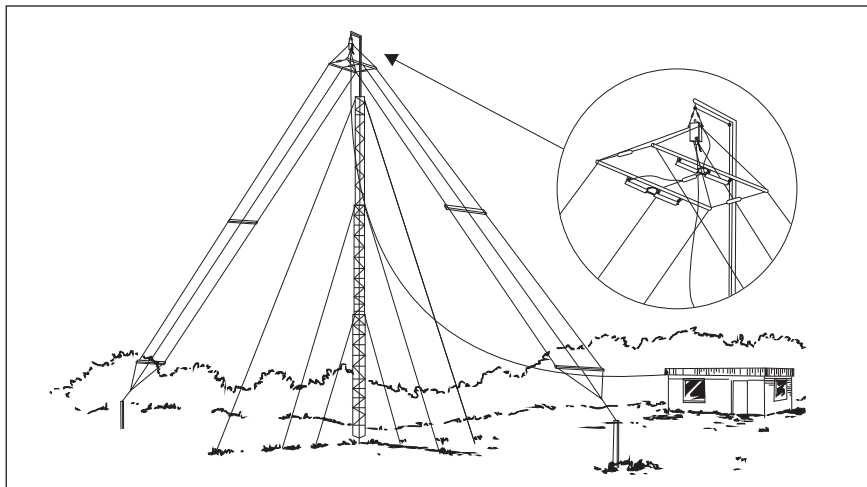
In the horizontal configuration the major radiation direction is broadside to the antenna.



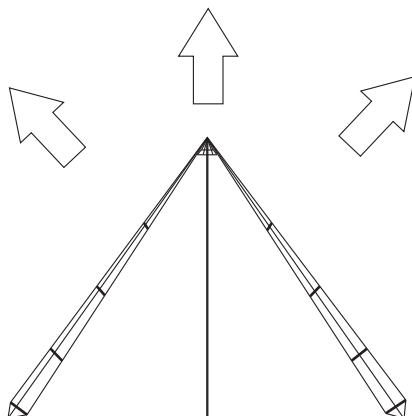
## 912 Multiwire broadband dipole antenna - 1Kw (54M/27M)

P/N BC91203/BC91207

In the inverted 'V' configuration, the recommended mast height is 15 metres and at this height the 2 metre stub masts are each installed at a minimum of 9 metres from the mast base. In this configuration the mast must have an offset or out-rigger bracket, at least 0.8 metres long, to hold the antenna away from the mast. Install the antenna as illustrated in the diagrams, in the inverted 'V' configuration the eye on the top of the balun is used to attach the support halyard.



In the inverted 'V' configuration the antenna becomes more suitable for NVIS, with radiation being directed at high angles, but omnidirectional around the antenna horizontally



## 912 Multiwire broadband dipole antenna - 1Kw (54M/27M)

P/N BC91203/BC91207

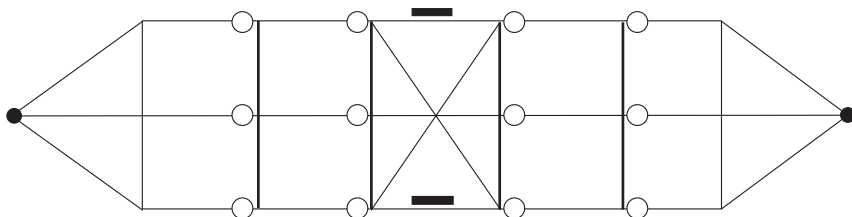
Support towers may be either lattice masts as illustrated, tubular telomasts or other support structures that may be available locally. It is recommended that the halyards used to support the antenna be either UV stabilised dacron chord or wire rope and that pulleys should be of stainless steel construction

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.

### 912 Multi Wire ANTENNA UNPACKING INSTRUCTIONS

**Note: Do not unroll antenna wires until the antenna is onsite in a large area**

1. Remove the antenna from the box so that the load resistor hangs downwards below the antenna.
2. Spread the antenna on the ground as shown below



3. Remove all masking tape.
4. Starting at the ends, gently with wire cutters or scissors, remove the cable ties from the first set of three coils of wire. Extend this antenna section as far as possible. Move onto the inner rolls and repeat.

**When all cable ties have been removed, the wires must be extended to full length to prevent them becoming tangled.**

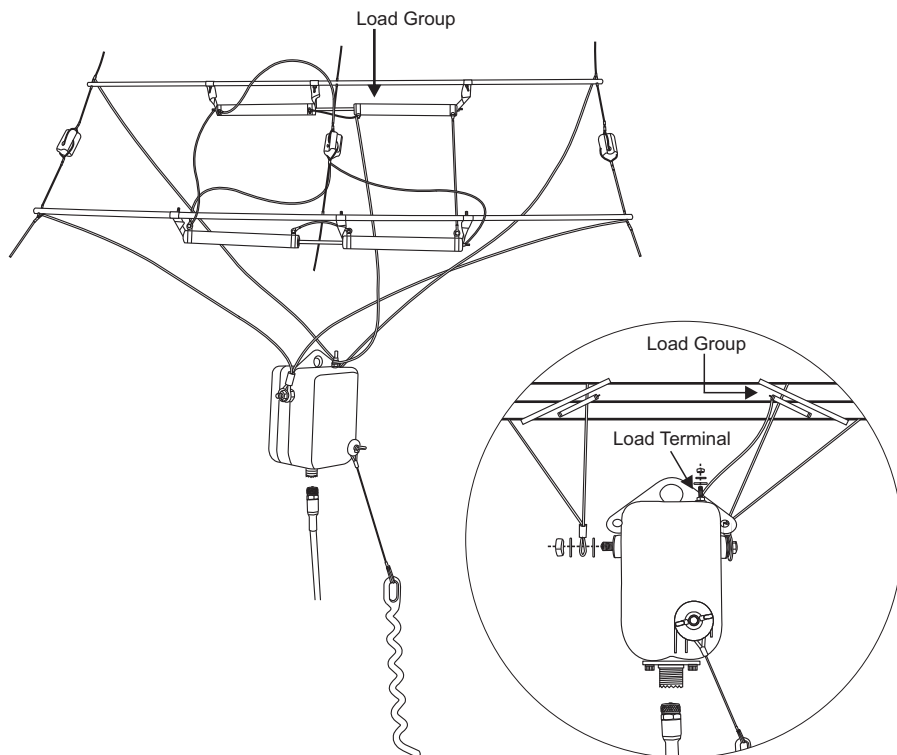
If twisting or crossing of the wire occurs during unpacking don't panic and reach for the wire cutters. Instead try to trace the crossed or twisted wire and correct the problem.

# 912 Multiwire broadband dipole antenna - 1Kw (54M/27M)

P/N BC91203/BC91207

## HORIZONTAL CONFIGURATION Installation Instruction

1. Unpack the antenna (see unpacking instructions) and lay it out on the ground between two mounting poles with the load element and balun wires below the antenna wires. (as shown in picture below)
2. Attach rope to each insulator (one at each end) and slowly hoist between the two mounting points (tower/poles even a tree or to the roof) ensuring the wires do not tangle. Raise to about eye level.
3. Balun (black box) connection: Once the antenna has been raised to a convenient height, attach the balun and coax cable as shown below. All stainless steel nuts and washers required are provided with the balun. RG 213 coax cable strain relief is provided, where appropriate, by a pigtail strain reliever (PTS) attached to the rear of the balun.
4. Raise the antenna to the desired height and secure ropes. A slight curve in the antenna is normal.





# BARRETT

## 912 Multiwire broadband dipole antenna - 1Kw (54M/27M)

P/N BC91203/BC91207

### INVERTED "V" CONFIGURATION Installation instructions

1. Unpack the antenna and lay on the ground making sure the wires do not tangle, with the balun wires above the antenna wires. i.e. upside down. (as shown in the picture.)
2. Remove the load elements by removing the stainless steel hanger brackets from the fibreglass spreader rods.
3. Re-fit the loads in the same way, but now under the antenna wires.
4. Re-tighten setscrews.
5. Fit the balun fitted with the yoke as shown in the picture
6. Attach hoisting cord to the suspension yoke. Slowly raise ensuring that the wires do not tangle
7. When at a convenient working height, connect the coax to the plug at the base of the balun (black box). Fit the coax to the pigtail strain relief. Raise the antenna to full height.
8. The ends of the antenna now need to be secured. Attach cord to the insulator at each end of the antenna. Tie these cords to convenient points to secure the antenna in position. These should ideally be tied at a height, or in a safe area, to avert possible contact and risks of minor shocks or burns.

