ZCG

Model

B19-SAR-164

Broadband omnidirectional VHF communications collinear

1.8 metres

VHF high band 148-174MHz

0 dBd gain

N-type female connector located at top of the mount section

- Mounts to a mast using 2 x UAM180L or 2 x UAM90L - available separately.
- N-type femlae in base of mount section
- 100 Watts maximum input power.
- 304 stainless steel mount section

INSTALLATION GUIDE

www.zcg.com.au

ANTENNA DESCRIPTION

The B19-SAR-164 VHF high band broadband VHF communications collinear is constructed from a 304 stainless steel mount section and a white parallel fibreglass radome with high quality aluminium and coaxial cable internals to ensure long term survival in the harsh environment and will deliver reliable performance for many years.

Standing approximately 1.8 metres tall, the silver soldered brass tube radiating internals deliver a true 360^{O} omnidirectional radiation pattern with unity 0 dBd gain.

The N-type female connector jack located at the base of the mount section is rated for up to 100 Watts input power.

A detailed specification sheet is available to download from **www.zcg.com.au**

TUNING

The collinear has been tuned in the factory for the full VHF high band frequency range 148-174 MHz.

VSWR has been optimised to better than 1.5:1 at the centre and better than 1.8:1 at the edges

This tuning cannot be altered.

SELECTING THE MOUNTING POSITION

To achieve best performance from your antenna, these are the important principles you should consider when selecting the mounting point:

1. ***Mount the antenna in as high a place as possible.***
2. ***Mount the antenna as far away from other antennas and metallic objects as possible to avoid interference and distortion of the radiation pattern. At least 350mm side clearance is desireable, preferably more.***
3. ***For optimum performance the antenna must be in a vertical orientation, not at an angle.***

We recommend for mounting: 2 x UAM180L or UAM180UNI for parallel mounting or 2 x UAM90L or UAM90UNI for right-angle mounting - order separately.

UAM180L 40-75mm | UAM180UNI 40-90mm | UAM90L 40-75mm | UAM90UNI 40-90mm

PREPARE THE FEEDER CABLE

RG213 is recommended for use as a feeder cable. To reduce signal loss, the cable should be kept to the shortest length necessary.

The "**7937**" N-type male crimp connector is available to fit RG213 cable. The stip dimensions can be found on our website **www.zcg.com.au**

Attach the N-type male connector to the antenna's N-type female connector located at the base of the mount section.

Route the feeder cable to your multicoupler or device. Ensure that the cable is not stretched excessively and there are no sharp kinks.

If using cable ties, ZCG highly recommend the use of 316 stainless steel cable ties for the harsh marine environment.

Do not pull the cable ties so tight as to crush the cable. A damaged feeder cable is a cause of high VSWR and reduced performance.

CONNECT YOUR EQUIPMENT

Cut the cable to the shortest length necessary, prior to fitting the appropriate connector to suit your devices termination. Once the cable has been constructed, ensure all termination points are clean from debris or possible interference.

Connect your cable to your equipment and power on. Note the performance of your system. If any issues occur power down immediately and check entire system for faults.

SEALING CONNECTIONS

It is vital that all connections be well sealed with at least two layers of self-amalgamating tape followeed by a layer of uPVC to prevent ingress of moisture. uPVC or electrical tape alone will not be adequate.

Installation is now complete.

MAINTENANCE

This antenna has been designed for high reliability and low maintenance. We recommend that you conduct a routine annual mechanical inspection of the antenna, feeder cable and connections for bird damage, lightning damage or possible broken components.

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